# THE UNIVERSITY OF HULL

### THE FINANCIAL PLANNING AND CONTROL IN THE AIRLINE INDUSTRY: A COMPARATIVE STUDY OF BRITISH AIRWAYS AND EGYPTAIR

# being a Thesis submitted for the Degree of Doctor of Philosophy

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by

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#### ABSTRACT

The examination of the financial planning and control systems in the airline industry is vitally needed. There were two important reasons for deciding to study this industry: firstly, its significant role in the development of the national economy of a country, linked with the growth of international business and trade, which gives the airlines industry great importance as a rapid means of transport. Secondly, there has so far been little study of this area.

This study focused on the investigation of the financial planning and control systems currently operated by both British Airways and Egyptair. These were seen in relation to a theoretical framework which provides a methodology for such procedures, with a view to improving the quality of the performance, especially at Egyptair. The study involves also the examination of the accounting systems employed by both airlines and their relevance to the financial planning and control functions.

There is a great deal of government influence and intervention in public enterprises, which are involved in a variety of activities for economic development. This intervention restricts their operations in a number of ways.

The conclusions of the study revealed that there are -I-

many deficiencies in Egyptair, in the budgetary control system, the information system and the feedback process. The present implementation of the uniform accounting system, which emphasises national planning and external control is inadequate to provide the information needed for planning and control purposes at the airline; in contrast, British Airways' system is reasonably effective.

Egyptair can learn and benefit both from theory, and from the adoption of certain functions and procedures used by British Airways. Some of these are: tactical planning, where plans are formulated for two years ahead, and on a seasonal basis; the method of allocating costs to each of the operated routes and aircraft; management accounting packages for internal control purposes; and specific criteria for measuring productivity, which are relevant to the airline's operations.

Finally, the research findings and recommendations pave the way towards developing the procedures concerned at Egyptair and British Airways.

-II-

### DEDICATION

"IN THE NAME OF GOD, MOST GRACIOUS, MOST MERCIFUL"

This thesis is dedicated to:

# MY PARENTS

Whose lives will always remain my greatest source of pride, inspiration and support.

#### ACKNOWLEDGEMENTS

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### ABBREVIATIONS

A.I.M.S.	Accounting Information Management System.
A.R.E.	Arab Republic of Egypt.
A.R.R	Accounting Rate of Return.
A.S.	Accounting System.
A.S.K.	Available Seat Kilometre.
B.A.	British Airways.
B.A.A.	British Airports Authority.
B.Cal.	British Caledonian Airways.
B.E.A.	British European Airways.
B.O.A.C.	British Overseas Airline Corporation.
B.S.C.	British Steel Corporation.
C.A.A.	Central Agency for Auditing.
C.A.A.	Civil Aviation Authority.
C.A.B.	Civil Aeronautic Board.
C.A.P.M.A.S.	Central Agency for Public Mobilisation and Statistics.
CHIEF	Costing by Hegemonic Integrated Evaluation Function.
BVS	Budget Variance Statement.
G.D.P.	General Domestic Product.
GL80	General Ledger 80.
I.A.T.A.	International Air Transportation Association.
I.C.A.O.	International Civil Aviation Organisation
I.M.F.	International Monetary Funds.
I.S.	Information System.
M.A.	Management Accounting.

- M.A.I.S. Management Accounting Information System.
- M.A.P. Management Accounting Package.
- MASCOT Monthly Aggregated Schedules Operating Data.
- M.C.A. Ministry of Civil Aviation.
- M.C.S. Management Control System.
- M.I.S. Management Information System.
- M.S.A.I. Management Science America Inc.
- N.E.D.O. National Economic Development Office.
- N.P.C. National Planning Committee.
- O.R.U. Operation Research Unit.
- P.P.B.S. Planning, Programming and Budgeting System.
- R.P.K. Revenue Passenger Kilometre.
- R.T.K. Revenue Tonne Kilometre.
- S.D.R. Special Drawing Rights.
- U.A.S. Uniform Accounting System.
- VDU Visual Display Unit.

PART I: METHODOLOGY AND THEORETICAL PERSPECTIVES

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CHAPTER: ONE

INTRODUCTION

### 1.1 Essential Features of Financial Planning and Control

In the current economic recession, effective planning is of paramount importance. Also, planning is an important aspect of management activities, which involves different managerial levels and serves multiple objectives. These include the internal process of resource allocation, including setting goals for different units, continuous negotiations with the participants involved, forming plans, controlling performance and adaptation to organisational and environmental variables.

Management literature contains discussions of the various functions which can be considered to be the responsibility of top management. Whilst some items on the lists vary, planning has been widely accepted as one of the crucial functions of top management and it is also one of the most important factors in the success of any firm.

In real life, many business managers are finding it increasingly productive to devote more of their time and energy to planning future activities and programmes. Also, executives responsible for directing organisations are placing greater emphasis on business strategy and quantification of alternatives, making the increased use of financial planning extremely important.

It is widely accepted that to remain in business a firm has to stay solvent; it must also have sufficient liquid funds to meet its debts and to provide the means of future

expansion, because lack of liquidity can bring about the collapse of the most enterprising of companies.

Furthermore, financial planning must positively identify the firm's financial needs, problems and opportunities: Kvanli (1980, p. 207), discussing financial planners, argues that:

"Financial planners within industrial organisations are often given the impossible task of formulating a multi-years financial plan which is severely over-constrained. As the planner attempts to meet one objective, another variable becomes unacceptable and he is faced with the familiar " balloon squeezing effect".

Traditionally, financial managers tend to think not only in absolute quantities such as sales, profit, payroll, etc. but also in ratios that reflect business activity and effectiveness such as sales per employee, profit/sales, profit per employee etc.".

Financial planning reflects the firm's operational plans in financial terms. It also indicates whether the firm's funds and resources are adequate and finally it is a way of ensuring the utilisation of the firm's invested capital. Above all, in order to ensure the achievement of the set plans, the financial planning processes should be accompanied by control procedures to assist the efficiency of the organisation concerned.

#### 1.2 Importance of the Airline Industry

The growth of airlines on an international scale and their emergence as a major form of transport have made it imperative for them to keep abreast of the latest management

techniques. Hammarskjold (1970, p. 439) argued that:

"Indeed I believe that governments should, when formulating their policies give greater recognition to their transport's very significant economic contribution to the of individual countries and to the economies economy generally. world International tourism, for instance, is now a more than \$14,000 million a year. A very important part of this is generated by air transport".

Most of the markets in which any international airline operates are highly competitive and subject to a high degree of governmental regulation, covering most aspects of the airline's operations; in particular, route flying rights, fare-setting and operational; standards relating to, for example, safety, security, and aircraft noise. Thus, it is for states to establish one company common for air transport. Those companies, particularly in developing countries, are given subsidies to enable them to withstand international competition. As a result of public ownership, governments can impose their policies and control investment decisions.

Sharp (1973, p. 17) asserted that investment decisions relating to airports are made partly in the public and partly in the private sector, though in this case the public decisions are by far the most important. In the UK, for instance, the major airports are operated by the British Airport Authority and until its privatisation investment decisions were controlled by the central government.

It is interesting to note that as O'Connor (1982, p.6)

argues, air services tend to be what economists call an undifferentiated product. The air transport industry is composed of a number of different types of air carriers performing a variety of services; for example, the USA Civil Aeronautics Board (CAB) (1976, p.3) categorises the types of carrier of the USA commercial airlines as follows:

"1- Domestic trunks -Domestic operations of the domestic trunk carriers: This group of carriers operates primarily within and between the 50 states of the United States over routes serving primarily the larger communities.

2- Domestic local service carriers -Certified Route Air carrier: which are air carriers holding a certificate of public convenience and necessity issued by the CAB to conduct scheduled services over specified routes.

3- International and Territorial operations.

4- Supplemental Air carriers -Air carriers holding a certificate issued by the CAB to perform passenger and cargo charter services as well as scheduled operations on a limited or temporary basis.

5- Certified Air Cargo Carriers.

6- Other groups".

Bouamrene (1982, p. 25) explains that during the period from 1950-1970 the scheduled airline market grew at an average annual rate of over 13%. The rate of growth of the world economies proved to be the most important factor influencing the growth rate of passenger air travel. The average air fare, especially in relation to other goods and modes of travel, has also proved to be an important factor.

The services provided by the airline industry have a number of special features:

#### 1- Nature of the Market

The market for air transport services has two main aspects. Firstly, there is a demand within the market, and secondly, there is the area over which that demand exists. This area is classified into ~off-line~ and ~on-line~ sales; for example, Europe is regarded as an off-line sales area by the Egyptian airline, Egyptair.

### 2- Elasticity of Demand

In developing countries in particular, it has been noted that fares are quite high in comparison with those of developed countries. These high fares have produced a low demand and, of course, low traffic for air services.

The demand for airline services is generally accepted to be a "derived demand", i.e. derived from the ultimate object which is being transported. If this object is a passenger, then his earning power and the ticket price become important influences on this demand.

### 3. The Supply Function

The supply function covers the behaviour of various suppliers of airline services who generally seek optimised efficiency of their total network.

## 4. Nature of the Airline Services

There are several factors which contribute to operating costs in the airline industry, such as distance of journey, aircraft type, etc. Freighters are normally interested in how much it costs to transfer their cargo from one place to another, not in the aircraft type, or the flight time for example, except in some urgent cases. It should be noted that cargo is always transferred in one direction. Therefore, it becomes very important for marketing, to find other goods to be transferred in the opposite direction in order to minimise operating costs.

### 1.3 Background of the Problem

There is no doubt that the services rendered by the commercial airline companies have rapidly increased during recent decades, perhaps as a result of the great progress that has taken place in the field of aircraft manufacture. This great progress has given rise to strong competition among commercial airline companies. However, it can be noted that this competition is normally not at the domestic, but at the international level.

Furthermore, as the world economy moves into a new era of market growth, new environmental forces are at work. A changing market, deregulation and information technology are some of the environmental trends influencing an airline's activities today. In addition, in the coming years, the

business market and business travel will continue to grow, while the growing trend in leisure travel offers great opportunities for social and economic expansion.

An examination of the literature reveals that there is lack of empirical investigations dealing with а the problems of the airline industry, especially those related to the implementation and development of financial planning and control procedures. The importance of this area lies partly in the rapid growth of world commercial airlines, which has indeed been impressive, measured in terms of traffic growth, size and type of operating aircraft, revenue per passenger- kilometre, revenue per tonne- kilometre, available seats- kilometre etc., and partly in the huge amount of capital invested in the operations of the airline industry. Also, governmental intervention policies have had a negative impact on the efficiency of the services presented by the industry.

For these reasons, it was decided to tackle certain fundamental issues relating to the financial planning and control processes of the airline industry. It was expected that study would provide the insights into the implementation problems of these processes at British Airways, and more particularly at Egyptair. The latter was chosen because it is a publicly-owned company in which a uniform accounting system is applied and there are some problems in the application of this system to planning and control, and because the problems in these procedures

affect the airline's performance (Pilot interview with the General Director of Budgeting and Research Department of Egyptair, Cairo, December, 1985).

### 1.4 Objectives of the Research

During the last decade, the study of planning in general and corporate planning in particular has rapidly increased. Moreover, particular attention has been paid by a number of authors to exploring the theory of financial planning and control and developing theoretical models, while others have investigated planning practices in a particular industry and ways in which the management concerned could more effectively learn from theory.

Therefore, this current research is mainly concerned with financial planning and control procedures. More specifically it has focused upon the investigation of these procedures in the airline industry; Egyptair in particular. British Airways was chosen for the comparative study because it is one of the leading airlines and also one where it may be expected that advanced technology is implemented. A framework developed from literature relevant to financial planning and control is compared with the practice within both commercial airlines. From an investigation of these two commercial airlines, the impact of financial planning and control procedures will be seen to be extensive.

The research should prove helpful to the industry, not only in conducting its business, but also in improving the

efficiency of its services and its performance. The results of this research should enable Egyptair to benefit both from theory and from the experience of B. A., especially in certain issues related to the planning and control procedures employed and to the use of advanced information technology.

### 1.5 Scope of the Research Methodology

The research methodology employed in this study is a combination of two methods.

#### 1.5.1 Literature Review

Regarding the literature review, it was necessary to ensure that all aspects of the research objectives are fully covered. To this end, a theoretical background and framework were established prior to the examination of actual practice. Therefore, the literature review covers the important related areas such as accounting information and accounting systems; planning and control problems in nationalised industries, planning theory, particularly financial planning; control procedures; planning and control in airlines in general.

### 1.5.2 Evaluation of Practice Based on Empirical Study

The empirical part of the research was organised to cover in full all aspects of the field study, which can be categorised in the following three major areas:

a- Financial planning procedures used,

b- Control procedures used and

c- The extent of government influence on the airlines' operations.

The investigative study made use of two approaches:

- 1- In-depth interviews: semi-structured schedules were prepared as a basis for the interviews combined with a series of follow up questions. It was decided to use semi-structured schedules as the initial framework for each interview in order to enable the interviewer to follow up in detail all important issues related to the areas of interest.
- 2- Published sources and official documents obtained from the airlines concerned and from relevant government authorities.

## 1.6 Overview of the Research

The research has been organised to focus on the major objectives outlined in section 1.2 of this chapter. An overview of this research can be indicated as follows:

#### Chapter Two:

The main function of the second chapter is to highlight the vital role of accounting data in any industry's financial planning and control procedures. Considerable attention is paid to such topics as accounting and management information systems, the importance of accounting data in managerial planning and control and

responsibility accounting. An example is given of an airline uniform accounting system: the American CAB system which is applied to domestic airlines.

Also, this chapter, briefly, surveys the literature on public enterprises and examines their problems in connection with the planning and control processes. Subsequently, government intervention and its influence on nationalised industries in general and public transport, including airlines, in particular, is discussed.

### Chapter Three:

The fourth chapter reviews the literature on financial planning and control to provide a conceptual and theoretical basis for the discussion of procedures.

In the light of this literature review, the different elements of the financial planning and control processes are integrated in a theoretical framework which is employed during the empirical investigation of both B.A. and Egyptair.

## Chapters Four and Five:

An in-depth study of the practice of financial planning and control procedures within British Airways is presented in the light of the environmental conditions in which the airline operates.

#### Chapter Six and Seven:

A comprehensive empirical study is undertaken of the procedures for financial planning and control at Egyptair. In addition, the extent of governmental influence on the airline's activities is examined. Vital issues emerge in this chapter from the comparison between the theoretical framework and actual practice in the company.

Also, an introduction of the main features and performance of the Egyptian economy was deemed necessary to highlight the environment in which Egyptair operates.

# Chapter Eight:

A summary of the study is given in this chapter. The research findings are discussed and recommendations made for developing financial planning and control procedures, especially at Egyptair.

#### 1.7 Scope of the Research

This research deals with the investigation of financial planning and control procedures in the airline industry, particularly, B. A. and Egyptair. Therefore, the focus of the study was limited to these two airlines. The necessary information was collected mainly through in-depth interviews with officials of B.A. from February to April and of Egyptair from September to November of 1987. Further contact with both airlines was made during the period November, 1988-April, 1989 and additional information was obtained.

In addition, a considerable amount of material required for the analysis was gathered from these offices, such as financial statements and reports etc. produced either by the airlines or by government authorities.

Finally, the information collected was limited to financial data and some non-financial information relevant to the comprehensive empirical examination of these procedures within the two airlines. CHAPTER: TWO

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THE ROLE OF ACCOUNTING DATA IN FINANCIAL PLANNING AND CONTROL

#### 2.1 Introduction

This chapter is designed to illustrate the crucial part played by accounting data in the planning and control process and. It consists of four main sections: the first deals with accounting data and financial planning, the second explains the role of the accounting information system in the control process. The third section presents an overview of planning and control in nationalised industries, and also pays some attention to the role of government and its relationship to these industries, while the fourth considers the airline industry and its accounting systems.

O'Connor (op. cit p. 53) indicated the importance of the accounting information system to U.S. Airlines, and to the Civil Aeronautics Board (C.A.B.):

"The Board has maintained a regulation containing a standard of set of accounts, with interpretive rules, that the airlines are required to follow ".

He goes on to explain that:

"Even the innermost records of an airline, some of which contain confidential company information, must be kept in the prescribed manner, but most of the accounts must be filed with the C.A.B. and are public information, Consistent with the regulatory reform trend, the Board has gradually relaxed many of its reporting requirements, but it is likely that a hard core of basic data will continue to be required after DOT (Department of Transportation) takes over the responsibility".

### 2.2 Accounting Data and Financial Planning

#### 2.2.1 Accounting and Information

In the past two decades, information and information systems have been the subject of countless conferences, seminars, workshops, articles and books.

Any type of industry, either nationalised or private, needs to pay considerable attention to information as a crucial factor in the success of any business, and to take steps to develop the method of preparing information that best meets users' needs. Thus, information is an ingredient essential to the success of every business. It is essential for planning and controlling business operations. For example, any airline will need information on the market in which the service is sold, in order to set its operational plans within a highly competitive international market.

Information has been widely defined and discussed in literature. For example, Chan (1985, p. 5) has explained that:

" Information may be defined as data which meaningful to the decision-maker, i.e. is after it has been processed. The better the basis information, the better the for decision. Therefore, information should be:information should i) Economical; be produced cost effectively. ii) Relevant; information must be relevant to the decision in question. iii) Accurate; information should be

- sufficiently accurate for the level required.
- iv) Understandable; information must be capable of being understood by the

recipient. It should be presented in a form that is easy to understand.

- v) Concise; information should only contain the essential details.
- vi) Timely; information must be produced in time and up-to-date for effective use".

In addition, information itself only has value when that information leads to a decision to take action which results in reducing costs, eliminating losses, increasing sales, better utilisation of resources, prevention of fraud, and providing management with the consequences of alternative courses of action.

On the one hand, one of a manager's concerns is that additional information should be produced only if the additional expected value is greater than the additional expected costs. On the other hand, however, information can be related to the cost of the whole process or the cost of any activity or set of objectives. In addition, such information may help to improve the quality of price decisions and planning and control of financial resources.

Nevertheless, the information designer must consider many aspects of decision-making within the firm, such as the types of decisions, and the levels at which those decisions must be made. Porter and Miller (1985, p. 149) have emphasised the role of information in managing business and state that:

"The information revolution is sweeping through our economy. No company can escape its effects. Dramatic reductions in the cost of obtaining, processing, and transmitting information are changing the way we do business".

Moreover, after surveying a wide range of industries, they found that information is changing the rules of competition in three ways. Firstly, advances in information are changing industrial structure. Secondly, information is an increasingly important tool that firms can use to create competitive advantage. Thirdly, the information revolution is producing completely new businesses. Indeed, these effects are critical for understanding the impact of information on a particular industry, such as airlines, and for formulating effective strategic responses.

With regard to accounting and information, it should be pointed out that every sort of business requires written records of transactions, dealing with money or money's This information is known worth. as "accounting information", which is a series of statements or records to show the financial situation and day to day transactions in of money of the particular firm. terms Accounting information assists management in planning, controlling, decision-making and appraising performance.

# 2.2.2 Accounting Information as an Economic Good

The importance of accounting information stems from its crucial role in the economic development of both developing and developed countries. The Committee on International Accounting Operations and Education, as mentioned in Hassan (1988, p. 9), in this respect argues that:

"In LDs, as in developed nations, accounting information is essential for development, and this includes financial, managerial, governmental and national economic information. In effect, it has been argued that there is a relationship between accounting and the economic development of a nation".

Information is a commodity. Horngren (1982, p. 4) argues that:

"Accounting data are economic goods (just like cuisine and smog control devices) obtainable at various costs. The manager, therefore, buys accounting data. Ideally, we should evaluate various types of information in terms of whether the action choices will be affected by the information in question".

Therefore, if the information will not affect the action choice, it is valueless. On the other hand, if the information will lead the manager to a better choice of action, then its value is measurable in terms of the increase in net benefit obtained from the information, as compared to the net benefit obtained without the information.

Horngren (ibid, p.4) illustrates the difference between the economist's and the accountant's approach to buying commodities, whether butter or internal accounting Just as the economist would not tell us information. how much or what quality of butter the consumer needs, so with information the economist is concerned more with the of conditions optimality. In contrast, accounting literature is more doctrinaire; it prescribes how much or what quality accounting to consume. The primary implication

of the economist's approach to information is almost philosophical. It is a rejection of both the unique truth and the conditional truth philosophies in favour of the cost-benefit philosophy.

Thus, it could be concluded that accounting information in all its forms is undoubtedly of growing importance to the economy. Furthermore, within any nationalised or private firm whether manufacturing or services- the importance of accounting information has increased.

#### 2.2.3 The Relationship of Accounting to the Environment and Management Functions

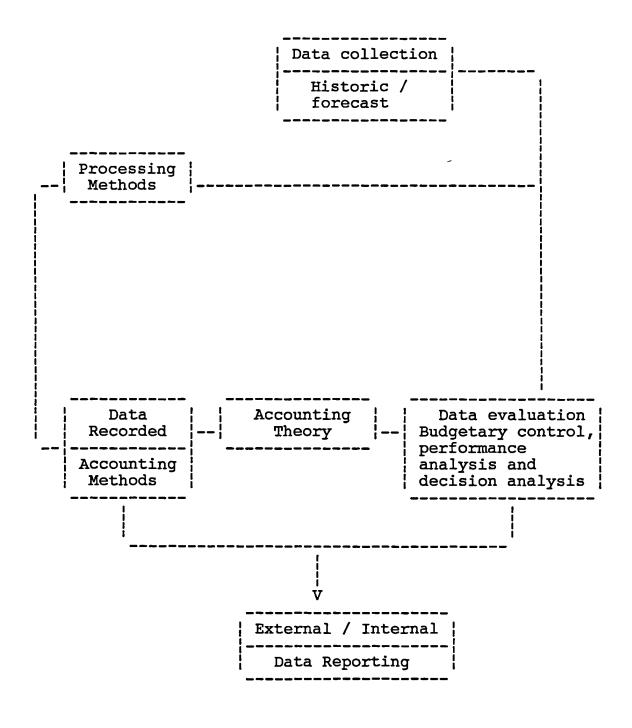
Accounting is concerned with the quantification of economic events in money terms in order to collect, record, evaluate and communicate the result of the past events and to aid in future decisions. Business accounting has been described in figure (2.1).

The area of activity which provides the raw material of accounting is "data collection". Not only are historical data collected but also forecast data to help the firm estimate the likely course of future events. Bull (op., cit., p. 5) stated that:

"If a survey were conducted in which people were asked to say what they understood by accounting, the majority would be able to produce some sort of answer. For most people accounting is something to do with figures, working out profits and the like; perhaps the very vagueness of such answers is indicative of the fact that those concerned with accounting are more adept at explaining what

# Figure (2.1)

Illustration of Business Accounting



Source: Bull, R., "Accounting in Business", 1980, p. 4.

they do, rather than what accounting is, or what are the foundations and uses of their art".

economic, legal, and political environment The has provided the general framework for the development of accounting. The boundaries of accounting have been largely prescribed by the various stages of economic development through which mankind has passed. Whether a business is organised as a sole proprietorship, or partnership, or a corporation, whether it is large or small, and regardless of its nature, management decisions must be made. Accounting is one of the essential tools of management, simply because provides management with facts and figures pertinent to it decisions management must take, and it becomes increasingly important as the business grows in size. It can therefore be argued that mutual understanding and respect between management and accounting is essential.

## 2.2.4 Accounting and Management Information System

It should be emphasised that it is not only the purpose of the accounting information system to prepare information for management decisions, such as sales or production decisions, but also to provide relevant, timely, accurate, information to the decision maker so that optimum decisions may be made. Therefore, the management of any firm in order achieve its desired targets needs a variety to of information which should be provided by the accounting Thus the accounting information system is system. the crucial feature of the firm's management information system

(M.I.S.).

Although it is not the main purpose of this study to provide a detailed description of the management information system, it would be helpful to give some attention to the M.I.S. and its importance to the success of a firm, and also the link between accounting and M.I.S. The management information system makes it possible for the diverse goals of the different functions within the firm to be coordinated and directed toward fulfilling the targets of the firm.

Also, information will be concerned not only with internal operations, but also with external intelligence. Finally, the information will be provided for the right person, at the right time, and in the right form.

The management formulates the strategic objectives of the firm, sets goals, standards and plans. These plans and standards provide inputs to the M.I.S. to which are added other inputs such as information and data from the environment.

one of the major problems facing the However, implementation of M.I.S. is the failure of top management to exert the efforts needed to break down the traditional functional structure and the barriers to effective communication that have built up over the years. Furthermore, a successful M.I.S. must include a computer system that is capable of capturing and processing the data



needed to generate the information required by the management of the firm.

Therefore, the information needed by the strategic planner is aggregate information, and is obtained mainly from sources external to the organisation itself. The information requirement for management control falls between the extremes for operational control and strategic planning. In addition, it is extremely important to recognise that much of the information relevant to management control is obtained through the process of interpersonal interaction.

The foregoing discussion shows that accounting is the most effective element of the firm's management information system, which in most firms is used as the vehicle to encourage communications and co-operation between specialised functions within the firm. M.I.S. supplies the management with relevant, timely, accurate information which is related to internal use such as financial planning and control, and is of value to external users as well.

# 2.2.5 Accounting Data for Managerial Planning

During the past decade there has been a significant change in the fundamental nature of organisations in institutional settings, such as the airline industry and public administration. In addition to expansion and diversification, many organisations have had an important segment of their resources applied to activities which have varying or uncertain life -spans. Such activities are

called "projects"; management has exerted considerable time and effort toward developing adequate management tools for these projects.

However, there has also been a change in the management environment regarding the speed and quality of performance expected from a project. Management must be able and willing to answer questions concerning process changes, deliveries, costs, and revenues. These questions must be answered more quickly and with much greater accuracy than ever before. Rivett (1980, p. 64), in his book on model building for decision-making, discussed the role of accounting data and stated that:

"Every model builder appreciates that it is rare for the cost data which are available in an organization to be appropriate or relevant to his investigation. The reason is that data which are kept for purposes of day -to day control are seldom based on the assumptions which are required when one is extrapolating into the future and considering the likely consequence of alternative courses of action."

Thus, it is convenient to use money as a transfer function, by which resources and results can be compared, and in every investigation the model builder will seek to express the final results in as few income measurable variables as possible. Moreover, any model builder must work in close co-operation with the accountants .

It is worth considering the reasons why the accounting profession exists and has developed in its present way. Until the first industrial revolution most businesses were

owned and managed by the same man. The industrial revolution stemmed from the development of power generation equipment and machine tools, and these increased the capital needed to start and run the company. This meant that the single owner-manager tended to be replaced on the ownership side by a group of shareholders who would demand assurance that their money was being properly used. For this reason the accountant came into prominence as a bookkeeper and then as an auditor.

business became more complex, book-keeping skills As were no longer enough and accounting began to be developed through a fairly sophisticated range of aids, generally of arithmetical nature. Soon however, it became more an difficult to have precise standards of costing and valuation applied to widely different circumstances. Thus, over the last two decades the development of different concepts has been seen, until at the present time it is true to say that is meaningless to talk of cost, profit, it revenue, profitability and so on as physically measurable without at the same time stating the underlining assumptions of the measurements.

Arnold and Hope (1983, pp. 7-12) have proposed a simple framework for managerial planning, decision making, and control which consists of seven steps:

- 1- Identification of goals;
- 2- Collection of data about alternative courses of action;

- 3- Analysis of data;
- 4- Choice of decision rules;
- 5- Ranking alternative courses of action;
- 6- Making a decision and stating its expected outcomes;
- 7- Monitoring actual outcomes to ensure that actions are under control.

In this model and others, the crucial step is data collection, since management must take a wide range of decisions of varying impact on the firm's cash resources. Some decisions will commit the firm's resources for a lengthy period of time and involve major changes in the firm's productive capacity.

Presumably, different levels of management will be associated with the different types of decisions, short or However, it is important to recognise that long-term. in the distinction between short and practice long-term decisions may often not be clear-cut and may, in fact, upon the nature of the decision and of depend the organisation on whose behalf it is being taken. For instance, economists often describe the long-term as a period in which all costs are avoidable. Thus, this period will probably be longer for a large firm, for example, one manufacturing heavy engineering equipment and having a large number of factories, plants and employees, than for a oneman firm selling fruit from a market stall.

It is necessary in this sense to give examples of both

types of decisions, short and long-term. On a more shortterm basis, lower-level managers may concern themselves with operating decisions such as:

- Number of units to be produced of a particular product,
- Fixing the selling price,
- Considering a certain route in an airline firm, and
- Determining the number of employees to be employed on a particular production process.

The top management level is normally involved in longterm decisions, e.g. fleet investment for the airline industry, where the level of risk involved is usually high.

The significance of information cost and value has by now been established. Accounting is concerned with the provision of information to aid informed decisions. Valuable information in an accounting sense is that which relates to planning in general, and financial planning in particular, in any form of industry. In other words, the role of accounting data has become vital to the purposes of successful business.

#### 2.3 Accounting Information System and Control

# 2.3.1 Accounting Information and Organisational Control

The function of a system designer is to provide management with help in decision making and in the implementation and control of the decisions made.

a part of the framework, several As organisational actions may be classified according to planning and control concepts. The estimates employed in strategic planning are intended to show the expected results of the plan, whereas the control process and the data it uses, are intended to influence management to take actions that will lead to the The last segment of the planned results. financial planning process deals with the implementation and control of the organisation's system of plans.

With strategy formulation, implementation may be considered as having several important sub-activities. In very broad terms, these are the design of the organisational structure and relationships. Behaviour, and the development of effective personal leadership are affected by the effective administration of the organisational processes.

In fact, the organisation will re-utilise the processes which were developed during the operational planning phase during the monitoring and control phase. The organisation's information system is an essential part of this phase, in that it allows management to become aware of deviations from planned progress. Unless a system of control is in place, the firm will not be able to ascertain whether it is heading in the desired direction at the planned speed.

However, often there is a breakdown in the system in that decision makers do not always benefit from information that is already known by someone in the organisation.

Unless the required information is received by the individual responsible for the problem area, the recognition of a problem is of limited value. Therefore the creation of a feedback loop in the planning structure, will assure the organisation of a means of disseminating information needed by key individuals.

## 2.3.2 Effectiveness of Control

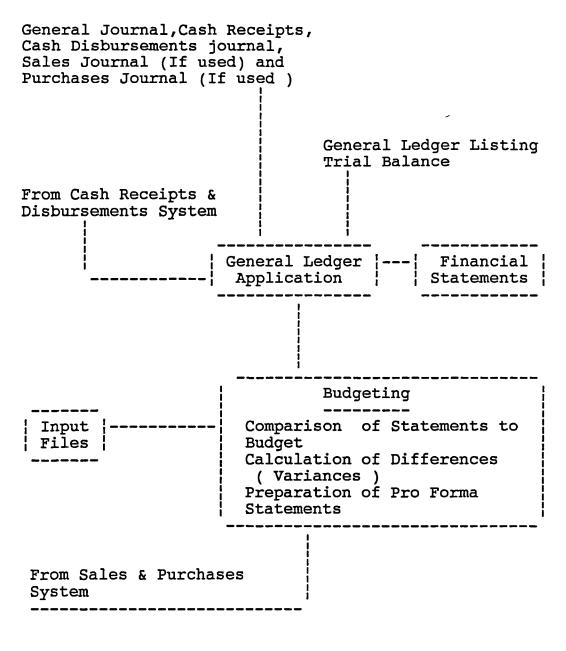
An information system for a business is the sum of the tools, techniques and procedures used by the business to process data. Such a system accepts input data about a business and generates required or desired output information. These tools and techniques may be carried out manually or by a computer.

Furthermore, most information systems are made up of small component systems which are designed to process data in specific areas of business activity. Page and Hooper (1985) explain the connection between accounting data and the control system in figure (2.2).

It is, therefore, necessary to specify that either planning or control of assets or manufacturing operations, require the development of many managerial accounting techniques. Also, a major concern of management is the process of planning and controlling each type of input cost. In putting this into practice the accountant may be characterised as adopting an adequate process with two-way

# Figure (2.2)

### Information Flow in a Financial Accounting and Control System



Source: Page & Hooper (ibid, p. 443).

interactions between information made available and information requested for control purposes.

In connection with the accounting information system, Hopwood (1987, p. 207) admits that:

"Accounting systems change over time. However relatively little is known of the preconditions for such change, the process of change or its organisational consequences".

Flamholtz (1983, p. 154) defines organisational control comprising any activities taken to influence the as probability that people will behave in ways which lead to achievement of organisational objectives. Therefore the organisational control means both a planning and control system as generally understood. In addition, the control system must not only motivate managers to contribute to the desired targets but must also constrain or influence their behaviour. Therefore, an organisation may change, for example, its structure, in response to changes in its size, product mix, or environment, in order to achieve better benefits of different forms control. The have been explored. A centralised and functional form may be very effective for medium-sized organisations, where product and customers are limited. As an organisation grows in size, regardless of product mix, more levels are added to the organisational hierarchy and a control loss occurs as communication becomes slower.

Nevertheless, Caves (1980) points out that, while the

choice of structure often suggests an organisation chart, the concept is somewhat broader than explained above and encompasses various control techniques within each element the firm's chart. Among the techniques employed by the of firms are rules and procedures, planning and lower level discretion, staff groups, and lateral relations and the use of integration. The purpose of these techniques is to minimise the amount of information related to day-to-day operations that must be prepared by higher levels in the management hierarchy. This frees managers to engage in the tactical and strategic planning which becomes more necessary as environmental uncertainty increases.

It should be noted that, when a firm has determined its structure and other control arrangements, information systems can be designed to support and provide these controls. Ramey (1986, p. 9), regarding accounting information systems and organisation control, concluded that:

"Accounting systems and especially management/cost accounting system is the one variable in the overall design of a planning and control system. The accounting system has certain limitations as an information system but was not designed to be all things to all users. An organization that relies heavily or exclusively on its accounting system for planning and control should recognize the of the system. limitations If adequate planning and control is not forthcoming, an organization should supplement accounting systems with other information systems and arrangements ".

Furthermore, Macintosh and Daft (1987, p. 49) argue that:

"Behavioural accounting research suggests that: (1) the design and use of a management accounting system is related to overall characteristics of the organisation and (2) a management accounting system is one element in a package of management control systems".

They also investigated the relationship between the organisational characteristics of departmental interdependence and the design and use of three elements in a package of management control: the operating budget, periodic statistical reports and standard operating policies and procedures.

Nevertheless, it could be argued that, to increase understanding of control within the organisation, a control system should be examined in relation to departmental interdependence.

Otley (1980) proposed that departmental interdependence may be a design parameter that influences the use of the accounting and information system as an integrating and control device. In general, there are two main types of control. The first is the external, i.e. shareholders or investors, in the case of private sector companies, and authorities' control nationalised governmental in The second is internal control, which can be industries. classified into administrative control and accounting control.

The foregoing discussion shows that the accounting information system has a vital part in the organisational

control process in terms of providing the information required by the management. Managing an organisation is an function and, in order important to fulfil that responsibility, management establishes procedures to be followed in the day-to-day routine of the organisation which safequard assets and ensure reliable recording of the company's transactions.

# 2.3.3 Responsibility Accounting

The main concern of this section is to consider responsibility accounting in the light of the control function within the organisation. Responsibility can be defined as an individual's (or group's) identification with a role to be performed or a task to be fulfilled. The feeling of responsibility is itself ordinarily a motivation as argued by Pick (1978, p. 370):

"Responsibility is a job-satisfier, and together with other job-satisfiers (e.g., remuneration, the work itself, and advancement) causes efforts towards desirable results. Even the burden of reasonably tough responsibilities boosts performance. Such burden may cause tension. Yet, up to a degree, tension evokes action and thought".

An important feature of the management control system is the use of responsibility accounting, Baiman (1982, p. 197) points out that:

"Responsibility accounting states that a person should be evaluated only on the basis of those factors that he controls. This is usually interpreted to mean that a person should be evaluated only on the basis of those

outcomes that he affects ".

Moreover, Baiman and Noel (1985, p. 486) explain the need to distinguish between controllable and noncontrollable costs, because the latter should not be used to evaluate an individual's performance. However, this interpretation of responsibility accounting is often violated in practice. For instance, it is often observed that a division manager who has profit responsibility for his division is evaluated and compensated on the basis of his division's capacity costs.

# 2.4 Problems of Planning and Control in Nationalised Industries

It is important to emphasise from the outset that, apart from the fact of public ownership and control, nationalised industries <sup>(1)</sup> often have little in common, for they can vary in size, objectives, competitive position, markets, financial strength, and social significance.

### 2.4.1 Scope of Nationalised Industries

#### 2.4.1.1 Nationalisation -A General Overview

Nationalisation is a modern concept, caused by the growing awareness of the limitations of competition in those industries where a natural monopoly exists. However, two factors stimulated the trend towards nationalisation, the

<sup>(1)</sup> The terms: Public sector industries, public enterprises, public corporations and nationalised industries, have been used interchangeably.

one rooted in socialist ideology, the other in pragmatism; these have interacted and overlapped, but they can be examined separately in terms of their contribution to the present operation of nationalised industries.

The extent of nationalisation in different countries varies enormously. In the Middle East, Egypt, for example, has owned the Suez Canal since 1956, and under the law known as "July's Socialist Decrees" introduced in 1961, many major industries such as transport, banks and the textile industry, came under public ownership.

In Communist countries, virtually all enterprises are publicly owned, though the system of direction and management bears little resemblance to the public corporation method.

are wide variations in the amount of There reflecting nationalisation in other countries, their political temper in recent years. France offers the greatest similarities to Britain. Railways were nationalised in 1963, and the coal mines, electricity, gas, the Bank of France, and some other banks were all nationalised in the post-liberation period 1944/6, faster than the British In addition, about half of French insurance process.

businesses are publicly owned; some enterprises (the Renault Motor Firm, for example) were nationalised because their owners had collaborated with the Germans during the war. Since 1948, Air France has been a company in which the

government holds the majority of shares.

The major enterprises in France form distinct concerns similar to public corporations in other countries, but the direction of each has been put in the hands of a tripartite These boards consist of representatives of the body. personnel, of the consumers, and of the government, all serving part-time. There have been difficulties in this system, partly because many board members are communists who do not co-operate easily with others, and partly because inherent conflict between the there is an groups In consequence, these boards have found their represented. position gradually weakened, and much power has passed to the ministries that supervise them and to the full-time professionals who manage them.

In West Germany there is less public ownership, though the railways have long been nationalised, and there are public enterprises in gas and electricity.

Italy has publicly-owned railways, gas and some other enterprises. Two large organisations (Instituto per la Ricostruzioni Industrial and Ente Nazionale Idrocarburi) act as publicly-owned holding companies.

In contrast, the United States of America maintains private enterprise in fields where most other countries have abandoned it; airlines, railways, radio and television, are all privately owned. Nevertheless, there is considerable public intervention, through independent regulatory agencies

and in other ways.

#### 2.4.1.2 Nationalised Industries -An Overview

There are three specific features which distinguish public enterprises from other forms of public bodies, and especially from departments of state. Firstly, they are free from full and continuous responsibility to Parliament through a Minister. Apart from matters specified in the statutes, a public corporation is legally and constitutionally free to carry out its business in its own In theory, if not always in practice, a Minister is way. answerable to Parliament for all the activities of his department, and for its omissions; and he is also the legal head of the department. Secondly, the staff of a public corporation do not have the status of civil servants; they have different conditions of tenure, remuneration, selection Thirdly, the finances of and management. a public enterprises are not part of the finances of the government.

There is also an important characteristic which distinguishes a public corporation from a private enterprise. Apart from the community acting through the government, there are no proprietors in the way that a joint-stock company has shareholders who expect to receive a share of the profits which are made each year.

Nationalised industries have from their inception been the cause of much debate among politicians and academics; but, perhaps in spite of the scrutiny to which they have

been subjected, the problems which they raise are far from completely solved.

The nationalised airlines were in deficit and had to be subsidised during their early years, as foreseen when they were set up. British Overseas Airlines Corporation (B.O.A.C.) made surpluses in the middle 1950's, but there were serious losses again in 1957/8. By 1963 there was an accumulated deficit of £80 million British European Airlines (B.E.A.) made surpluses from 1955 until 1961, but in 1963 had an accumulated deficit of £2.5 million.

The transition to large jet aircraft brought economic difficulties; some types of aircraft such as Britannias and the early Comets had special troubles. Both airlines had had non-commercial elements in their policies-some routes were flown for prestige or social reasons, and there was a preference for British-built aircraft.

An obvious factor affecting the finances of a corporation is its pricing policy. In very few cases have public corporations been able to charge what they would do on commercial grounds. The statutory requirement to break even does not forbid profits, but it clearly does not envisage them on any large scale, and it has discouraged some industries from exploiting monopoly advantages when they could do so; there has been government pressure to keep down prices to check inflation; there was the Transport Tribunal; and there is the international agreement on air fares. The upshot of these restrictions -often economically

sound in isolation- has been that industries which have got into difficulties have found it difficult to get out of them.

Comparisons of actual price movements between industries are extremely difficult to make and rarely have any validity. Since prices rise in stages, the period chosen for comparison may be crucial -a period starting just after a large rise and ending just before another one will show an extremely flattering result for a particular industry. There are usually many complicating factors, such as changes in tariff structure, as in electricity, or changes in the quality and nature of the product, for example, coal now has to be obtained from deeper mines, and is more extensively processed to meet modern requirements.

It is most important to note that prices reflect not only costs and efficiency, but also changes in policies on industrial finance. It is often pointed out that loss making by a nationalised industry means that it has to be supported by the taxpayers. While this is so, it should also be stressed that the losses are evidence that the consumer, directly or indirectly, has been getting the benefit of below-cost prices.

While Britain has had over thirty years' experience of nationalisation, there have been important changes and some considerable remodelling of the structure of the corporations in that time. In particular, the Conservative

Government has adopted a policy of privatising some of the nationalised industries such as British Gas (1986), British Airways (1987) and the Water Industry in 1989.

2.4.2 Governmental and Nationalised Industries

2.4.2.1 Governmental Influence on Public Transport

Public enterprises have become very common institutions in most parts of the world and are concerned with many types of activities, but most frequently with basic industry and economic development.

On the other hand, in other countries such as Egypt which is the major concern of this research, a public enterprise is merely a convenient form of government-owned commercial activity.

Industries such as airlines, railways, and waterways have been affected very much by government policies which arise from the party in office.

Thus the real difficulties of government relations with nationalised industries arise partly from their cumbersome nature, and partly from the changing requirements of government policy.

There are, of course, wide policy differences between governments in this field, some of them professing a detailed industrial strategy, devised on doctrinaire lines without agreement with the very people who most closely operate it. Others reject the very concept of strategy,

relying on the free play of market forces.

However, any government needs to have a clear idea of what it wants out of an industry in terms of national performance. This does not entail any detailed national plan, but it does require structured debate about an industry's capabilities and aspirations.

However, the attitude of governments to the industries they own is characterised by great ambivalence. On the one hand, they want them to operate as commercially as possible with a minimum of financial subvention, while on the other hand, they want to use them as tools of economic management.

In Egypt, for instance, where the government's power starts with the constitution of boards (such matters as the appointment of members and the determination of their remuneration), public industries have been overloaded with employees because of the government policy of finding jobs for everyone. The policy powers include approval of general programmes of reorganisation, capital development, research, and training. Control over financial matters is expressed through the determination of the form of accounts, e.g. by applying a specific uniform accounting system to all public industries. Further examples of financial influence are making orders, raising the borrowing limit within the statutory maximum, making advances from the Exchequer, and giving directions about the management of reserve funds.

In the case of many airline industries, the government

has the power to authorise compulsory purchase of aircraft from certain countries, and to operate particular routes, even though they are not economic. At the same time, the government grants awarded do not cover losses. Gratwick (1985, p. 155) in his description of the government role in air transportation in Canada points out that:

"For air transport, airports are carried at a loss as only 2% of costs are covered from tickets takers and landing fees. There is no cost recovery for air traffic control and there are some small subsidies for uneconomic services".

Public transport, including air transport, is seen by most countries as capable of furthering a variety of national policies. Therefore, Gratwick (op. cit., p. 156) indicates several general policy areas which are relevant in Canada to particularly the government's intervention in public transport including airlines. These areas are:

- Defence and national security,
- Unification,
- Expansion,
- Society,
- Energy and work, and
- Trade.

Because of the significant role of air transport in national policies, in most airlines governmental authorities and organisations are involved either in the industry's operations or in other ways.

In view of the extent of government influence in public transport, it would seem desirable to look at the objectives of government intervention in the nationalised industries.

## 2.4.2.2 Objectives of Government Intervention in the Nationalised Industries

The National Economic Development Office in Britain has discussed in detail the crucial question of whether the government should aim to stand back from the industries and operate an "arms-length" relationship, or whether it should be involved more closely. Their conclusions in this respect are as follows:

" It seems to us that the thinking behind the wholly arms-length approach is based on a false analogy with the private sector. The financial structure and disciplines in the public and private sectors are very different -not least because the ultimate sanction of liquidation is in practice absent in the major nationalised industries. Moreover, they act as employers, suppliers, and customers, and the economic and social implications of their actions make it right as well as inevitable that government should take a close interest in their strategies. The issues of the public policy involved are so long and politically sensitive that it is not realistic to suppose that they would ever be left alone to determine their policies, subject only to checks periodic on their financial performance".

(In Chancellor of Exchequer, 1978, p.7).

Gramlich (1981, p. 26) reviews the three objectives of government intervention in a market economy. He states that:

"Problems in resources allocation involve expenditure programmes on particular goods or particular areas -public in goods, externalities, and natural monopolies- so as to bring marginal social benefits in line with marginal social costs and improve economic Problems in income distribution efficiency. involve overriding the market distribution of income to yield an actual distribution that better to social standards conforms of fairness. This could be done either in a comprehensive short-run sense through a tax and transfer programme that could generate efficiency losses; or in a long-run sense through education and training programmes , which are less comprehensive, but could involve efficiency gains. The final set of objectives refers to macroeconomic stabilization goals to minimize unemployment and inflation and to provide for economic growth".

It can thus be concluded that governments intervene in nationalised industries for allocation and distribution reasons. Allocation programmes include measures to affect relative prices and/or the allocation of resources in an by considerations motivated of economics economy, Distribution programmes aim to alter efficiency. the society distribution of income in a motivated by considerations of distributive equity. Stabilization measures are designed to achieve a series of objectives; for instance, governmental efforts to set the pace of economic activity motivated partly by a desire to stabilise prices, and partly by a desire to ensure that overall output levels are growing at the right pace.

The role of nationalised industries can be converted into formal, measurable, financial, and economic objectives. This is achieved by an increased emphasis on economic

performance and a progressively more explicit definition of financial and economic considerations.

Of course it is possible to translate economic and social goals into a financially measurable form. On the other hand, attention has to be paid to public enterprises' social responsibilities towards their environments, such as social welfare avoiding unemployment promoting and considerable protecting the public interest. Another responsibility of the nationalised industries might be political objectives set by their government.

#### 2.4.3 Planning and Control in Nationalised Industries

The first main feature of planning in the nationalised industries is the extent of public participation in the planning process. Kingshott (1975, p. 58) stated in respect of British Steel:

"Our shareholders in the government have to be given much more knowledge of our planning options and selected strategies than is the case in private industry. And the government has more power than private shareholders to influence the strategy which is selected".

Therefore, the firm's plans have to be constructed to withstand more scrutiny than those of private sector industries and they must take account of a much wider range of views and possibilities than other companies consider necessary, and must be as sensitive to the political implications of decisions as to their commercial implications.

A further characteristic of planning in nationalised industries is the limited nature of the diversification opportunities which are available to management in order to engineer profit improvement, to spread risks, or to provide alternative employment opportunities for workers.

One planning feature which is much the same for both the nationalised industries and the private sector is financial planning. The principal element of any planning system in either nationalised or private industries is the long range plan which is related to a five-year horizon, and the short-term plan which is related to a one-year horizon.

The nature of operational management tasks differs little between private and public enterprises. There are jobs to be done, budgets to be met, activities to be organised, and decisions to be made in both public and private sectors. However, Heath (1980, p. 16) has argued that:

"The higher up the management hierarchy the more different the tasks become. Contact with government becomes a more important activity, the centralised functions, specially planning and finance, are likely to be larger, finding solutions to government induced problems, and absorb time which ought to be devoted to managing the business. Public enterprises need political strategies as well as business strategies, and these require people with special knowledge and experience".

Comparing the state and its portfolio of public enterprises, with a private sector holding company with its portfolio of subsidiaries, certain differences emerge:

i) Planning and finance departments are likely to be

larger (for equivalent enterprises) in the public sector.

- ii) There is likely to be less stringent control over managerial performance between the government and a public enterprise than between a private sector holding company and its subsidiaries.
- iii) The managerial control system at lower levels of management is also likely to be less tight than in the private sector.
  - iv) The job of managing a public enterprise is likely to be harder than in the private sector equivalent at all levels of management.
  - v) Loyalty to the organisation -especially among senior managers- is likely to be greater than in a private sector equivalent.
- vi) Power in a public enterprise is likely to more highly concentrated and centralised than in an equivalent private sector subsidiary, and this is likely to create particular problems in a service business.
- vii) There is likely to be greater emphasis in public enterprises on "trouble-shooting" as a means of responding to crises and less emphasis on finding and achieving a deeper solution.

viii) The pay and employment conditions of board members of public enterprises are likely to be less satisfactory than in the private sector, and the appointments system may not always provide the right people for the job.

One of the main features of control in nationalised industries is governmental control. There are good economic reasons for some degree of public control, and examination of the major industrialised countries reveal that the same industries are subject to public control. Fielding (1979, p. 6) states that:

"Of the eighteen countries surveyed in a recent article in the Economist, all either publicly own or otherwise control their posts, telecommunications, railways, electricity, gas, coal and airlines. Public ownership is the most popular form of control; Britain is third after India and Austria in the number of industries publicly owned, last is the U.S., preceded by Japan, Canada, Belgium, and Switzerland. In these last countries, regulation or joint government - private ownership is a more popular form of public control".

any nationalised industry has Certainly, specific economic or market features which make some form of public control necessary, such as security or defence, infrastructure, natural monopoly, and short-term transition. In the light of the foregoing discussion of planning and control in nationalised industries, it can be concluded that financial and management control systems have an extremely crucial part to play in these industries. Furthermore, control in the public industries could be classified as two

main types: Firstly, internal control within the industry itself, such as budgeting control systems, and secondly, external control by means of government and parliamentary control.

#### 2.5 The Airline Industry and the Accounting Systems

In recent decades, many commercial airlines have shown increased interest in developing and establishing advanced systems to assist their performance accounting and efficiency. In the search to develop their accounting systems implement new ones, there are or two main The first is to buy a ready made system: approaches. an example is the system applied at British Airways. The second is to create a suitable accounting system in the light of the airline's social and economic environment. However, in some cases the airline has to adopt a uniform accounting system, especially where it is publicly owned, to meet the needs of national planning. Egyptair is an example of such an airline.

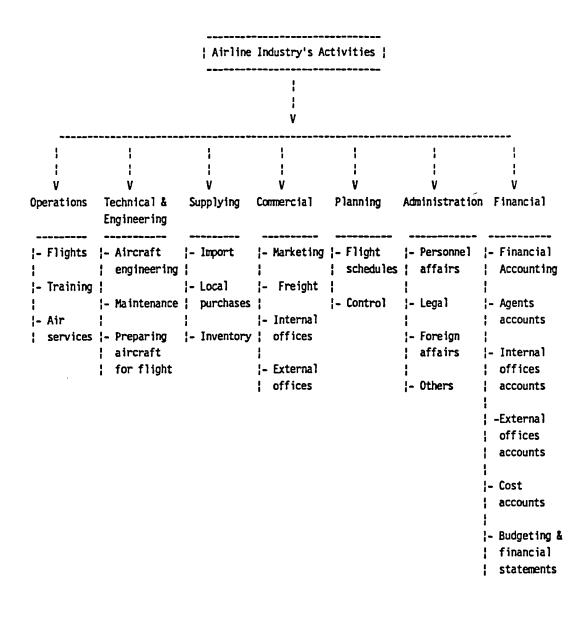
# 2.5.1 The Main Features of the Airline's Financial Structure

The major role of commercial airlines at the present time is to transfer passengers, cargo, luggage and mail and to provide tourist services. The main activities of an airline are identified in figure (2.3).

With regard to the structure of airline accounts and their classifications, Dogonis (1985, pp. 73-75) explains

#### Figure (2.3)

#### The Airline Industry's Main Activities



that:

"It is normal practice to divide airline accounts into operating and non-operating categories. The aim is to identify and separate out as non-operating items all those costs and revenues not directly associated with the operation of an airline's own air services ".

He also goes on to argue that:

"On the operating side, airline accounts divided into operating revenues and are operating costs. The latter can be further subdivided into direct operating and indirect operating costs. In theory the distinction between those two costs is associated with and dependent on the type of aircraft being operated and which would change if the aircraft type was changed. Non-operating costs are all those costs which will remain unaffected by a change of aircraft type because they are not directly dependent on aircraft operations ".

It should be mentioned, however, that in practice the distinction between direct and indirect operating costs is not always clear cut. There are some cost items, for example, cabin crew costs, which are categorised as direct costs by some airlines and indirect by others.

## 2.5.2 The American Civil Aeronautics Board's (CAB) Uniform Accounting System

The CAB has the authority, under section 407 of the Federal Aviation Act of 1958 as amended (72 Stat. 731, 49 U.S.C. 1301), to prescribe the method of keeping airline accounts. The Board maintains rules containing a standard accounts with interpretative regulations set of that airlines are required to follow.

O'Connor (op. cit., p. 53) states that:

"If you visit the CAB's office (1) in Washington (presumably, later, the DOT's office), you will find a public file room with accounts from each airline in loose-leaf People may come in, as in a public binders. library, take down the binders, and go through They list traffic and revenue data, them. broken down in various ways such as by passengers, cargo, and mail. they show the carrier's equipment (such as aircraft) by number and type, spare engine, and spare parts. Of course there are balance sheet and income statements ".

This accounting system, which was initiated in May 1976, is designed to reflect the varying needs and capacities of different air carriers without impairing basic accounting comparability as between air carriers. The CAB Uniform Accounting System is applied in 44 U.S.A. licensed air carriers which are classified into three main groups and two supplemental. This grouping may be reviewed from time to time upon petition of individual air carriers or by the request of CAB with the view to a possible regrouping of air carriers.

The system consists of five main sections: general accounting provisions, balance sheet classifications, profit and loss classifications, operating statistics and general reporting provisions.

## 2.5.3 The General Accounting Provisions

The general accounting provisions of the system briefly include an introduction to the system and accounts and (1) DOT : Department of Transport.

reports and general accounting policies, such as:

## a. Applicability of system of accounts and reports

Each air carrier should keep its book of accounts, records and memoranda and make reports to the Board in accordance with this system of accounts and reports. The CAB reserves the right to expand or otherwise modify the classes of carriers subject to this system.

#### b. Waivers from the system and accounts and reports

A waiver from any provision of the system of accounts or reports may be made by the CAB upon its own initiative or upon the submission of a written request from any air carrier, or group of air carriers, provided that such a waiver is in the public interest.

## c. General description of system of accounts and reports

Under the system of accounts prescribed, balance sheet elements are accounted for by all air carrier groups within a fixed uniform pattern of specific accounts. The profit and loss accounts can be reduced to broad objectives and general or functional classifications which are comparable for all air carriers.

In order to afford air carriers as much flexibility and freedom as possible in establishing ledger and subsidiary accounts to meet their individual needs, a minimum number of account subdivisions are prescribed. It

is intended, however, that each air carrier, in maintaining its accounting records, will provide subaccount and subsidiary account segregations, in a manner which will render individual elements readily discernible and traceable throughout the accounting system.

#### d. System of accounts coding

A four digit code number is allocated to each balance sheet and profit and loss account item. Each balance sheet account is numbered sequentially.

## e. Interpretation

Any questions involving matters of significance which are not clearly provided for should be submitted to the Director, Bureau of Accounts and Statistics, for explanation.

#### f. General Accounting Policies

#### 1. Basis of allocation between entities

a. Each transaction is recorded and placed initially under accounting controls of the particular entity to which it is directly traceable.

b. All revenues and expenses are apportioned between accounting entities on the basis of the services provided by each.

c. Each route air carrier is required to file a statement with the CAB which details the practices and techniques used in directly assigning operating revenues and

expenses.

# 2. Distribution of revenues and expenses within entities

Revenue and expenses attributable to a single account or functional classification are assigned accordingly.

Expenses items relating to more than one function are in charged to the general overhead category to which it is applicable, except that where only an incidental contribution is made to more than a single function, an item may be included in the function to which it primarily relates, provided that that function is not distorted by including amounts applicable to other functions.

#### 3. Translation of foreign currencies

All accounts are stated in terms of USA dollars, and at each transaction date, each asset, liability, revenue, or expense arising from a transaction denominated in a foreign currency is translated into USA dollars at the exchange rate in effect at that date, and is recorded at that dollar amount.

At the balance date sheet for each accounting period, dollar balances representing cash and amounts owed by or to the carrier that are denominated in a currency are adjusted to reflect the current rate of exchange. In addition, assets carried at market value, whose current market price is stated in a foreign currency are adjusted to the equivalent dollar market price at the balance sheet date.

#### 4. Depreciation

Depreciation is calculated by the air carrier in such a manner as will prevent the charging of either excessive or inadequate expense or the accumulation of excessive or inadequate reserves. It is based upon a study of the carrier's past experience and such engineering or other information as may be available and without regard to depreciation accounting practices adopted for tax purposes.

Depreciation chargeable against operations is limited to the actual costs incurred in the acquisition of the assets to which it relates. Also, each carrier is required to prepare a statement which clearly describes each asset classification and the methods, service lives, and residual values used for computing depreciation.

## 2.6 Summary

In this chapter, the role of accounting data in financial planning and control procedures has been investigated. It has been shown that the accounting information system has a vital part, not only in the process of decision making, but also in the implementation of financial planning and in the monitoring and control system. The chapter has also discussed responsibility accounting as an element of the accounting control system.

Planning and control phased in the nationalised industries where the the relationship between government and

nationalised industries was reviewed. Two types of control were identified, internal control, i.e. the budgetary control system, and external control by government and parliament.

Finally, the American CAB's Uniform Accounting System was described. This system to permits limited contraction or expansion to reflect the varying needs and capacities of different carriers without impairing basic accounting comparability.

## CHAPTER: THREE

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FINANCIAL PLANNING AND CONTROL: A CONCEPTUAL FRAMEWORK FOR THE AIRLINE INDUSTRY

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## 3.1 Introduction

This chapter presents a review of the literature on financial planning and control. Consideration is given to the concepts of corporate planning, operational planning and finally, financial planning and control, thus providing a theoretical background to the more detailed discussion of financial planning and control. Ultimately, this discussion will serve the major objective of this chapter, which is to formulate a financial planning and control framework for the airline industry, and for "Egyptair" in particular.

#### 3.2 Review of Planning Literature

aspects of planning are concerned with reviewing All ways and means to achieve given objectives, listing the actions to be taken and the resources necessary to implement the selected strategy. The necessary standards of performance for a wide range of corporate activities must be set out in such a way that it is possible to know fairly promptly if actual performance is above or below the levels to achieve the objectives, so that required either corrective action can be taken, or the objectives modified. In extreme situations, the monitoring of actual performance against planned levels of performance may indicate that a plan is no longer appropriate.

#### 3.2.1 Planning and the Environment

Emery and Trist (1978) point out that an organisation can be viewed as operating within an environment that has

economic, social and technical features. A firm needs to acquire performance patterns that enable it to respond to and act upon that environment in ways that provide it with the required resources.

The crucial point here is that while the environment may have major effects on the firm, the firm may not be able to exert a reverse influence. The external and internal factors of importance to this issue have been identified by Aronofsky and others (1978, p. 255) as follows:

#### <u>External</u>

- Product market structure in terms of size of market, number and size of competitors, number and size of customers, etc.
- Resource market structure in terms of size of market, number and size of suppliers, number and size of other purchasers, etc.
- Sources of financing and availability of capital.
- Regulatory environment.
- Pattern of labour agreements and wage, hour, and working conditions patterns for employees.

#### <u>Internal</u>

- Number of production processes.
- Number of products made.
- Capital intensiveness.
- Planning time horizons and control time horizons.
- Length of manufacturing cycle from firm receipt

of order to completion of work. - Levels of management.

- Degree of local plant autonomy.
- Interdependence of management task within and between plants.

Steiner (1978) explained that one of the most important elements of strategic planning is the fundamental organisational "Socio-economic purpose" of a company. In addition, he argued (p.31) that:

"In the U.S. at the present time there are substantial changes taking place in social expectations of business which are of great significance in the strategic planning of companies particularly the larger ones, General Motors for example, in a number of ways, automobile safety, smog control, and social responsibilities generally is reacting to these changes in general social attitudes".

Thus, it can be concluded that there are several environmental factors which could affect the firm's planning process such as economical, sociological, political and technological.

## 3.2.2 Planning and Management

Certainly, planning is an important element of management, although the percentage of time that should be spent on it is probably indefinable as it will vary between function, industry and firm. As a generalisation it may be true to say that the higher the echelon of management, the greater the time that should be devoted to planning. It is

widely understood that planning is a task to which every manager ought to devote a percentage of his time; just how much depends upon the circumstances.

The relationship between planning and management has been examined by many accountants, economists, and managerial writers, such as Hussey (1982), Steiner (op. cit.), and others. The managerial activities which are considered the most important are:

- Planning,
- Organising,
- Commanding,
- Co-ordinating, and
- Controlling.

Management in any firm is the guide and director of all these activities for the purpose of meeting the planned goals.

Anthony and others (1975, p. 20) explain management activities as:

- Strategic planning, such as choosing company's objectives, planning the organisation, and setting personnel policies.
- Management control, such as formulating budgets, planning staff levels, and formulating personnel practices.
- Operational control, such as implementation of policies, scheduling production, and measuring and

improving efficiency.

#### 3.2.3 Planning and the Human Factor

The two major aspects of planning are strategy development and implementation, but there is a tendency for planners to consider the human aspects only during the implementation of the planning process.

Hussey (op. cit., p. 82) explains that planning can fail because of the way it is introduced or managed in a particular firm. Warren (1973), and Steiner (1978) carried original surveys and discussions with out individual planners who faced difficulties related to planning. The difficulties included the behaviour of the chief executive, acceptance by management, confusion about corporate planning and its meaning, confusion of strategic and operational planning, insufficient care given to the formulation of plans, and the planning system sometimes being too sophisticated for the firm it is serving.

It can be concluded that planning will fail if the chief executive does not understand it, and accordingly shows a lack of interest in its processes. Therefore, planning has become a separate discipline in the business schools and a distinct profession in the world. Also, many programmes have not been completely successful, simply because the planners have not developed the targets on the basis of discussion of those targets with the individuals involved.

#### 3.2.4 Concepts of Planning

In this section attention is paid to the following three concepts of planning:

- 1- Corporate planning,
- 2- Operational planning, and
- 3- Financial planning.

## 3.2.4.1 Corporate Planning

Planning is classified by Steiner (1978, p. 93) into Intuitive and formal planning. The first is known as informal planning and it based on experience, a "feel" for a situation, and a deep understanding of events. In contrast, formal planning or organised planning is frequently performed by and with the help of many people in a firm on the basis of procedures laid down beforehand, generally as a written set of plans.

Several authors have tackled the task of writing guides to corporate planning for top management, for instance: Hussey (1979a, 1979b, and 1982), Eddison (1973), Warren (1973), Bouamrene and Flavell (1980), Taneja (1982), Wills and Beasley (1982), Hausman and Sepehri (1985), Haines (1988), Forman (1988), and many others.

These guides lay down the corporate planning process in terms of certain stages, which will be considered below.

3.2.4.1.1 Process and Structure of Corporate Planning

Literature specifies the corporate planning process as

follows:

- 1- Determination of objective and targets -corporate objectives. It is better for firms to employ a hierarchy of objectives with varying degrees of emphasis attached to each objective, instead of one objective.
- 2- Determination of the task for the organisation, based on the planning gap.
- 3- Preparation of a forecast realising its probable inaccuracy.
- 4- Deciding upon the operating constraints and determining the means to close the gap.
- 5- Preparation of the written plan.

is a temptation for a company to copy the There of others which have adopted experience successful rather than to develop a corporate planning processes, process for its own use. Even if the other company has been even if both companies provide the successful and same services, an identical planning process would not be appropriate because the process of planning should be governed by the social dynamics within the executive group rather than by the ability of the organisation to conform to the dictates of someone else's planning model.

In this regard, Shuman (1972, p. 148) argued that:

" A firm wishing to establish a planning process should do so by adopting and modifying planning principles and concepts to its own

unique operating environment. In this sense there is no right or wrong planning process to implement, rather, there are some guidelines which are more likely than others to lead to success ".

An important development in recent years in the field of planning and control has been 'Planning, Programming and Budgeting System (P.P.B.S.) . Although the implementation of the system has caused enormous problems, and many experts have regarded it as a failure, it does demand attention in that it is, in effect, very little more than the extension to the public sector of corporate planning and control procedures which have been found to work, and work well, in the private sector. The main steps in P.P.B.S. process are as follows:

- (a) The determination and specification of the objectives of the organisation in question;
- (b) The search for programmes which may be adopted to achieve those objectives;
- (c) The appraisal of each programme by means of cost benefit analysis to identify the likely contribution of each programme to the attainment of the objectives of the organisation;
- (d) The selection of the optimal mix of programmes;
- (e) The construction of a master budget which will incorporate the newly selected programmes into the existing programmes and activities of the organisation;
- (f) The implementation of the budget; and
- (g) The control, monitoring and feedback process.

## 3.2.4.1.2 Corporate Planning Constraints

Many of the constraints on a firm's corporate planning activities are related to its size or arise from a dominant market position. Therefore, because of the specialist nature of the firm's plant and the relatively few manufacturers who can supply it, the speed with which the firm can implement its development strategy is a function not only of its own ability to control this substantial volume of expenditure effectively, but also of the ability of its suppliers to produce and commission the equipment.

Similarly, the firm can not close down plants abruptly in order to get cost advantages or to rid itself of any surplus capacity, simply because of its dominant position as employer in many communities. In addition, there is another constraint, in that the firm is possibly a major user of many materials, in which case it may have to commit itself to long-term contracts.

Therefore, those activities of the firm which affect its corporate planning decisions are related to the limitations imposed on its pricing decisions by the external environment, in many cases, the government.

## 3.2.4.2 Operational Planning

The operational plans are expressed in physical and financial terms and reflect the outcomes and resource implications as formulated and agreed by the participants for the short-term or medium-term future. Ahmed (1982,

#### p.12) argues that:

"Operational planning refers to the activities of co-ordinating and allocating organization resources. It provides а framework within which the corporate will objectives be met, taking into economic, consideration technical, the financial, and environmental constraints ".

In other words, operational plans should cover marketing, production, administration and financial plans and also deal with existing products. Thus, operational planning gives rise to plans and forecasts which flow back to the strategic planning process, where they are considered in the light of the firm's objectives and strategy.

Furthermore, through the operational planning process procedures are developed for the co-ordination and scheduling necessary to control the firm's pursuit of its chosen objectives. Thus operational planning is concerned with maximising operating efficiency, and is essential if the firm is to achieve its proposed targets and planned performance.

Operational planning also has an indirect effect on resource allocation, and is a crucial element in the information system of most organisations. More attention should be given to this kind of planning, for it also provides feedback about the performance of the subunits and the functional departments. Thus, decisions about placement, promotions, termination and pay can be made.

The process of operational planning may be centralised

or decentralised. If it is centralised, however, it should be related and complementary to other centralised planning processes.

In summary, then, operational planning covers a wide area, and can be set for the long or short term. Confusion sometimes arises between the terms corporate, strategic and operational planning, but a strong operational planning system is one of the most fundamental factors in the strategic planning process.

#### 3.3 Financial Planning

# 3.3.1 Links between Financial, Operational, and Corporate Planning

Financial planning involves a survey of long-term financial trends, the present and future of the general economic situation, and the relation to each of the production, sales, research and development and general administration. It is the heart of the corporate planning system, partly because of the time needed to plan and partly because the firm's resources and costs need to be well planned. Franks and others (1985, pp. 709-710) argue that:

"Financial planning enables management to assess financial risks and, if appropriate, protect against them. By sharing the risks with other partners, by entering into contracts incorporating escalation clauses, or by negotiating long-term financing, management may be able to shift or to sell some of the risks to other parties.

Because financial planning reduces frequent unanticipated demands for additional funds

that result in unnecessarily high transactions costs, it reduces costs both to shareholders and to lenders".

The relationship between financial, operational and corporate planning can be illustrated by figure (3.1).

Two key points are illustrated by this figure. Firstly, this design makes it possible to identify and summarise the activities of each major corporate management unit. In addition, the form and level of detail can be varied between units/departments, of the firm according to their individual features and their contribution to the planning process.

Secondly, it may be noted that a logical set of ideas should be followed; these, of course, depend upon the structure of the business.

## 3.3.2 Financial Planning Objectives and Limitations

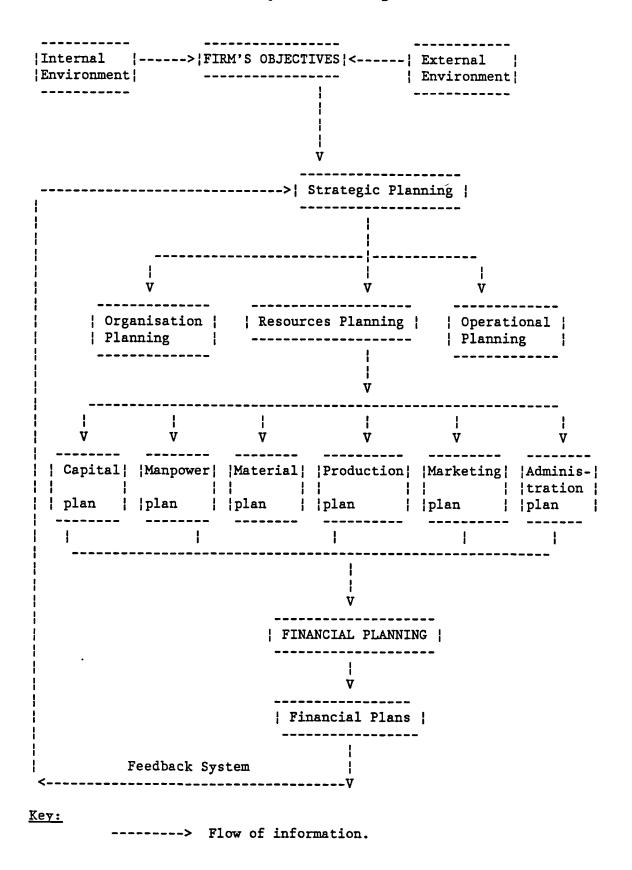
The finance function always plays an important role in business management and many businesses have felt the need for increased efficiency in the area of financial planning. In order to define the financial function, two distinct aspects can be considered:

1- Management of company assets, cash, bank deposits, marketable securities and of part of the company's liabilities -financial liabilities of any kind. This

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Figure (3.1	.)	
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The Relationship between Financial, Operational and Corporate Planning



may involve short-term operations such as bank operations, or medium/long-term operations such as planning of important financial decisions; this latter might, for instance, be the time and the amount of a loan flotation in connection with the future financial needs identified during company planning.

2- Production of information regarding the financial aspects of past and future management and operations. This information includes accounting, control and economic and financial aspects of proposed decisions, the effects of which will be felt in the future.

Therefore, the departments within the firm which develop this information may have various titles, for example, financial management, accounting planning, and administration. However, the principal activity is the appraisal of the financial aspects of investment and the firm's planning.

Because the preparation of financial plans on the basis of the information available to planners leads to more effective decision-making, there is a need to develop financial planning techniques. However, managers may face considerable difficulties in securing the amount as well as the type of funds needed at a cost which will allow the company to maintain balanced growth, and extreme care must be exercised in financial planning where inflationary influences are concerned.

Financial planning objectives may be summarised as follows:

- Recognising the significant interrelationships within the firm.
- Evaluating and considering all reasonable alternatives.
- Determining the full financial effects of each alternative.
- Reviewing the present and future availability of funds.
- Formulating the required financial plans, in the light of the firm's needs.

Good financial planning can help management to avoid waste by providing policies and procedures which make possible a closer co-ordination between the various functional areas. Once again, without detailed financial plans, executives in the lower levels of the organisation chart often develop their own policies and procedures which produce not only confusion, but also waste in the form of lost time, goodwill, and financial resources.

Above all, financial planning enables the organisation to maintain financial equilibrium. This was illustrated by Bar-Youssef and Landskroner (1984, p.14) whose article provided an analytical framework of financial equilibrium expounded in relation to the government sector as well as the private sector.

At same time, financial plans the have their limitations, because future states cannot be forecast accurately. This is particularly true of plans which cover several years, since the reliability of forecasting decreases with time. On the other hand, plans which cover a relatively short period can be more reliable since both internal and external factors affecting the firm can be predicted with greater accuracy.

The inability of management to change a plan once it has been made, represents a further limitation. However, it is quite possible for a firm to overcome this by improving its forecasting techniques and revising plans periodically, and by the development of variable plans which take changing conditions into consideration.

## 3.4 Control Concept- A Review

It should be emphasised that planning on its own is not particularly useful because it requires high quality implementation procedures and a strong monitoring and control function if it is to succeed in practice.

## 3.4.1 Why Control is Essential ?

Control and evaluation are necessary for running any industry, whether profit-making or otherwise, and any organisation no matter what sort of activities it deals with and whatever its size, needs to exercise control in order to reach its desired targets by implementing its plans. Banks

(1983, p. 168) writing on the control of legal costs in the Xerox company states that:

"Clearly the opportunity was there, controls were not just lax, they were nonexistent. While the law department was responsible for legislation, it had no system for executing that responsibility.

Our first challenge was to find a way to establish cost parameters, we did not have to be creative. We turned naturally to the tried and proven business methods of expenses control: the budget".

In addition, checking performance and cost control by using variance analysis is an activity depending in the first instance on accounting techniques. Pocock and Taylor (1981, p. 14) argue that;

"Control information needs to concentrate on key result areas. In so far as results in these areas can be measured, the numbers used need not always be financial, but if good results are being achieved on these numbers, then the organisation is a long way along the road to creating good financial results ".

Therefore, the information needed for control purpose must always be tailored to fit the circumstances.

3.4.2 What is Control ?

Control concepts range from systems engineering and cybernetics approaches, approaches framed essentially in terms of feedback, to the human relations approach as typified by management targets.

Morris (1978, p. 363) argues that the many definitions of control have much in common; the essential differences

between them lie in the extent to which they regard the firm's objective-setting processes and the taking of corrective action as elements of control.

Nevertheless, control ensures that the desired results are obtained from what is done in the light of the plans set by the organisation's management. In general, control activities can be classified into task control and management control. Task control is defined by Anthony and Young (1984, p. 4) as follows:

"Task control is the process of assuring that these specific tasks are carried out effectively and efficiently".

However, the focus of the present study is on management control.

#### 3.4.3 Management Control System

Management control activity is the link between the planning and control phases and it helps management to decide on the optimum allocation of resources. It also influences behaviour.

Anthony and others (1984, p. 5) explain that management control is a process carried on within the framework established by strategic planning. Thus the management control process is intended to make the achievement of the planned objectives as effective and efficient as possible.

Macintosh and Daft (op. cit., p. 51) point out that the management control system also helps managers to evaluate

employees and co-ordinate across departments. Depending upon emphasis given to a control system the within the organisation, scope and frequency may vary, and so may the emphasis given to each control function. Management control systems can be evaluated in terms of many features, including the reporting system, influence on goal-setting, planning, response to variances, and influence on day-to-day operations. Therefore, the management control system is a crucial function in any organisation. However, it is by no means the whole of management: its main purpose is to encourage management to take actions that are in the best interest of the organisation.

#### 3.4.4. Structure of Management Control System

The term "Management Control System" (MCS) is assumed to include at least the following elements:

- 1- Environmental test,
- 2- Targets and objectives setting,
- 3- Planning and budgeting,
- 4- Reporting operations results and measuring performance,
- 5- Taking necessary corrective actions, and
- 6- Feeding back the information obtained.

The development and implementation of a MCS is an enormous undertaking and can be a costly venture. Therefore, it is necessary to approach the problem in a systematic manner. A well thought-out MCS offers

opportunities for improving the business results of the firm through development of planning and control procedures.

# 3.5 Financial Planning in the Airline Industry Literature

Financial planning in the airline industry is rarely discussed in the literature, but some references are made to several areas for which financial plans should be worked out by the airlines during their corporate planning procedures. In a discussion of the problems involved in any airline's operations and its management function, Katz (1970, p.229) identifies the following:

"1. deciding on route structure, equipment conducting and schedules, 2. flight operations, 3. maintaining and servicing aircraft, 4. servicing passengers and shippers, 5. advertising, promoting sales, 6. dealing with governmental and other public bodies, 7. purchasing and inventory control, financial planning, 9. 8. industrial relations".

As a result of a good financial planning strategy, a well co-ordinated management, delegation of responsibilities and an ability to make employees feel they are part of a team, Singapore Airline's (SIA) productivity is up to twice that of other airlines who might regard themselves as competitors, with an ability to drive hard bargains and obtain the right aircraft at the right price at the right time. Rafferty (1984, p. 105) pointed out that:

"SIA has never posted a loss in its elevenyear history. Last year (1983), SIA, one of the world's top fifteen airlines made an after tax profit of \$50 million on \$1.25 billion in

revenue. Airline operations accounted for just under half this profit, the other \$27.3 million coming from activities such as airport handling, duty-free shops and engine and aircraft overhaul subsidiaries".

In contrast, some plans of U. S. airlines were illconceived, though economic conditions and fuel crises after 1973 were beyond their control. Robertson and Ward (1983, p. 40) explain how Braniff, a USA domestic airline, decided to expand its product line and was the first to apply to the CAB for automatic market entry for unused routes as the CAB made them available in the initial experimentation with deregulation. However, the airline discovered that the reason other airlines were not flying these routes was a lack of traffic. As a result, the company encountered huge costs and low load factors.

Schneider (1973, p. 53) referring to airline management strategy and how it could be evaluated explained that:

"The answer lies in a tabulation of the major kinds of decisions that face airlines cargo managers:

- Determination of route and level of service.
- Selection of flight equipment.
- Development of a ground cargo handling and transportation system.
- Planning and implementation of marketing strategies including pricing, personal selling, promotion, and market research.
- Recruiting, training, motivating, and controlling the workforce.
- Development of a management organization geared to the specific requirements of the air cargo business with freedom to determine the level of assets and manpower necessary to achieve corporate financial goals".

These strategic decisions are clearly interrelated; for instance, choice of equipment will affect the cost of operations, feasible prices, frequency of service, and number of locations to be served.

Mandell (1979, p. 19) in his book on the USA Airline Industry in the 1980's, examined the magnitude and timing of capital requirements for the eleven largest airlines in the USA. He argued that the wide discrepancies in the financial performance of the carriers investigated indicated that several major airlines would be in serious financial trouble. Moreover, Bouamrene (op. cit., p. 32) claims that:

"Most world airlines are at present, concerned with short-term survival and hence with short-term plans. Such plans, could, and in general should, be produced on a divisional basis if, by doing so, sight of the company's overall objectives is not lessened, for an airline to survive and develop long-term".

The obvious conclusion to be drawn from Glass's article (1982, p. 259) on the planning for acquisition of Eastern Airline's new aircraft and their financing is that a capital-intensive industry or company cannot continuously replace its assets without meaningful profits. This is particularly true in an inflationary economy where the cost of replacement assets is higher than the depreciation charge. While a company may survive in this way for a while, outside financial markets will not permit it indefinitely.

However, financial planning has not been widely

discussed in relation to the airline industry, hence the importance of the current research.

3.6 Structure of the Conceptual Framework

The heart of an airline's success will be its planning system in the broadest sense of the term, for it is unlikely that it would be able to pursue its mission, as defined by its top management without adopting a satisfactory financial planning and control process.

The following major points must be examined as factors which will contribute to the formulation of the proposed framework:

- The theoretical framework.

- Techniques and models of financial planning.
- Financial planning and forecasting.
- Forecasting models.
- The cash budget analysis.
- Financial statements and financial break-even analysis chart.
- Sensitivity analysis.
- Control and feedback system.

#### 3.6.1 The Theoretical Framework

Theoretically, any attempt at tailoring a financial planning and control framework to the needs of the airline industry would result in a large and quite complex model, because the industry itself is complex both in itself and in relation to the environment.

When reviewing the framework it must be emphasised that this study has concentrated solely on the corporate financial planning and control procedures. However, these must be specified before it is possible to formulate an overall system of long and short-term financial plans and control. The crucial elements which cover the functional areas of the operations and form the model for the industry will be compared with the actual practice in two airlines: British Airways and Egyptair.

## 3.6.1.1 Techniques of Financial Planning and Control

The financial model is built as a part of the organisation's management information system, and provides a broad point of reference when considering decisions relating to the development and use of the framework. The model attempts to recreate real-life situations by means of representations of how the variables in a given situation behave. Krueger and Kohlmeier (1972, p. 27) suggest that:

"A financial planning model is a representation of a company based on a set of economic assumptions and relationships. The model can generate projected operating and financial statements and can be used to answer a range of "what if" type questions ".

Financial models have been applied particularly through the use of computer programmes.

In addition, there are other tools, such as forecasting by use of statistical techniques, financial break-even and

sensitivity analysis, revenue analysis, cash/ profitability analysis and so on.

## 3.6.1.2 Financial Planning and Forecasting

The higher the quality of the forecast, the more effective is likely to be the internal allocation of financial resources. Forecasting is crucial to the adoption of a financial planning policy. It is important to any not only for top management, but also for company, employees, governmental authorities shareholders, and potential investors. In recent decades, for example, criticisms of published financial statements have led to suggestions that the publication of profit forecasts may lead to improved investment decisions.

Another crucial issue surrounding the strong relationship between forecasting and financial planning is that the financial forecaster is constantly aware that an error of one or two percentage points in estimating revenues or expenses can shift the profit position markedly.

Howard and Summerfield (1982, p. 57) have argued that:

"Because the future will always be shaped by a vast number of factors whose magnitudes, directions, and interrelationships can be estimated only imprecisely, forecasting is extremely difficult. Yet many organisations find it essential to devote considerable resources to the task of forecasting. A good forecast can provide management with a means of profitability taking advantage of the future or at the worst, avoiding disaster ".

Therefore, the financial planning process requires an

analysis of the present state of demand which is of great interest to the marketing manager. Demand forecasting is, of course, the core of planning in any form of economic activity. Nevertheless, the type of business and its environment should be considered at the time of forecasting and planning. Shaw (1985, p. 48) asserts that:

"For airlines, this is especially the case, for fleet planning decisions will often be taken three or four years before aircraft come into a carrier's fleet.

He continues to explain that:

"Consideration of of the nature the industry emphasizes one fundamental fact which applies to any forecasting technique, irrespective of its statistical sophistication. The history of air transport full of events -such as wars, civil is disturbance, fuel shortage and price increase, natural disasters, etc.".

Thus, it can be concluded that there is a strong relationship between financial planning and forecasting, and the degree of accuracy of planning depends upon the accuracy of forecasting and also on the forecasting techniques used.

3.6.1.3 Model Forecast

The literature on modelling corporate financial data has focused almost entirely on profit forecasts. Of the two general approaches to forecasting, causal modelling and time-series analysis modelling, the latter is used almost exclusively. Kodde and Schreuder in their paper (1984, p. 383) provided further evidence on the forecasting accuracy

of a simple time-series model with respect to financial data. They concluded that:

"..... for the purpose of forecasting yearly profits from time-series models, the pure random-walk model seems hard to beat, although in some studies moving average models better. Moving beyond such relatively simple models to more complex time-series frameworks seems as yet to yield no improvement in forecast accuracy".

Time-series models have become increasingly popular and thus it is recommended that a forecasting model of this type is appropriate to an airline's financial planning.

### 3.6.1.4 The Cash Budget Analysis

The main purpose of this section is to introduce the use of cash budget and cash flow analysis and their benefits for financial planning.

Attention should be drawn to one of the most important tools of planning, the cash budget, which indicates the ability of the firm to generate cash flow in order to determine its ability to pay dividends and other obligations. The cash budget summarises the estimated cash inflows and outflows of a business over the budget period.

Arnold and Hope (op. cit., p. 293) argue that the preparation of the cash budget aids management in its planning and its desire to minimise unwanted and nonproductive cash balances, while at the same time ensuring that, wherever possible, expensive borrowing to overcome short-term deficiencies is not incurred. The cash budget

could be prepared on a yearly basis as well as a monthly one.

Interest in financial planning focusing upon the cash budget information has been widespread. The cash budget technique is necessary, not only because of its benefits which have been extensively discussed in the literature, but also, because it provides useful insights into economic performance.

Any firm needs cash to finance its daily transactions, and also it naturally wishes to avoid the accumulation of idle cash balances which represent a non-productive use of resources. The cash budget helps to indicate the periods, if any, in which cash resources are expected to be inadequate, so that the firm may seek for an additional source of finance to avoid a lack of liquidity.

Thus, the cash budget's role in assisting the financial managers is crucial, because it provides the necessary information to indicate whether there is likely to be sufficient cash available to meet the firm's objectives.

# 3.6.1.5 Break-Even Chart and Sensitivity Analysis

Of course, the setting of any financial plan is based on the capability of forecasting costs and revenues of the proposed operational plans. This information can be used to determine the various break-even points and funding requirements under multiple sets of income and expenses

assumptions, marketing and service use. It is also enables the appropriate management level to prepare the financial statements and analysis chart, and finally it allows a user to conduct sensitivity studies.

Dahn and Coleman (1982, p. 273) point out that:

"During the initial stage of HMO <sup>(1)</sup> planning, the most useful of these reports are financial statements and analysis ch the chart. These present the "bottom line" of each They configuration study. contain such information as the month in which break-even will occur, what enrolment and premiums are projected to be at break-even and a statement of costs, revenues and profit (or loss) for each year".

Overall, the financial planning of a firm's activities not only makes it possible to work out the financial statements and undertake break-even analysis, but also to conduct sensitivity analysis in order to determine the sensitivity of break-even points and cash flow schedules to changes in projections.

#### 3.6.1.6 Control and Feedback

The most important aspect of control is to make sure that the organisation's resources are economically utilised, and used effectively in the light of the main financial targets of the company.

(1) HMO : Health Maintenance Organisations.

As explained earlier, a flexible budget based on standard costs is highly effective as a control technique, where the accounting analysis techniques, such as variance analysis, ratio analysis, etc. can be implemented in order to assess the firm's performance.

3.6.2 Elements of the Co-ordinated Framework

The main elements of the proposed framework can be stated as follows:

1. Environmental circumstances:

(a) External, e.g. the international market position,IATA standards and regulations regarding fares policies,routes licences and schedules approval.

(b) Internal, e. g. governmental constraints, political affairs, economic and social objectives, and the policies of the civil aviation authority concerned.

- 2. Airline's strategic objectives.
- 3. Airline's management structure and philosophy.
- 4. Airline's financial targets, both long-term, for example, the five-year plan and the capital investment plan, and short-term, for example the tactical plans or annual budget, which should include:
  - (a) Airline's application of IATA and CAA policies regarding fares and routes.
  - (b) Traffic and cargo forecasts.
  - (c) Costs estimation and allocation to each route/ aircraft/ department/ region etc.

- (d) Estimation of revenues.
- (e) Marketing: a plan formulated in the light of international and national market constraints.
- (f) Manpower plan, which includes aircraft crews, ground service staff, and other staff.
- (g) Fleet availability in terms of number of seats available and flying hours.
- (h) Provision for transport cargo.
- (i) Ground services, for example catering, fuel etc.
- (j) Profitability expectations.
- 5. Operational plans, i. e. the operating schedules for both regular and non-regular flights.
- 6. Cash flows forecast.
- 7. Control implementation and productivity measures and evaluation of the airline's efficiency.
- 8. Costs and revenue analysis.
- 9. Reporting on the budget and taking corrective actions.
- 10. Feedback of information through the budget period.

To formulate successful financial planning and control in an airline, the foregoing constraints and objectives should be taken into account. Therefore, the general structure of the framework can be indicated in the light of these different elements. However, it must be noted that this proposed framework should be integrated with the airline's main corporate planning strategy.

Thus, as shown in figure (3.2), the first step of the process is to set out the airline's financial goals, long

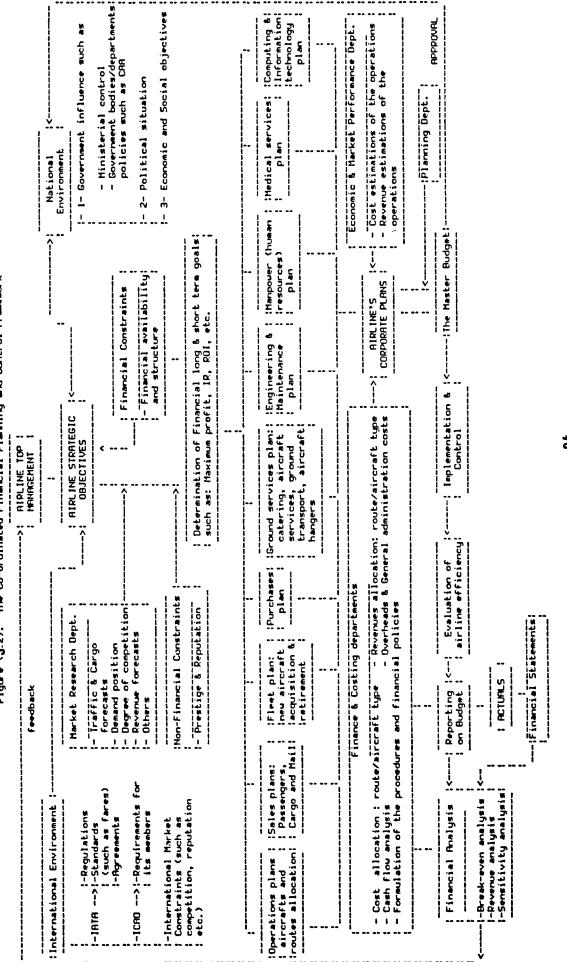


Figure (3.2): The Co-ordinated Financial Planning and Control Franework

and short-term, e. g. specific profit targets, cost minimisation, a specific return on investment (ROI) or specific internal rate of return (IRR). Hence, the financial planners should first establish both long and short term goals assuming that there is a main strategic objective for the industry. The next part of the process is planning the available resources, for instance, material, manpower, aircraft acquisition, fleet investment, cargo activity, capital expenditure, etc. Then, financial policies should be formulated in the light of the financial feasibility analysis, financial policies being the guide to all actions relating to procuring, administering, and distributing the funds of the airline.

It should be noted that financial planners are required to forecast the future market in order to predict the variability of the factors which influence the types of policies formulated by the airline. The fourth step is the translation of these financial policies into detailed procedures. The next stage is the allocation and analysis of the data input-financial, non-financial and combined information.

Financial plans are then formulated in the light of the availability of resources and additional capital borrowing, if necessary. The planners should build flexibility into these plans, so that the airline's management is able to revise or change the short-term targets, policies and procedures in accordance with changes in the international

market in order to take advantage of changing conditions. Therefore, the next step is to lay down the formulated financial plan -the annual budget or the tactical plan- and obtain approval from staff who will be responsible for carrying it out. Then, the preparation of cash flows analyses is necessary.

The most important segment in the overall process is the implementation and monitoring of the approved plan. The use of a management information system is highly recommended, as that would enable management to identify variances.

Finally, the analysis of financial -output- data is required, e. g. financial statements, revenue analysis report, break-even analysis, sensitivity analysis and the financial analysis summary report.

The crucial point is that the financial planning and control procedures should be followed by a feedback information system in order to complete the cycle of the framework.

#### 3.7 Summary

Literature relating to the theory of planning in general, corporate planning, operational planning and, in particular, financial planning and control, is examined in this chapter. Planning is essential to any firm if it is to stay successfully in business, while financial planning and control form the vital link in the organisation's strategic

planning cycle.

The theory of financial planning and control has been discussed in this chapter, with the main emphasis on establishing a conceptual financial planning and control model for the airline industry.

It was seen that some previous studies have investigated a particular area of airline activities such marketing; others have examined corporate planning as in other industries such practices as electricity. However, the area of financial planning and control in the airline industry is a vital topic which needs a considerable amount of attention.

It can be stated that financial planning and control involve the use of forecasts based on standards and the development of feedback and adjustment procedures to improve the industry's performance. The use of several types of lies at the heart of the processes. budgets Budgeting systems are developed for every significant area of the Thus, financial planning and control airline. systems improve profitability, avoid cash squeezes aim to and develop the efficiency of the individual division of the airline concerned and the services being presented.

Chapters four, five, six and seven investigate and test the prepared framework in relation to the actual financial planning and control processes at both British Airways and Egyptair.

PART II:

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THE PRACTICE OF FINANCIAL PLANNING AND CONTROL IN THE AIRLINE INDUSTRY: BRITISH AIRWAYS AND EGYPTAIR

# CHAPTER: FOUR

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# FINANCIAL PLANNING PROCEDURES AT BRITISH AIRWAYS

#### 4.1 Introduction

This chapter is mainly concerned with the financial planning procedures at British Airways (B.A.). This investigation is presented in three main sections: the first concerns the methods used to collect the required data for the empirical study, the second is devoted to the company's background and the third section deals with the procedures in practice at the airline.

# 4.2 Procedures for Collecting the Data required for the Empirical Study

As indicated in the introductory chapter, the two approaches employed during the study are:

- (1) Gathering data through in-depth personal interviews.
- (2) Gathering data from published sources and from British Airways.

# APPROACH ONE: Gathering Data Through in Depth Personal Interviews

Representatives of top and middle management at British Airways were interviewed. The following three main areas were fully covered:

- a- Financial planning procedures,
- b- Control procedures.
- c- The extent of Government influence on British Airways.

The following was the interview schedule for

determining the current financial planning and control processes at B. A.:

(a) A List of the Interviewees

A team of B. A. staff was organised by the Controller, Management Accounting, headed by himself, and representing all the major areas which cover the procedures concerned. This group included:

- 1. The Controller, Management Accounting of the company,
- 2. The Assistant Controller, Management Accounting (Reporting and Analysis),
- 3. The Assistant Controller, Management Accounting for Route Costs,
- 4. The Deputy Planning Manager
- 5. The Budgeting Manager, and
- 6. The Deputy Marketing Manager.
- (b) Topics Related to the Financial Planning Process
- 1. Strategic Objectives.
- 2. How the Strategic Plan is implemented.
- 3. Financial Planning targets.
- 4. Setting Financial Planning Targets Under Privatisation.
- 5. The Economic Planning Unit.
- 6. The Market Unit.
- 7. Strategic and Financial Planning.
- 8. Structure of the Financial Planning Process.
- 9. The Tactical Plan and the Budget Cycle.
- 10. The Annual Budget Process.

- 11. Reporting the Budget to the Financial Officer.
- 12. Operational Planning.
- 13. Manpower Planning.
- 14. Investment Planning.
- 15. The Capital Expenditure Budget.
- 16. The Cash Budget Analysis.
- 17. Use of Quantitative Techniques.
- 18. Participation of the Different Management Levels in the Financial Planning Process.
- 19. The Possibility of Changing the Budget During the Budget Period.
- 20. The Route Costs Department's View of the Financial Planning Process.
- 21. Frequency with which Management approves Departments' Budgets.
- 22. The Modifications Expected to the Financial Planning Process in the Future.
- 23. Evolution of the Financial Planning System.
- 24. The Finance Department.
- 25. Controller, Management Accounting and Chief of Accounting.
- (c) Topics Related to the Control Process<sup>(1)</sup>
- 1. The Budgetary Control System.
- Methods of Cost Allocation to each Type of Aircraft and Route.
- 3. The Cost Accounting System .
- (1) These topics will be examined in detail within the next chapter.

- 4. Cost Classification.
- 5. The Control Process.
- 6. Productivity Measures.
- 7. Variance Analysis.
- 8. Revenue Analysis.
- 9. Sensitivity Analysis.
- 10. Extent to which Heads of Department are Free to take their Own Cost Decisions.
- 11. Decentralisation.
- 12. The Flow of Information throughout the Airline.
- 13. The Most Difficult Variables to Control.
- 14. The Relationship between Budgets and the Control System.
- 15. The Accounting System and its ability to provide the required information for Financial Planning and Control.
- 16. The Application of Funds Statement.
- (d) Topics Related to Government Influence on B.A.
- The extent of Government influence on B.A., for instance, route operating policy, aircraft acquisition etc.
- 2. The extent of B.A.'s freedom under privatisation.

# Approach TWO: Gathering Data From Published Sources -Document Examination-

After reviewing B. A. publications it was concluded that the following were of particular interest to this study:

- 1. Manual of the Accounting System.
- 2. B. A. organisation structure.
- 3. The Financial Reports for the years 1983/4, 1984/5, 1985/6, 1986/7, 1987/8 and 1988/9.

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- 4. The Application of Funds for the same period.
- 5. Forms of the Management Accounting Packages.

### 4.3 Background of the Company

Soon after Britain's entry into the Common Market in 1973 the British Airways Board recommended on 1 April 1974 that the British Overseas Airline Corporation (B.O.A.C.) and British European Airline (B.E.A.) should fully merge under the name "British Airways". The new airline would have the most comprehensive route network in the world, extending to half a million miles with 200 destinations in 84 countries, and the 200 aircraft would be the world's largest passenger fleet.

As explained by Corke (1986, pp. 53-55), in April 1973 competition with British Caledonian was increasing, and their Boeing 707 made the first of its twelve-times-weekly transatlantic flights. British Caledonian's intrusion was particularly unwelcome since this route was fiercely competitive.

Traditionally, B.O.A.C. had operated to Los Angeles only via New York, but in 1972 the licensing authorities stated that B.O.A.C.'s services on the Los Angeles route were clearly inadequate and gave British Caledonian a licence to operate direct services.

The airlines were forced by the war in the Middle East in 1973 to concentrate their attention on the problems of fuel supplies and prices. Fuel bills had been rising steadily for ten years or more, and fares had to rise since fuel costs amounted to ten per cent of the total operating

costs for scheduled services. Because of the effects of the fuel crisis, the airline industry was, in December 1973, ordered to reduce consumption by an average of seventeen per cent. In order to achieve this, B. A. had to cut 40% of its services, but, although frequencies were cut, it managed to retain its 200 destinations.

Further developments came in 1975, when Concorde flights and non-scheduled flights were made Training and Concorde flew the most intensive programme ever undertaken for certification of an airliner. After testing in the Near East, North and South America, Africa, India, Malaysia and Concorde received its full certificate of Australia, after thirteen years' development airworthiness and 1976 saw the commercial introduction of Concorde testing. to B. A. operations, and on 24 May of that year, a B. A. and an Air France Concorde simultaneously touched down at Washington to an excited welcome from a crowd of thousands. The Chairman of British Aerospace (in Corke, ibid, p.62) commented:

"People said Concorde would never fly. People said it would never get to the USA. The record gives us confidence in Concorde's future".

After a number of hold - ups and appeals in the USA, Air France and B. A. inaugurated the regular service to New York in November 1977.

In December, Concorde's route to Singapore was threatened when Malaysia vetoed flights over its territory,

and this forced the cancellation of the Bahrain/Singapore sector. For fourteen months there was no agreement on overflights, but in July 1978 the Malaysian government agreed to the resumption of a twice-weekly schedule. As a political gesture the Concordes were painted in the colours of B. A. on one side and those of Singapore Airlines on the other. B.A. operations now flew to all six continents, serving 158 cities in 78 countries. The scheduled route network of 400,000 miles is the longest of any airline. By 1988/9 over 25 m. passengers were being carried -nationally and internationally. British Airways also has interests in 45 hotels offering 22,000 beds in about 20 countries.

# 4.3.1 Privatisation of British Airways

In early 1986, the Board team of B. A. which included the Chairman, the Chief Executive and the Chief Financial Officer visited a dozen of the country's leading financial centres, including London and Edinburgh, to meet members of the financial and business community. The top management was making the airline ready for the moment of privatisation, and at the beginning of 1987 the company was privatised.

Lord King, Chairman of B. A., who was asked by the Government to take a loss -making enterprise and restructure it and make it profitable, expressed his view of privatisation thus:

"Privatisation is an essential step towards releasing the full potential of British Airways. Free from the constraints of public ownership, we shall be able to concentrate

single - mindedly on doing what is best for the company, for its customers and for all who work for it both now and during future expansion. Moreover, the benefit of privatisation is that B. A. will continue to grow and expand; to fly wherever it can in the world profitably and to create wealth. It is incidental that it will create employment and will pay its taxes .

Moreover, the Chief Financial Officer, Mr Dunlop, felt that privatisation would not have a profound effect on the day-to- day workings of the company, and said that:

"After privatisation, British Airways must go on getting better at what we are good at, which is flying aeroplanes. We have three markets to cater for: people travelling in business, people visiting friends and relatives and people travelling for leisure. This is the age of leisure and good routes are becoming available to us".

The Chief Executive's view on privatisation was:

believe the airline "I do is best positioned in the private sector. During the days when the industry was very heavily regulated indeed, and there was a lack of willingness to accept competition in the industry on the part of Governments, maybe there was not such a great need for airlines to be in the private sector. But, in todays' environment, with increasing competition and more liberalisation it is imperative for airlines to be in the private sector and able to act and react very rapidly to changing conditions in the market-place ".

However, it is still early to evaluate the effects of the privatisation of British Airways, and time only will tell whether the decision to privatise the airline was the right one.

### 4.3.2 Takeover of British Caledonian Airways (B.Cal.)

British Caledonian Group Plc. was acquired for £246 m. following a recommended offer on 24 th December, 1987 of £12.15 per share payable in cash or an unsecured loan note alternative carrying a fixed interest rate of 10.1% and the offer was declared unconditional on the 8 th January, 1988. In arriving at the amount of goodwill, the book values of B. Cal.'s net assets were adjusted to reflect their fair value and to align the accounting policies of B. Cal. with those of B. A. at 31 st December, 1987.

The principal downward adjustments comprised the reduction of specialised buildings from B. Cal.'s value to cost less depreciation and adjusting B. Cal's Boeing 747, DC10 and BAC 1-11 aircraft from book value to market value. Account was also taken of the costs of re-organisation including staff severance, contract cancellations and the cost of bringing aircraft, property and equipment to B.A. standards. Table (4.1) shows the acquisition costs of B. Cal.

A number of major organisational decisions have been taken since the acquisition. All the staff of B. Cal. and its principal subsidiary were offered new contracts of employment with B.A. and the vast majority accepted these offers. The whole of the business of B. Cal. was transferred to B. A. on 14 th April, 1988 under an agreement of sale. The full integration of the operations was

# Table (4.1)

# Acquisition of British Caledonian

(1) Cost of Acquisition	£m	£m.
Cash, B.A. shares and Loan Notes given in exchange for B. Cal. shares	L	246
Professional fees		7
	-	
		253 ===
(2) Net assets acquired at fair value		
Fixed Assets		
Tangible assets	351	
investments	12	
		363
Current Assets		
Subsidiary held for sale	2	
Stocks	2	
Debtors	126	
Bank balances and cash	61	
		191
		554
(3) Creditors -amounts falling due within one year		===
Trade and other	(187)	
Loans and term finance	(89)	(975)
	<u> </u>	(276)
(4) Total Assets Less Current Liabilities		278

Table (4.1) continued.

		£m.	£m.
	Creditors -amounts falling due after one year		
	Loans and term finance	(283)	
	Deferred income	(4)	
	Provisions for Liabilities and charges	(1)	(288)
	Net Liabilities Acquired	-	(10)
(5)	Goodwill		
	Cost of Acquisition		253
	Reorganisation expenses, less tax		90
	Net Liabilities at date of acquisition after adjustments of £48 m. to comply		10
	B. A. accounting policies.		10
	B. Cal's Goodwill		353

Source: B.A.'s Report and Accounts, p. 42, 1987/8.

#### Notes:

Adjustments were made to the book amounts of the net assets acquired to reflect their fair value and to align the accounting policies of B. Cal. with those of B. A. The main adjustments were as follows:

- 1- Intangible assets -comprising route development costs, cost of crew training etc. were written off.
- 2- Tangible assets were included at fair value based principally on external professional valuations. Properties of specialist use nature were included at cost less depreciation.
- 3- Investments -were valued by the Directors.
- 4- Current assets stocks, debtors and cash were aligned with B.A. accounting policies.

completed on 29 th May, 1988. It was expected that all these decisions would contribute to future profit improvement.

It should be stated, however, that prior to this acquisition, the company participated in the investigation of the proposed merger by the Monopolies and Mergers Commission, as a result of which a number of commitments were made by the company, if the merger were to go ahead, including the return of certain licences to the Civil Aviation Authority (CAA). B. Cal. expects to carry some two million passengers a year on behalf of the B. A. holiday companies and its acquisition will enable B. A. to develop an increasingly important operating hub at Gatwick Airport.

### 4.3.3 British Airways Organisation Structure

The present organisation structure of the airline came into being in July 1983. The principal departments are: engineering, finance, flight crew, human resources, information management, legal, marketing, medical service operations, planning, public affairs, safety services, and market-place performance. Under finance, for example there are several finance centres which cover all aspects of finance, such as setting budgets and control procedures. These centres are: chief accountant, treasurer, controlleraccounting, financial controller, financial management controller- operations and customer services, financial controller- subsidiaries, chief internal auditor and information management executive; each centre and business

is profit-accountable. Figure (4.1) shows the organisational structure of B. A.

Regarding information management, the computers and telecommunications in use inside B. A. represent one of the most technically advanced operations in the world. The demands upon it continue to grow at about 40% a year. New systems are being developed to ensure that the B. A. booking system retains its lead, while the company's investment in new system development continues to grow at over 20% a year. In addition, new systems have been introduced in Catering and Crew, and existing systems are being redeveloped in engineering, operations control, finance and management.

With regard to the acquisition of B. Cal. by B.A., the operations of the two companies have been carried on under a single management since April 1988. All scheduled services are now operating under the name of "British Airways" and charter services under the name "Caledonian Airways". Also, B. Cal. uniformed staff have been issued with B.A. uniforms, while travel shops and airport facilities have been refurbished.

Figure (4.1): British Airuays Organisation Structure I CHNIRMAN I FERRENS I FERRENS I

Flight   of Numan     Ofrector     Flight   of Numan     of         Flight   -Head of Crew Employee   -Head of Fright   -Head of	tori ctori to floctor nt nt ficer neger neger	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ritector of ritector of ritector of ritero ritero future future future future for for cos for for for for for for for for for for	Actor 1 Nettor 1 Nettor 1 Nettor 1 Netical 0 Netical 0 Netical 0 Nettor 1 Offical 0 Nettor 1 Offical 0 Nettor 1	10.rector 1 11. Interctor 1 12. Interctor 1 13. Interctor 1 14. Interc
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Chief - Director Crew Flanning - Conmer Engineering of Fuel - Hanager - Hanager - Hanager - Hanager - Hanager - Hanager - Hanan	nt ief ficer neral	, , , , , , , , , , , , , , , , , , ,			-Head of Rirport Policy Planning Planning Planning Ilanager
Engineering	Chief Press Officer General				Planing Planing Finance Planning Hanager
Chief Hanager Creu Resources Engineer & Rasagement Concorde Lead of Strategy Lead of Component fisintenance Raser Concorde Lead of Business fisintenance Raser System Chief Engineer Flight Lead of System Creu 757 Research Computer Inventory Creu 757 Research Computer Creu 737 Lead of Computer Computer Creu 737 Lead of Computer Creu 737 Lead of Computer Creu 747 Creu 747 Creu Cotoner Officer Developer F Resources Custoner Creu 747 Creu 747 Cr	Chief Press Officer General Manager				-Finance Planning Hanager
Engineer & Nanagement Concorde - Head of Business Component Ilanager - Head of Business fiaintenance Ilanager Development System Chief Engineer Flight - GH Production & Creu 757 - Head of - GH Inventory Creu 737 - Head of Computer Inventory - Manager F. Recruitaent Operations Creu 737 - Head of - GH IN Creu 737 - Head of - GH IN Creu 737 - Head of - GH IN Diaming & Creu 737 - Head of - GH IN Planning Officer - Operations	Officer General Manager				lanager
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Chief  - Financial : Flicht :-Liand of .	L.	Safety -HD Airtours -Head of	l of		
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> Executive : Source: Interview	with the Controller,	- MO : Maria	Managing Director   General Manager	-GM Property :-Nead of DPS	_

# 4.3.4 British Airways' Market and the effect of the B. Cal. acquisition

4.3.4.1 United Kingdom Domestic Market Centre

The UK market centre is responsible for the operation of all B. A. domestic services.

Despite the competition, B.A. attracted about three quarters of the traffic on the Scottish Super Shuttle routes. Also, the range of services out of the regional cities has been developed.

### 4.3.4.2 European Market Centre

Owing to problems caused by air traffic control and by a temporary scarcity of aircraft in the summer and autumn of 1985, a drop of 12% was recorded in traffic for the second year running. Also, the withdrawal of the Trident meant that the vast majority of the B. A. routes were operated by 757s, 737s and TriStars, with relatively few services flown by One-Elevens. Services to Madrid and Lisbon, which for several years operated from Gatwick in accordance with British Government policy, returned to Heathrow in the spring of 1985 and this transfer contributed to the overall traffic growth.

# 4.3.4.3 Southern Market Centre

The Southern Market Centre was created to administer the South American, East Caribbean and African operations. The new tour programmes led to a steadily increasing volume

of holiday bookings. Also, the daily Cairo service has been very successful.

4.3.4.4 North Atlantic Market Centre

The market centre was formed in August 1985 to take responsibility for services between the UK and the USA, Canada, Bermuda, the Bahamas and Jamaica. It also controls B. A. sales operations in the rest of the Western Caribbean and Central America. In April 1985 the Canadian operation was reorganised with a director responsible for sales and marketing and another for customer services.

# 4.3.4.5 Middle East and Indian Subcontinent Market Centre

The escalation of the Gulf war made it impossible to operate to Teheran and Baghdad and services were suspended. However, an upturn in the political stability and economic fortunes of India led to substantial growth in all market segments.

# 4.3.4.6 Far East Market Centre

Traffic has increased on the B. A. twice-weekly Manchester to Hong Kong service via Munich, Dubai and Bangkok, the first service to be operated by any airline between southern Germany and the Far East. The weekly flight from Japan to South Africa had to be terminated during the winter of 1985 because of poor prospects for the route. However, there is greater frequency to Bangkok providing direct connections with Sydney and Melbourne.

#### 4.3.4.7 Australia and New Zealand Market Centre

In April 1985, B. A. introduced faster schedules, in which no service had more than two intermediate stops between the UK and Australia. The introduction of two new weekly flights to Australia in December 1985 enabled the airline to raise its frequency to four a week. Flights to Auckland reached three a week.

In addition, a round-the-world fare, applied to this centre, was introduced proving extremely popular in both the UK and Australian markets. The fare offered a special transatlantic Concorde option to First and Super Club class passengers.

The acquisition of B. Cal. will allow B.A. to extend its network and compete in new markets, particularly in the southern USA and West Africa. Following this acquisition, B.A. has applied, along with other British airlines, for licences to operate seven former B. Cal. routes from Gatwick to points in Europe and in the UK. These were routes that had been returned to the CAA as a part of the commitment given to the Monopolies and Mergers Commission.

The CAA decided not to award B.A. licences to serve these routes and B.A.'s view was that the CAA had failed to take the opportunity to allow more than one British airline to compete on the Gatwick/Brussels route. It also unnecessarily restricted the number of airlines flying from

Gatwick to Paris, bearing in mind that London/Paris is the busiest international air route in the world. On the other hand, B.A. had agreed with the European Commission, as part of the terms of its approval of the acquisition of B. Cal., that B.A. would not appeal against CAA licensing decisions on the "returned" licences. Therefore, the CAA was informed on 23 rd May, 1988 that the applications for these other "returned" licences were withdrawn.

B.A.'s charter operations are carried out by B. Cal. based at Gatwick, where B.A. now has a substantial scheduled service operation, especially at Gatwick Airport. The acquisition promotes and provides automated multiple access reservation services for the travel industry.

Also, it is worth noting that in December 1987, B.A. announced a worldwide marketing partnership with USA Airlines, the largest single US airline. This partnership gives B.A. additional strength in the USA domestic market.

In July 1988, a major expansion of the airline's activities at Gatwick was announced including a significant increase in passengers and cargo activity to be offered in the summer of 1989. This in turn led to a redistribution of operations between the company's bases at Gatwick and Heathrow where all Gatwick operations were moved into the new North Terminal, which opened in March, 1988.

# 4.3.5 British Airways' Fleet

On New Year's Eve 1985, the last of B. A.'s fleet of

Tridents was withdrawn from service after a career spanning over twenty one years, during which time they flew 500 million miles in passenger service. The Tridents had been replaced by advanced technology Boeing 737s and 757s. Also, in February 1986 B. A. ordered two new 747 Combi passengerfreighter aircraft which were delivered in the spring of 1987. This type which could be operated either as ordinary passenger aircraft or with additional cargo capacity, offered useful flexibility on the world-wide route network. A further passenger Boeing 747 was also delivered in the spring of 1987. At the same time, B. A. placed an order for а further Boeing 757 for use on domestic and European routes. This brought the number of 757s in service to 25 in Spring 1987.

At the beginning of 1988, an order was placed for a new fleet of eleven Boeing 767 aircraft for delivery from late 1989, together with options on a further 15 aircraft. These aircraft will be used on many of the major European routes Super Shuttle services. Also, a further five and Boeing 757 aircraft were ordered for delivery in Spring, 1989. At the beginning of 1989 three more Boeing 747-400 were added to the 16 already on order, making the total commitment for this type of aircraft 19. Three more Boeing 757's and one Boeing 747-236 Combi were purchased. In addition, eight twin-engined British Aerospace Advanced Turboprop (ATP) aircraft were ordered during the year 1988/9, with an option for a further eight, the first entered service in January

1989.

As a result of the transfer of B. Cal.'s business to B.A., commitments for future deliveries of 10 airbus A320s and three McDonnell Douglas MD-11 aircraft have been assumed by the company. The B. Cal. fleet of 5 Boeing 747's, 8 DC10s and 13 BAC One-Eleven was repainted in B.A. livery and also re-equipped with B.A. furnishings and cabin equipment, including the new Club World and Club Europe interiors where appropriate. Its TriStars and Boeing 737s bear the traditional Scottish lion emblem made famous by B. Cal., and its stewardesses wear the well-known tartan uniform.

Moreover, in order to give the necessary flexibility to the long-term replacement policy for medium-size DC10 and TriStar aircraft now used on the airline's intercontinental routes, B.A. signed an agreement in May, 1988 with the McDonnell Douglas Corporation of the USA and with the GPA Group Limited of Ireland, the world largest lessor of passenger jet aircraft, to establish a joint-venture company.

### Concorde

During the years of Concorde's commercial service with B. A., it has made some 15,500 supersonic commercial flights, totalling over 50,000 flying hours and covering over 50 million miles. In that time, nearly a million passengers have travelled on it. Moreover, due to its successful and profitable operations and the increased

demand for its services, B.A.'s seventh aircraft was returned to flying duties and the whole fleet is now in regular service. Table (4.2) illustrates the company's fleet on the 31 st March, 1989.

On the following pages the financial planning and control procedures at B. A. are discussed in detail.

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Aircraft	Number in service	Number on order	Average Hours Hours per aircraft (3)	Age per aircraft
Concorde	7		1,142	12.3 <sup>(4)</sup>
Boeing 747- 100	16	-	4,630	16.9
Boeing 747- 200	24	-	4,613	9.9
Boeing 747- 400	-	16	-	-
TriStar 1/50	9	-	2,847	13.7
TriStar 200	8	-	4,102	8.3
Boeing 757- 200	35	3	2,553	3.6
Boeing 737- 200	45	-	2,628	7.2
Boeing 767- 300	-	17	-	
Boeing 737, 300, 400 & 500	4	-	1,760	0.9
BAC 1-11/500	30	-	1,702	18.8
BAC 1-11/400	4	-	2,402	18.8
HS 748	11	-	1,941	9.6
BAe ATP	4	-	1,267	0.3
McDonnell Douglas DC10-30	8	-	4,541	8.3
Airbus A320	4	6	2,300	1.1
Hired aircraft	2	- -	_ 	-
Total Fleet	211	42	38,428	

# Table (4.2): British Airways Fleet on 31/3/1989 (1)

#### Notes:

- (1) This fleet includes aircraft on short leases and B. Cal. fleet as well.
- (2) Excluding one aircraft delivered in March 1989.
- (3) This is an average hours per each of the fleet per a year.
- (4) The average age is in years.

Source: B.A., " Annual Reports", 1985/6-1988/9.

#### 4.4 FINANCIAL PLANNING PROCEDURES AT B. A.

#### 4.4.1 Strategic and Financial Planning

Before the budget process, a set of strategic plans must be drawn up for about five years ahead, falling within the scope of corporate planning. The strategic planner basically looks at long-term results and focuses on such areas as fleet acquisition, i.e. determining what aircraft will be necessary over a longer period. Tactical plans, however, are normally prepared for a period of approximately two years to determine the likely operating schedules, where the company's fleet is to operate and the likely profitability of the schedules etc.

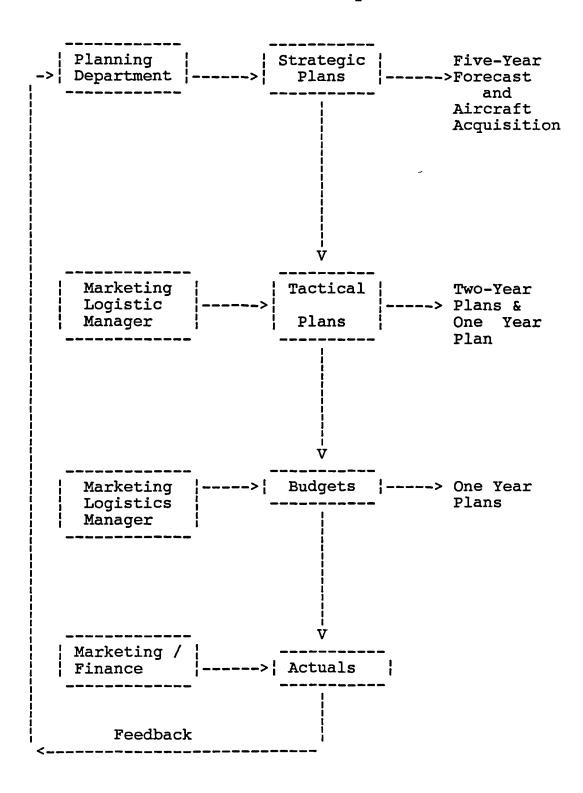
The close connection between strategic and financial planning at the airline can be explained as follows;

- There is a long-term plan -a five-year forecastwhich is called "The Strategic Plan",
- (2) A shorter-term plan, prepared for two years, is called "The Tactical Plan", and
- (3) "The Budget" is currently prepared for one year, though this will probably be done on a seasonal basis in the future. Thus, this budget is the yearly breakdown from the above plans.

The preparation of these plans varies in terms of degrees of detail. Figure (4.2), produced by the researcher, indicates the relationship between the various planning levels.



The Relationship Between Strategic and Financial Planning at British Airways



Key: ----> Flow of information.

# 4.4.2 Financial Planning Targets

When setting financial targets for an airline, it should be taken into account whether the industry is privatised or nationalised; for example in a private company it is necessary to pay a dividend to shareholders.

B. A. does not have its financial goals formalised in terms of specific return on capital, but in terms of being able to generate sufficient profit to replace all its assets, i.e. to replace the fleet as necessary, and to pay sufficient dividends to shareholders. Mr Preston, the Controller Management Accounting, in answering the question of whether B.A. has changed its financial targets in accordance with the new era of privatisation said:

"It is a bit of a difficult question you ask, because there is a change in terms of privatisation. I would imagine that we will have to develop specific financial targets in the future -quantitative targets, i. e. we have an intention of paying specific dividends to shareholders".

> [Interview with the Controller, Management Accounting of B.A., London, February, 1987].

The 1988/89 Report and Accounts (p. 1) shows that earnings per share, calculated on the basis of profit after taxation but before extraordinary items attributable to shares in issue, was 24.3p in 1989 as compared with 21p and 20p in the previous two years, 1988 and 1987; the dividend per share was 7.8p, 6.9p and 4.1p in 1989, 1988 and 1987 respectively.

However, at the present time in the budget process, B. A. has a system of giving the individual departments targets for expenditure as deemed appropriate by the Airline's Chief Financial Officer.

# 4.4.3 Economic Planning and Market-place Performance Units

The unit concerned with forecasting the external economic situation of other countries and markets in which B.A. operates is called "The Economic Planning Unit".

Another unit called "The Market-place Performance Unit" is responsible for continually monitoring B.A.'s products worldwide. However, the Director of Investors' Relations and Market-place Performance, a relatively new position, is not particularly concerned with financial planning; his concern is with monitoring the standard of operation and the service generally, as distinct from financial planning.

#### 4.4.4 Structure of the Financial Planning Processes

#### 4.4.4.1 The Annual Budget Process

The Corporate Planner who reports to the Chief Executive looks five years ahead on the broad principles of achieving an operating profit and maintaining adequate cash flows.

From the management structure of B. A., which was explained in section 4.3.3, the financial planning

procedures followed in setting budgets and developing tactical plans can be explained.

The process begins with the economic planning staff who note changes in General Domestic Product (G.D.P.) not only in Britain but also in the U.S.A. and many other countries. This information is analysed by the marketing research group and the tariff staff, who also incorporate their own estimates, and the results are sent to the marketing unit. The central marketing unit decides which routes will be operated in the light of the potential loads, market research and fares etc.

These data are forwarded to the schedules planning department where a detailed evaluation is undertaken by obtaining an estimates of costs from every department, for example pay, consumption of materials, catering, pilot costs, etc. The broad view of the longer term is translated into a detailed departmental view.

Then, the planning department looks at the available aircraft types, number of services to each point, flying hours, landing fees, consumption of fuel etc., interacting with both the schedules and the marketing staff to arrive at the best schedule in order to optimise revenue or minimise costs. All these data are fed into a large computer file called "MASCOT" which contains the schedules for each type of aircraft and route. In addition, MASCOT has data on loads, for instance the number of passengers, the amount of

mail and the amount of freight; these are multiplied by the tariffs which are held in the file, which forms the basis for the expected revenues.

The expenditures are broken down into different e. g. pay, pensions and insurance expenses. At headings, the same time, these expenditures and the latest information are also fed into the computer system which allocates all the costs to the routes and aircraft in order to calculate the likely profits and losses on each route, and each aircraft type. Then the control statistics for productivity the RPKs, the ASKs, the RTKs measures, such as (an of these measures will be given in explanation the productivity measure section), are estimated and sent out to the accountants who report to the managerial levels which are responsible for each of the measures.

As a result of these calculations and after aggregating this information, budgets are prepared by the Controller, Management Accounting who reports to the Chief Financial Officer to justify them. He in turn reports to the British Airways' Board. The budgets are eventually fed into a general ledger budget where variance statements can be produced. The actual cost is compared with the budget and a variance percentage produced for each month. Thus, the departments can compare their budget with the actuals and then the performance can be assessed.

The data which comes from this budgeting process, is then fed back into the corporate planning department, which

uses it as a baseline for future strategic plans, and to those responsible for marketing.

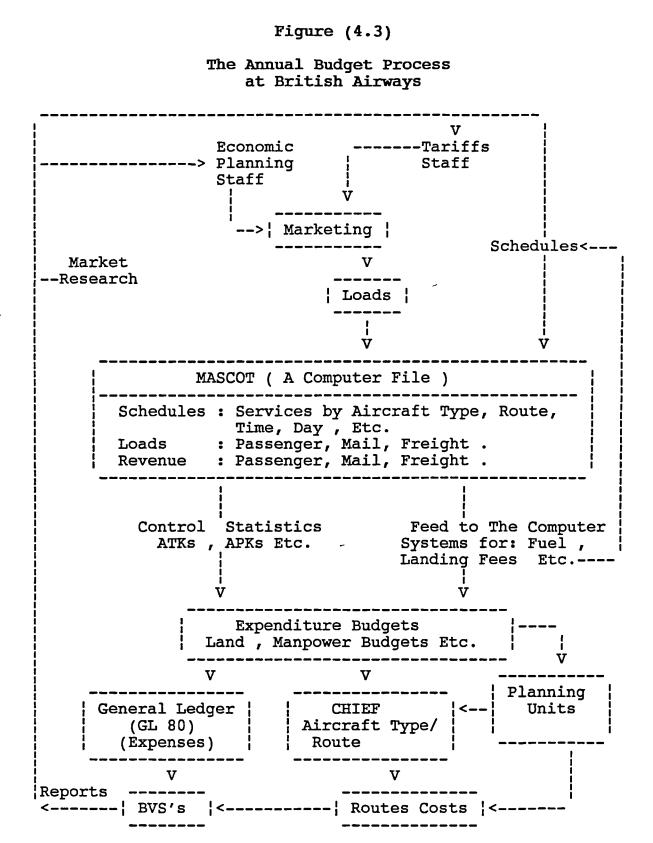
It should be mentioned, however, that budgeting is based on estimates regarding the cost of such items as the landing fees to various airports in other countries, fuel cost etc. If the actual prices rise beyond what was expected, the airline's fares may be affected. Figure (4.3), shows the annual budget process at B.A..

#### 4.4.4.2 The Tactical Plan

The tactical plan is prepared taking into account the prospects for the next two years. B.A. prepares a detailed plan for the first year and then broad plans for each of the subsequent financial years.

The tactical plan is divided into seasons, because in the airline operations, especially in the Northern hemisphere, there is a distinct summer season-the high season -which runs from April to the end of October, and a distinct winter season -the low season- from November to March inclusive. Between these two very distinct periods, the size of the operating programme differs by as much as 30%, i. e. there are about 30% more flights in the summer season than in winter.

The tactical plan includes the operating plan, detailed seasonal budgets and the annual budget, involving



Source: Interview with the planning Manager of B.A., London, March, 1987.

Key: ----> Flow of information.

marketing, operations and the finance department. The plan is converted into budgets which are then finalised. Figure (4.4) shows the tactical plan cycle, taking the summer and winter seasons of the two financial years 88/89 and 89/90 as an example.

#### 4.4.4.3 Operational Planning

Operational planning is the schedule planning which is prepared in the light of, for example, the marketing forecasts, available aircraft, flying hours and the availability of flight crew. It indicates where and when each aircraft in the company's fleet should operate. This information, which is continuously updated the by operational department, is used in the day-to-day running of operations. It also forms the basis for building up the budget schedule and accordingly, the airline's master budget.

#### 4.4.4 Manpower Planning

In November 1985 the company launched a programme entitled "A Day in the Life", as part of the "Putting People First" campaign. This was designed to give staff a better understanding of the work of their colleagues in other sections of the airline. A presentation took place every weekday and continued until late 1986 by which time nearly all 39,000 employees had attended the programme.

Figure (4.4)

# The Tactical Plan and Budget Cycle

	1 1988	1989		1990	
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		1 2 90 1		1 1 16/06 M 1 1	Logistics ;
			116/06 M 1		
: MASCOT Required	I I MASCOT I				
	M88/9     / R89/90	HASCOT I HASCOT I	HASCOT		
				I I MASCOT I I	Logistics   
		1 06 S	I YR 90/91		Finance
I Evaluation					
		TP S 90 1	1 16/06 41 1	1 16 S d1 1	
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	1 1 89/90 1		1 1GT YR 1 1 90/91 1		
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	AHJJAS	L L L L L	A L L A S		
	881				

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As a follow up, a "Managing People First" course was devised which was specifically concerned with helping anyone who had responsibility for managing others to become more expert at getting the best from them in every situation. The reaction of the managers and technical staff who have already attended the course has been positive and favourable.

There has also been a shift within B. A., and the principal role of the Human Resources Department has been to help to bring about that change. One of its tasks has been to define the kind of organisation B. A. should seek to be in order to achieve its desired objectives. A performance appraisal scheme for senior and middle managers seeks to measure objectively and systematically the extent to which they have met the goals set and displayed the managerial behaviour needed to bring about the change that the airline needs.

During 1987, B.A. launched a basic training programme for cadet pilots, designed to meet the long-range demand for a steady inflow of highly trained pilots to man the airline's fleet. Also, in 1988, a programme was introduced to improve the effectiveness of the staff and determine how to tackle competitive pressures in a positive manner. There is a manpower committee which monitors manpower numbers and indicates any new requirements throughout the year; each department is required to produce a statement of its manpower budget, which is an integral part of the overall

expenditure budget.

Finally, a profit sharing scheme has existed since 1983/4. From 1987/88, the parameters of the scheme were marginally changed to recognise the effects of inflation.

Table (4.3) shows the manpower situation at B. A. in the financial year 1988/9 compared with the prior financial years 1987/8 and 1986/7, the average number of employees per aircraft (including B. Cal.) in 1989 being 238 compared with 223.2 and 240.8 in 1988 and 1987 respectively.

4.4.4.5 Capital Expenditure Budget

Investment planning is carried out as a separate exercise. The capital expenditure budget is separate from the master budget described in section 4.4.4.1 and it is prepared for a three-year period. It includes, for example, acquisition of aircraft, transport tools and other assets.

There is a separate unit within the planning department specifically concerned with aircraft acquisition. Each department is required to submit its proposed capital expenditure budget covering purchases of assets for the next three years; all acquisitions over £1,000 are separated from the normal fleet acquisition budget. Then the Controller, Management Accounting finalises the figures and reports the budget to the Chief Financial Officer.

Therefore, the company has two types of capital expenditure budget; one is devoted to aircraft acquisition

#### Table (4.3)

# Manpower Situation at British Airways On 31 March 1989

Numbers	1986/7	1987/8	1988/9
Airline Operations <sup>(2)</sup>	39,498.0	42,709.0	48,760.0
Package Holidays	544.0	697.0	475.0
Others	398.0	563.0	969.0
Discontinued activities	319	-	-
Total Airline	40,759.0	43,969.0	50,204.0
Number of Aircraft	164	197	211
Average Per Aircraft	248.5	223.2	238.0
ii			i i

Notes:

- (1) These figures include B. Cal.'s acquisition.
- (2) 1988 Airline operations include 1,828 in respect of B. Cal. being equivalent to the annual average of 7,312 persons employed by B. Cal. during the three months 1 January to 31 March, 1988.
- Source: B.A., "Reports and Accounts 1986/7 1987/8 and 1988/9".

and the other is for non-aircraft acquisitions such as machinery, property, land and buildings.

#### 4.4.4.6 The Cash Budget Analysis

The cash budget is not prepared by asking for detailed information from all departments, but is done on a centralised basis by the Treasury. After close examination in relation to the increase or decrease in cash that would be expected to come in or out of the budget, the trends over the year are identified by the Treasury in order to establish this budget. Forecasts are prepared based on knowledge of the previous year's cash inflows and outflows.

Funds are reported in an annual report called "The Application of Funds statement". The funds statement is reported monthly during the year and also at the end of the budget period in order to control and monitor the company's The statement explains the flow of funds, and operations. the increase and decrease in financial and monetary transfers, which also can be used as a basis for planning for the year ahead.

Table (4.4) shows the comparative application of funds statements for the financial years from 1984/5 to 1988/9. The table shows an increase of total funds available in 1988/9 of 28.8% over the previous year and indicates that the airline used £929 m. during the year of 1989 as a result of increasing the capital expenditure at 39.9%, while it

198 36 (39) 195 162 69 426 22.1 282 - - - -	1986/7 173 19 (30) 162 188 9 359 (15.7) 245 - - - - -	1987/8 236 12 (20) 228 216 30 474 32.0 499 259 16 46	1988/9 336 18 (86) 268 307 15 590 24.5 698 1 78 52
36 (39) 195 162 69 426 22.1 282 - - - -	19 (30) 162 188 9 359 (15.7)	12 (20) 228 216 30 474 32.0 499 259 16	18 (86) 268 307 15 590 24.5 698 1 78
195 162 69 426 22.1 282 - - -	162 18 <sup>8</sup> 9 359 (15.7)	228 216 30 474 32.0 499 259 16	268 307 15 590 24.5 698 1 78
162 69 426 22.1 282 - - -	18 <sup>8</sup> 9 359 (15.7)	216 30 474 <b>32.0</b> 499 259 16	307 15 590 <b>24.5</b> 698 1 78
69 426 22.1 282 - - -	9 359 (15.7)	30 474 32.0 499 259 16	15 590 24.5 698 1 78
22.1 282 - - -	(15.7)	<b>32.0</b> 499 259 16	24.5 698 1 78
282 - - -		499 259 16	698 1 78
-	245 - - -	259 16	1 78
-	-	16	78
-	-		
-	   _	46	52
100	i	i	i
(96)	(86)	(99)	100
186	159	721	929
322.7	(14.5)	353.5	28.8
(268)	(82)	179	260
28	(118)	68	79
(240)	(200)	247	339
-	(268) 28 (240)	(268) (82) 28 (118) (240) (200)	

# Table (4.4): Comparative Application of Funds Statements for the Financial years from 1984/5-1988/9 (Value in f Million)

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utilised £721 in 1988, a percentage of 353.5% over the year of 1987 because of the acquisition cost of B. Cal.. Also, high dividends were paid in 1989 and 1988, £52m. and £46 respectively since privatisaton. The funds generated by the company in 1989 increased by 24.5% over the previous year. Therefore, despite the acquisition of B. Cal., the company's availability of funds has been steadily increasing.

In practice, the company's departments are not required to fill in special forms in order to establish the cash budget, which is prepared centrally by the treasurer's department. Also, the interviews revealed that there is no clear and direct link between this budget and the airline's master budget process.

### 4.4.5 The Possibility of Changing the Budget during the Budget Period

Before the budget is formalised and monitoring begins, all the variables and most of the related factors should have been considered.

In practice, during the budget period B. A. will not make any alterations to the overall budget; however, the operating schedules and, consequently, certain items of the expenditure budget, may be changed where there are planned and changes which affect the actual operating programme after the budget stage. Comparing variances against the budget, an explanation of the reasons for these variances

will be found, which could be used as a guide to what may occur in the future.

Mr Dunkerley, Assistant Controller, Management Accounting (Reporting and Analysis) has expressed his view as follows:

"In fact, at B. A., generally, by the time of finalising the budgets these can not be changed; that is, when the Chief Executive has actually seen the plan and accepted it, especially after the approval of the British Airways Board".

> [Interview with the Asst. Controller, Management Accounting (Reporting and Analysis) of B.A., London, April, 1987.]

Therefore, although British Airways is considering the possibility that in the future, the winter season budget, for example, might be changed, under the current system, once the budget has been prepared at the beginning of the year it remains fixed for the whole year.

#### 4.4.6 Evaluation of the Financial Planning System

The examination of the financial planning process indicates that at the present time, there is dissatisfaction with the length of time taken to obtain results from the system and the restrictions placed on reporting the budget. Whereas the present system is to construct a budget plan for the coming year, it is hoped that in the future, a budget plan could be made at the beginning of the year and then revised half-way through the year.

Despite the existence of a system of strategic plans,

tactical plans and budgets and comparison of actual against budgets, development of the current planning procedures should be considered; e.g. separate budgets are required for the summer and the winter seasons. Mr John, Planning Manager, has stated that:

"Because we have this sort of freethinking, we are continually trying to improve the planning process."

> [Interview with the Planning Manager of B.A., London, April, 1987.]

Also, Mr Spencer, Assistant Controller, Management Accounting for the routes costs says:

"I think, certainly our short-term planning is actually done in a lot of detail; if we look at the flow chart of the tactical plan which shows the processes that lead one to another, in any year's plan that we are going to operate, we will normally have been through several procedures before we get to the plan of operation. So, we cannot plan for 1987/8 without going throughout the evaluation stage of the previous five years before we actually operate".

> [Interview with the Ass. Controller, Management Accounting of B.A. for Routes Costs, London, April, 1987.]

Thus, there is a process of continuous change in order to achieve a better financial planning system.

With regard to the participation of the management levels in the financial planning procedures, the discussion at B. A. suggests that there is adequate cooperation in terms of preparing the detailed budget itself. The document which is produced shows the timetables, the targets and the expected performance, it goes to all the individual accountants who are (in liaison with the managers for whom they work) responsible for supplying the budget instructions to each of the departments shown on the organisation chart.

Thus, there is co-operation with the management in the sense that managers and directors are ultimately responsible for their budgets and have to present them to the Chief Financial Officer. Therefore, it is clear that the individual directors must take responsibility for their own budgets in their own areas.

Furthermore, in respect of the power of heads of departments to take their own cost decisions, the interviews revealed that there are many decisions regarding costs which they are authorised to make, but they have to take into account the budget. In other words, they have to accept that the budget must not be exceeded unless there are good reasons for doing so. Within these constraints, each department is responsible for its own costs.

Concerning the relationship between Controller Management Accounting and Chief of Accountants, the latter keeps the financial books, produces the financial reports, and does the formal recording and reporting, while the Controller, Management Accounting is responsible for the monthly management reporting system.

The Chief of Accountants prepares information for the

purposes of the financial records, whereas the Controller, Management Accounting provides financial management information for the airline as a whole, going to each of the airline managers, to the Chief Executive or to the board. Controller, Management Accounting Therefore, the is responsible for the management accounting principles and for determining the budget timetable and the way it is prepared. This is done in conjunction with the managers (for instance marketing and operations directors), who the bring information together from all the departments throughout the airline.

#### 4.5 Summary

In this chapter the main objective has been to examine the financial planning procedures at British Airways. Various related topics were discussed and investigated by means of in-depth interviews. Topics covered included privatisation, the company's national and international market and the available fleet, the effect of the B. Cal. takeover, the annual budget process, the tactical plan, operational and manpower planning, the capital expenditure budget and the cash budget.

It can be concluded that the budget process involves a variety of departments, such as economic planning, marketing research, tariffs, computer, planning and finance departments. The budget is usually prepared for one year, mainly on the basis of the available flying hours, the

operational schedules, crew and the information provided by the marketing department, particularly in relation to the expected movement of passengers and cargo. The tactical plan is concerned more with details of the next summer and winter operational programme and with those of the following year.

The airline's operational and manpower plans forms a vital part in setting the master budget. Also, the company separates capital expenditure on aircraft acquisition from the acquisition of other assets.

# CHAPTER: FIVE

CONTROL PROCEDURES AT BRITISH AIRWAYS

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#### 5.1 Introduction

the preceding chapter, the financial planning In at B.A. was examined in detail. process This chapter focuses upon the control procedures at the airline. The investigation is divided into five main sections: the first deals with the costing system and methods of cost allocation; the second examines these procedures in operation in the company. The third section investigates productivity measures, paying attention to such aspects as cargo activity, variance analysis, revenue analysis, sensitivity analysis and the application of funds statement. In the final two sections, the airline's accounting system and government influence are examined respectively.

#### 5.2 The Cost Accounting System

#### 5.2.1 Cost Classification

An absorption costing system is generally employed, costs being categorised into variable, semi-variable and fixed. The basis for splitting these costs is a matter of judgement. For example, some costs vary with the level of flying operations, others are fixed. The budget is created after taking all the identified elements into account and allocating costs according to each aircraft type and route.

As an example, in accordance with the airline's experience, 30% of material costs are considered to be fixed and 70% semi-variable. Another example may be found in the

Office Costs, which in most cases tend to follow the same pattern as labour cost, because most of these costs ultimately depend upon the number of staff employed.

#### 5.2.2 Methods of Cost Allocation

Costs are allocated among aircrafts and routes in accordance with the proportion of these costs needed to operate each aircraft and route. The first stage of the allocation process is to allocate the expenditure budgets to each operated aircraft and route. This is done by means of a computer system called "CHIEF".

Each department within the airline is involved in this process. Taking the engineering department as an example, it analyses and allocates the expenditure according to aircraft type on the basis of the route on which each of the fleet will be operated. The operation schedules which were used to build up the expenditure budget are already known: thus, it is possible at this stage to determine, for example, that 60% of pay costs will be spent on maintaining 747 aircraft, while 40% will be used to maintain 737 aircraft. This procedure is carried out for allocating all other costs to aircraft and routes.

The process of allocating costs to each route can be illustrated by taking as an example the London/Paris route, which is currently operated by the 747:

In the 1987/8 budget, the total flying and landing hours for all 747 aircraft operated on the company's

scheduled flights, including London/ Paris route, were 10,000 and 500 respectively and the budgeted engineering costs were £1,102,500, the allocation of these costs being done by applying an engineering terminology called "Operating Units" which represents both landing and flying hours. Thus, the operating units can be worked out as follows:

The Operating Units =

Total Flying hours (10,000) + Total Landing hours (500) = 10,500

The total operated hours on this route were estimated at 1,000 flying and 100 landing hours during the period, which is used as a basis for allocating not only the engineering, but also the other relevant costs. The next stage is to calculate the operating unit rate as follows:

The Operating Unit Rate for the 747s aircraft on the scheduled routes =

Total Operation Costs for 747 aircrafts (£1,102,500)

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Total Operating Units for 747 aircraft (10,500)

£105

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Therefore:

The London/ Paris route costs =
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Operating Unit Rate X Total Operating Units

for this route =

£105 X 1,100 [(1000) Flying Hours + (100)
Landing Hours] = £115,500
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The same calculations are made for each route to allocate costs among aircraft and routes. This information is obtained from the fleet planning department which prepares the fleet budget plan. Figure (5.1) shows the functional costs headings, cost content- and allocation methods.

(A) Load Variable Costs(1,2,3,4 and 5):

- 1- Passengers Services Charges/Security Levels: These are airport costs: the costs that the airport charges per passenger.
- 2- Catering Variables: These are basically the costs of food.
- 3- Air Operators Certificate and Load Insurance: The latter is the cost to be paid for carrying passengers.
- 4- Passenger Commission: This represents the costs of collecting revenues from the agents who sell tickets and charge the company commission.
- 5- Cargo Direct Variables: These are various items associated with the cargo. Those costs which depend upon the aircraft load are called the "load variable costs".

# Figure (5.1)

Methods of Cost Allocation at B.A.

	Functional Items of Expenditure	Methods of Allocation
L -	oad Variable Costs	
1.	Passengers Services Charge/ Security Services	Costs are calculated directly at sector level using published charges for each station per arrival/departing passengers.
2.	Catering Variables	Meal costs are calculated for each sector by aircraft and passenger type using station meal rates and passenger numbers, whilst handling charges, equipment costs and amenities are based on aircraft movements or passenger numbers, weighted as appropriate. On and offboard sales revenue is calculated by sector using the relevant passenger numbers.
3.	Air Operators Certificate (AOC) Load Insurance	All insurance items and passengers and related AOC are allocated in the same way as the charges are calculated -on RPTs. Freight related AOC charges are on cargo tonne kilometres.
4.	Passenger Commission	Costs are apportioned to route by applying budget commission rates to budgeted revenue at appropriate levels (e.g.product area).
5.	Cargo Direct Variables	As for the corresponding passenger costs.

Aircraft Variable Costs

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6. Fuel and Oil Costs for each route and aircraft type are calculated directly by reference consumption, fuel uplifts by sector, and local prices. Figure (5.1) continued.

- 7. Landing/Outstation Costs for each route and aircraft type are calculated directly from the number of sectors and scales of landing charges appropriate to each aircraft type and station.
- 8. Routes Facility Charges Charges Charges Costs for each route and aircraft type are calculated directly from the number of sectors flown and the appropriate charge for each aircraft type and sector.
- 9. Variable Handling Costs at each station by Costs aircraft type directly calculated at sector level on the basis of annual station movements.
- 10. Variable Aircraft Costs are allocated directly to Hire those services on which the aircraft are budgeted to fly.

Semi-Variable Costs

- 11. Variable Costs are analysed to aircraft Engineering type, then allocated to route on the basis of operating units (Flying Hours + Landings).
- 12. Flight Deck Crew -On Service Costs are then apportioned to routes operated through the station. Inflight costs are allocated direct to route and aircraft type.
- 13. Cabin Crew -On Service Costs As for flight Deck Crew.
- 14. Parking Fees Total costs at Heathrow and -London Gatwick are calculated at sector level on the basis of annual weighted aircraft movements at each of these stations.

#### Fixed Costs

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15. Aircraft Standing Costs are identified to aircraft Charges type and allocated to route on the basis of the time an Figure (5.1) continued.

aircraft is committed to a route during the commercial day (elapsed hours).

16. Engineering Bases Costs are allocated to aircraft type.

Handling

- 17. Engineering Ramp -London -London Costs are allocated to aircraft type and then to route, on the basis of weighted annual aircraft landing at London/Heathrow or London/Gatwick.
- 18. Engineering Lamp Station costs are allocated to handling Elsewhere routes on aircraft weighted movements.
- 19. Traffic Handling (L. & G.)
  - a- Passengers and Manpower and equipment costs Aircraft Handling are identified to pier/ terminal and apportioned to routes by weighted aircraft movements.
  - b- Passenger Delay Heathrow and Gatwick costs are Costs allocated to route on the basis of sector passengers. i.e. L.H./ L.GW.
- 20. Traffic Handling General (Elsewhere) a- Handling Apportionment is on the basis of annual aircraft weighted movement.
  - b- Passenger Delay After transfers between Market Costs Centres for charges at shared stations, costs by station within each Market Centre are then apportioned to routes based on sector passengers.
- 21. Flight Deck Crew -Fixed/ Administration
  - a- Fleet related Fleet costs are allocated to Fixed Costs routeing and aircraft subtypes using credited hours -a measure of the crew commitment needed which also forms the basis for

calculating crew numbers.

- b- General Spread to route on the basis of the Administration Flight Crew Fixed costs.
- 22. Cabin Crew -Fixed/ Administration
  - a- Fleet Related As for Flight Crew but using duty Fixed Costs days instead of credited hours.
  - b-General Spread to routes on the basis of Administration the fleet related Flight Crew costs.

#### 23. Catering Fixed

a-L./H. Catering Allocated to routes using Centres factored passengers departing on catered services from L.H.

- b- Other Catering Costs are allocated to route and Fixed aircraft type on the basis of catering variable costs.
- c-Sundry Station Station totals allocated to routes Related Costs on the basis of departing passengers.
- 24. Cargo Direct Fixed Handling costs are allocated on the each stations tonnage throughout. Revenue Accounts and all Marketing costs are identified to area and thence to route on cargo revenue.
- 25. Network Control Identified to Market Centres and allocated to routes on sectors.

- Source: Interview with the Manager of the Routes Department of B.A., London, May, 1987.
- (1) -L./H. : London Heathrow.

-L./GW.: London/ Gatwick.

## (B) Aircraft Variable Costs: (6,7, and 8)

These costs vary with the operation of the aircraft: the more aircraft the airline operates and the more flights each aircraft takes, the greater these costs will be. The greatest of these costs are for fuel and oil. Then there are landing fees, which are the costs of parking the aircraft at the airport and route facility charges, which represent air traffic control and depend upon the amount of flying: if an aircraft does not fly, these costs are not incurred.

- 9- Variable Handling Costs: Sometimes the airline employs an agency to disembark passengers and get them into the airport, thereby incurring variable costs.
- 10- Variable Aircraft Hire: These are the costs of leasing an aircraft from other airlines, but these costs are a very small element in the total.
- (C) Semi- Variable Costs: (11,12,13 and 14)

Variable engineering costs vary with the amount of flying. There are also flight crew and cabin crew costs which basically represent hotel accommodation and allowances for overnight stops.

(D) Fixed Costs: (15-25)

These costs are the aircraft standing charges which mainly represent the depreciation of the aircraft and also include the aircraft insurance. There are some other items,

for example some engineering costs such as ramphandling/London which relates to use of the ramp in the central area for quick turn-around of the aircraft. Also, the airline has engineers at overseas stations whose costs are classified as fixed. The account which holds these costs is called "Engineering: Ramp-Handling Elsewhere".

Passenger-handling costs are regarded as variable, if agent is used and paid according to 'the number an of operations the airline has had through the station concerned, or fixed costs, if the airline uses its own staff to handle the aircraft. For example, if B. A. had none of its own staff at Cairo airport, but Egyptair handled passengers on their behalf, then there would be a contract with Egyptair requiring, for example, that for each time Tri-Star landed, B. A. would pay about f1 per passenger. Thus, these would be variable costs. However, if B.A. had its own staff at Cairo airport, and these took the passengers from the aircraft to the terminal building, then the cost would be fixed. There are also traffic handling costs at Heathrow and around the area stations (19-20).

The next fixed cost is flight deck crew and cabin crew. This basically represents their pay and also includes any administration costs such as training and management.

There are also catering fixed costs and Network Control Costs. The latter is the cost of keeping the network flying by controlling the central areas of airports, making sure that there is an aircraft which will operate for example, on

the London/Paris flight at 10.00 a.m. on a given morning, and keeping in touch with the aircraft and crews around the world at all times to make sure that the right crews are on the right aircraft in the right places.

Finally, there is an item called Cargo Direct Fixed which represents all the fixed costs of handling cargo.

In conclusion, B. A. has load variables, aircraft semi-variables, and fixed costs. However, it may be noticed that within the airline there are considerable areas of costs which are not allocated to individual routes, such as central costs, and marketing costs.

#### 5.3 Control Procedures

So far we have considered the structure of financial planning (described in the previous chapter) and the cost accounting and cost allocation system used for budgeting and monitoring purposes. Regarding the internal control process, in practice B.A. reports against the budget and produces the results of the actual performance monthly for each route.

#### 5.3.1 The Control Process and Budgetary Control System

Once the budget has been established and agreed it is broken down into the months of the year. Then the information is posted to the general ledger system which is categorised into budgets month by month. Each month, the system produces budget statements which show the actual

expenditure in comparison with what was budgeted. The variances are favourable if the actual expenses are less than budgeted rather than greater. Then budget and variances percentages are passed through the management accounting supervisor to the departmental managers, each of whom is responsible for the budget in a particular area.

In addition, the department of management accounting has to take these variance statements and analyse them in terms of "Causal factors" in order to determine the reasons why they have occurred. A report interpreting the reasons for any decrease or increase in the airline's activities is then prepared and passed to the Central Finance Office which is responsible for Central Management Accounting within the company.

Various variance statements are produced from the These forms, called the system. "Management Accounting (M.A.P.)", are required by the company's directors Package and represent a budgetary control system to be followed by the accountants. The M.A.P. comprises a number of monitoring forms, the information for which is obtained mainly from the budget variances and is for internal use. Also, it represents a series of monthly reports in order the airline's actual performance against the to assess budget. These control documents are illustrated in figures 5.2 to 5.5.

Figure (5.2), analyses the variances by causal factors.

	I E I	•	2			8	6	<u> </u>			1		· Ki-		
									•	<u>v</u>	<u>n</u>	<u>.</u>	<u>n</u>	9	2
actual & variances	7 8 9 7	Staff: H/C   H/C Custs:Charges!Mainte		1		rating Costs- Landing & Engineering Route Charges	0th <del>a</del> r	Selling Costs Advert-Other tising	1	Freenand- jühner freever lation & Costs erres Equipment ; Costs	Other Recov		Intra Group Charges	Inter Depart- Transfer	Total
Plan Changes	  283	<u> </u>	.'												
BA [ndustria] Disputes	  zu>	<u> </u> 													
Other	ΣU>	   	- <u>'</u> 												
10:Rates of Exchange 11: 12:	  = u >	   	.'												
2131 Staff Number, 141 Overtine 2151	  ΣU≻	 	. <u>.</u>												
16 Rate of Pay, 17 Pension, Insurance 18	  ±∪≻		. <u>.</u>												
19 0ther 201 211	Ξu>		.'												
	Ξυ>		.'   												
225:Total Variance 226: 227:	Ξυ>	 						·							
	   ±u>	   						• • • • •				-	   ·		

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It takes the type of expenditure and the variances for the month (column M), and the cumulative variance that has been notified from the budget variance statements and the expenditure (column C). From this, column (Y) indicates the variance forecasts for the next year. This form is а more detailed break-down of expected monthly expenditure. For example, if the reporting period is December, column (C) will represent the accumulated variances from the beginning of the financial year, April, to December, while column (Y) is the annual forecast which is based on column C, together with the forecast from the remainder of the budget year, from the beginning of January to the end of March. i.e. Thus, this is a joint report because it includes actual and forecast variance from each department.

Figure (5.3) shows the form normally used to make all the relevant adjustments and to obtain the true expenditure in a particular month. This can be done by looking at the expenditure in relation to the same period of the previous month and the same period of the previous year. Figure (5.4) illustrates the manpower variance report.

Figure (5.5) is another example of the monthly variance statements which can be explained as follows: Column 1: WPU ratio: the ratio of the actual operated capacity compared with the budget.

# Figure (5.3)

# MONTHLY REPORTING STATEMENT (Form B)

# AIRLINE EXPENDITURE VARIANCE ANALYSIS REPORTING PERIOD ...... DIVISION/DEPARTMENT .....

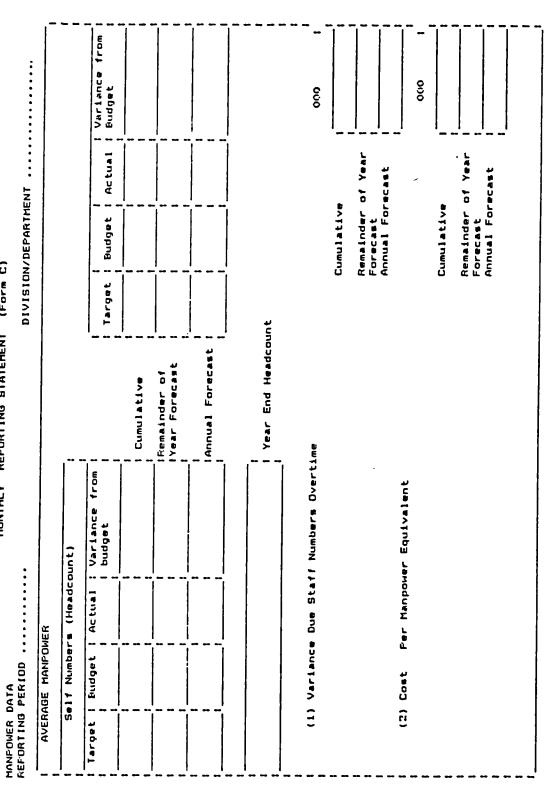
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1:	2	13	4
Line;	Retrospective Adjustments		
No.;			Notes
	Staff Costs		
2 1	Aircraft Charges	1 1	
3!	Aircraft Maintenance	1 1 1 1	
4 :	Fuel and 011	1 I 1 I	-
5	Landing Fees etc.		
6 :	Other Operating Costs	· · ·	
7	Selling Costs	4 1 1	
8 :	Accommodation & Equipment Costs	, i	
9 1	Other Costs	!	
10	Recoveries		
11 ;	Intra Group Charges	+	
12 ;	Total Retrospective Adjustments		
!	Operating Expenditure	Actual.Cm.,	·
No.	operating expenditure	Prior Year	
		Adjustments	
		Including	
		to Date [	
13	Staff Costs	_'''	
14 ¦	Aircraft Charges	; I	
15 ¦	Aircraft Maintenance	I I	
16 ¦	Fuel and Oil	1 1	
17	Landing Fees etc.	: :	
18 :	Other Operating Costs	: :	
19 ¦	Selling Costs	1 1	
20 ;	Accommodation & Equipment Costs	: :	
21	Other Costs	1 1	
-			
22		i i	
-	Recoveries Intra Group Charges		
22   23   1			

Figure (5.4)

MONTHLY REPORTING BIATEMENT (Form C)



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EPORTING STATEMENT (FORM D) -ROUTE GROUP RESULTS REPORTING PERIOD	Line Corect Contract Burling Contract Contract Burling Contract Burling Contract Burling Contract Burling Contract Burling Contract Burling Line Line Route Group Pre-TER POOLING Scores Costs Fixed Costs Costs Contract Burling Line Contract Burling Contract Burl			1 THEN YORK SUPERSONIC 2 IMASHINGTON SUPERSONIC 3 IOTHER SUPERSONIC		5 INEL YORK SUBSONIC 6 INTERNINGTON 7 IBOSTON 8 INTERNINGTON 9 ICHICAGO	1 International		16 1020NT0 17 200NTREAL	15			1 10 60 ATER SERVICES	24       10TAL CHRATER SERVIC.         25       10TAL NORTH ATLANTIC:	27 IOTAL MORTH ATLANTIC AFTER FIXED COSTS AUJUSTHENT
енг (гокн d) 	ă 		SCHEDULED SERVICES	H2H1 H2H1	TOTAL CONCORDE	HEH HARH 12081	RECENT RECENT RECENT RECENT RECENT	•• •• ••		101	HEST	SER		101AL	
RTIN	Sched. I'Factor Uperat- pas. 2:0'AIL 2 Ratio	Ret : Bud : Ret : Bud : Ret : Bu													

- Column 2: the actual passengers load factor compared with column (3) which is the budgeted passengers load factor.
- Column 4: the actual overall load factor (both Cargo and passenger traffic) compared with column (5) which is the budgeted overall load factor.
- Column 6: the actual operating ratio between revenue and costs compared with the budgeted operating ratio column (7).

Columns 8 and 9: headings, "Route Group" for each route.

- Column 10: the company's total actual revenue.
- Column 11: difference between revenue and budget in monetary term.
- Column 12: differences between the achieved revenue and budget as a percentage.
- Column 13: the actual variable and semi-variable costs of operating the route concerned.
- Column 14: the variance between the figures in Column (13) and the budget costs.
- Column 15: the actual fixed costs of operating the route concerned.
- Column 16: the variance between the figures in column (15) and the budget for fixed costs.
- Column 17: the actual operating surplus of the route concerned.
- Column 18: the variance of the actual operating surplus from the budget.

Columns 19 and 20: the actual and variance from budget

statements which show how much the cargo operation contributed to the result of each route.

In practice, the London/Cyprus route can be taken as an example:

In January 1988, the actual performance of this route was reported as follows: The WPU ratio was 8% more than the budget where a 73% seat factor was achieved against a budget of 65%. The actual earnings of that route, at  $\pounds 688,500$  (Columns 10, 11 & 12) was better than the budget target of  $\pounds 637,500$ , the difference being  $\pounds 51,000$ , a favourable variance of 8%. Also, there were variable and semi-variable costs of  $\pounds 16,000$  (Columns 13-14) worse than what was budgeted. Furthermore, the actual fixed ( Column 15 & 16) costs were  $\pounds 66,000$  more than budgeted.

Thus, it may be seen that through these control documents, the airline's master budget is closely monitored month by month, providing an understanding of the past and current activity, and it can also be used as a basis for the next year's forecasts.

#### 5.3.2 Flow of Information Throughout the airline

A project for computerising the flow of information within the airline has been initiated. Currently, some information flows through the computer system, but a significant amount is still passed by hand before it is put into the computer system because the airline does not yet

have the necessary technical links.

The process is gradually changing. The route costs department, for example, produces information that will fit directly into the new system without need for manual transfer. In fact, the Controller, Management Accounting who is responsible for implementing this process will eventually be able to feed all data into the system.

5.4 Productivity Measures

5.4.1 The Productivity Measures

Lord King, Chairman of the B.A. (B.A.'s Report and Accounts, p. 3, 1988) stated that:

"The challenges that face our industry will test to the full our commercial, financial, technical and human resources. To strengthen those resources will remain among the Board's principal objectives.

The acquisition of B. Cal., and in particular the workload arising from the Monopolies and Mergers Commission inquiry, impose severe additional demands upon the time and effort of our management at many levels".

During the budget process the productivity of the airline's departments are set on an overall basis using criteria such as cost per ASK (Available Seat- Kilometre): seats which are available for sale. Costs for each department are also evaluated by ASK and compared with the previous year. The manpower measures are derived from the number of available seats-kilometre for individuals. Therefore, a general productivity measure would be derived

for each department.

Other measures are used in parallel with the overall measure, for example;

- RPK : Revenue Passenger- Kilometre,

- RTK : Revenue Tonne- Kilometre, which is the total load of the aircraft including passengers and cargo.

In addition, there are specific productivity measures for particular departments: in respect of the flight crew, for instance a measure of productivity is "the number of corporate hours per member of the flight crew".

(5.1) compares the airline's Table productivity indicators during the period from 1983/4 to 1988/9. According to this table, the revenue per passengerkilometre in 1988 was 18.8% more than the previous year and this measure has been steadily increasing during the period from 1984-1988. With regard to the passenger load factor, there was a slight increase in 1988 by 3.2% more than 1987 and the transferred cargo tonne- kilometre was increased by 24.2% in 1988, and the company met an overall load factor of 67.3% in 1988 with 2.6% more than 1987. Also, the revenue per aircraft- kilometre was increased by 10.5% in 1988 compared with the previous year. The revenue per tonnekilometre decreased in 1988 by 4.8%. 1988 witnessed an increase of both the available seat-kilometre and tonne-

## Table (5.1)

## Comparative Productivity Performance During the Financial Years from 1983/4-1988/9.

Scheduled Services	1983/4   	1984/5   	1985/6   	1986/7   		Increase/Decrease from the previous year %	-	Increase/Decrease from the previous year %
¦ Revenue Passenger Km (m)	34,206	38,386	41,334	41,356	49,123	18.8	57,795	17.7
i   Cargo Tonne Km (m)	1,122	1,292	1,356	i   1,444	1,793	24.2	2,249	25.4
;   Total Revenue Tonne Km (m) 	4,244	i 4,810	i   5,155	i 5,267	i 6,345	20.5	7,636	20.3
Available Seat Km (m)	53,386	; ;56,031	i  60,759	61,722	69,970	13.4	82,984	18.6
Available Tonne Km (m)	6,699	7,275	i 7,956	i   8,141	9,427	15.8	11,404	12.0
Passenger Load factor (%)	64.1	68.5	68.0	i   67.0	i   70.2	3.2	69.6	(0.9)
Break-Even Passenger Load factor (%)	54.8	59.3	62.2	62.1	64.4	2.3	62.9	(2.3)
Overall Load factor (%)	63.4	66.1	64.8	64.7	67.3	2.6	67.0¦	(0.4)
Break-Even Overall Load factor (%)	55.2	58.2	59.6	60.4	62.2	1.8	61.1	(1.8)
Revenue aircraft Km (m)	211.0	229.0	248.0	257.0	284.0	10.5	i 343.0¦	20.8
Revenue per Passenger Km(p)	i 5.6	5.9	5.8	6.0	5.8	(3.3)	6.0¦	3.4
Revenue per Tonne Km (p) ;	i 49.8	52.1	51.3	52.1	49.6	(4.8)	i 49.6¦	No change

(M) : Million.

Km : Kilometre.

(P) : Pound.

Source: B.A., "Reports and Accounts for the years 1983/4-1988/9".

Note: These figures include 1987/88's results of B. Cal. and its subsidiaries' for the three months ended on 31/3/1988.

kilometre at 13.4% and 15.8% respectively over the previous year.

Further, the examination of 1989's productivity, shown in table (5.1), indicates that the company achieved a satisfactory performance, with a number of indicators improving over the previous year, e.g. revenue per aircraftkilometre increased by 20.8%, the revenue per passenger by 3.4% and the available seats- kilometre by 18.6%. Despite this growth, the overall efficiency of 1989, in relation to the figures illustrated in table (5.1), was inadequate compared with 1988, for example the break-even passenger load factor and the overall load factor sharply dropped in 1989.

It can be concluded that there was an overall improvement in the airline's performance, particularly in the years of 1988 and 1989 as a result of B. Cal.'s acquisition and the increase in the airline's total activity.

In addition, table (5.2) shows the total airline operations performance (including B. Cal.) during the period 1983/4-1988/9. The revenue per flight showed an improvement in 1988 of 7.8%, the utilisation of the aircraft was increased by only 3.2% in 1988 and the available tonnekilometre for the total airline improved in 1988 with an increase of 5.6%. Analysis of 1989's performance shows that the increase in revenue per flight and available tonnekilometre was appropriate, 15% and 13.1% respectively. On

#### Table (5.2)

Scheduled Services	1983/4   	1984/5   	1985/6   	1986/7   	-	Increase/ Decrease from the previous year %	•	Increase/ Decrease from the previous   year %
Revenue tonne Km (m)	4,650	   5,276	5,673	   5,784	   6,895	     19.2	; ; ; 7,636	10.7
Available tonne Km (m)	; 7,194	7,837	   8,751	   9,548	  10,083	; ; 5.6	  11,404	
Average fleet size	151	   153	159	161	   171	6.2-	203	18.7
Aircraft utilisation (average hours per aircraft per a year)	     2,465	     2,653	       2,720	; ; ; 2,801	; ; ; 2,891	3.2	2,886	(0.2)
Revenue per flight (000)	   184	   196	   210	   217	234	7.8	269	15.0
Net operating expenditure per ATK (p)	     27.1	29 <b>.</b> 8	     30.4	     30.9	     30.4	(1.6)	30.0	(1.3)
Average Airline staff employed (000)	36,096	36,861	38,939	40,759	43,969	7.8	50,204	14.2
ATKs per employee	199.3	212.6	220.9	221.6	236.1	6.5	243.4	3.1
Productivity per employee (0000's)	; -	4,720	4,648	; 2,993	; 2,297	(23.3)	2,370	   3.2

#### Analysis of the total Airline's Operations during the Financial Years from 1983/4-1988/9 (Including British Airtours)

(M) : Million. Km: Kilometre. (P): Pound. hrs: Hours.

Source: B.A., "Reports and Accounts for the years 1983/4-1988/9".

Notes: a. Total airline means; B.A., B. Cal. and British Airtours.

b. These results include the results of the three months period ended on 31/3/1988 of the B. Cal.

the other hand, the airline's average utilisation of the aircraft capacity dropped by 0.2% in 1989, whereas in 1988 it had increased by 3.2% over the previous year.

•

Table (5.3) analyses the company's turnover and operating surplus according to geographical area for the same period. The 1987/8 figures reflect a total turnover of £3,756 m. compared with £3,263 m. in the previous year, a rise of 15.%, and the airline achieved a surplus of £63 m. more than the previous year, a percentage of 36.4%.

An upward trend is also revealed by 1989's figures, which indicate that the overall operations surplus was better than the previous year, increasing by 42.%. However, the airline's turnover increased by only 13.4% in 1989. Thus, on the basis of the above analysis, B.A. total operations and turnover improved in the financial years 1988 and 1989.

The Annual Report for the financial year 1988/9 (p. 42) showed a profit of £175 m. compared with £151, £152 and £181 m. in the previous three financial years, 1987/8, 1986/7 and 1985/6, an increased percentage of 15.9% and 15.1% compared with the 1988 and 1987 due to the growth of the company's operations. In addition, it may be seen that British Airways in 1989:

- Carried over 25 m. passengers with an overall load factor for the scheduled services of 67% compared with 23 m. passengers in the previous year, its overall load

#### Table (5.3)

#### Analysis of the Company's Turnover and Operating surplus by geographical area during the Financial Years from 1983/4-1988/9 (Including B. Cal. and British Airtours)

(Value in Million)

Scheduled Services	1983/4	1984/5 	1985/6	1986/7	1987/8 '	1988/9
TURNOVER		 	·	, 	, !	 
Europe	1,021	1,152	1,264	1,416	1,609	1,622
The Americas	683	876	1,008	<b>9</b> 82	1,175	1,374
Africa	167	190	179	185	237	323
			_	-		
Middle East, Far East and						
Australasia	600	687	660	662	735	938
i i ! Discontinued activities !	43	38	38	18	_	i - !
1						
Total    Increase/ Decrease from the	2,514	2,943	3,149	3,263	3,756	4,257
previous year *	- 1	17.1	6.7	3.6	15.0	13.4
l					*******	
			l			
OPERATING SURPLUS	97 I	81	56	56	36	i 16
				50		10
The Americas	88	131	85	65	131	181
	l		1	1	' I	1
Middle East, far East and    Australasia	i 60 !	55 !	46 !	: 33	 32	1 90 1
			ן טדי 	1 55	ן גנ ן	50 1
Africa	23	27	14	20	37	49
	l		1		ł	ł
Discontinued activities	-	(2)	(3)	(1)	-	-
i Total I	i 268	292	i 198 ¦	i 173	i 236	336
Increase/ Decrease from the			;			
previous year *	-	9.0	(32.2)	(12.6)	36.4	42.4
*******						

Source: B.A., "Reports and Accounts for the years 1983/4-1988/9".

Notes:

- a. Total airline means; B.A., B. Cal. and British Airtours.
- b. These results include the results of the three months period ended on 31/3/1988 of the B. Cal.

factor was 67.8%, a percentage of 0.8% less than 1988. The break-even overall load factor was 61.1% in 1989 while it was 62.2% in the previous year that because the increase in the airline fleet led to an increase of the overall available seats in 1989 at 18.6% more than 1988. This requires marketing department of B.A. to be developed where more activity e.g. advertisement campaign is necessary.

- Increased operating expenditure to £3,921, a percentage of 11.4% over the previous year.

- Employed an average airline staff of 50,204 compared with 43,939 including B. Cal. and 40,759 in the previous two years, which represent an increase of 14.3% and 23.2% over the year of 1988 and 1987 respectively. This means more jobs were created during the past three years.

-Carried cargo amounting to 460,000 compared with 361,000 and 341,000 tonnes in the previous two years.

Table (5.4) shows the comparative financial statements of B. A. from 1983/4 to the year ending 31 March 1989. It indicates that the retained profit declined by 32.6% and 17.2% during 1986/7 and 1987/8 respectively as a result of the fluctuating operating surplus during the period 1983/4-1987/8. Furthermore, the examination of 1989's activity portrays that B. A.'s retained profit has increased by 17.8%

#### Table (5.4)

# Comparative Financial Statements of B.A. for the period from 1983/4-1988/9.

	83/84	84/85	85/86	86/87	87/88	88/89	
Turnover	2,514	2,943	3,149	3,263	3,756	4.257	
Operating Expenditure	(2,246)  	(2,651)	; (2,951)	; (3,090)	; (3,520)	(3,921	
Operating Surplus	268	292	198	173	236	336	
Other Income	26	12	36	19	12	18	
Interest Payable and Similar charges	(109)	(113)	i   (39)	(30)	(20)	(86	
Profit / Loss before Taxation	185	191	195	162	228	268	
Taxation and Minority Interests	(2)	(5)	(2)	(14)	(77)	(93	
Profit / Loss before Extraordinary Items	183	186	193	148	151	175	
Extraordinary Items	33	(12)	(12)	4	-	-	
Profit / Loss after Extraordinary Items	216	174	181	152	151	175	
Dividends	   -   	-	-	(30)	(50)	(56	
	 		ا۲		<b>!ا</b>		
Retained Profit for the year	216	174	181	122	101	119	
ncrease/Decrease from the previous year %	-	(19.4)	4.0	(32.6)	(17.2)	17.8	

(Value in £ Million)

Source : B. A., "Annual Reports 1983/4-1988/9.

<u>Note</u>

The financial year 1987/8 includes the results of B. Cal. and its subsidiaries for the three months 1 January-31 March 1988.

over the year of 1988. The main reason was the expansion of the operations and activities, particularly related to the acquisition of B. Cal. during the last quarter of the financial year 1987/8.

## 5.4.2 Cargo Activity

Since its inception in 1983, the Cargo Business Centre built its strength upon two major principles; has aood service to customers and the development of a strategy that exploits an unparallelld worldwide route network. These principles proved invaluable in 1985/6, when air cargo growth slowed down throughout the industry. In particular, there was a large decrease in air exports from the US, the world's largest market, and those to the UK fell by 20% against 1984/5. With the introduction of the 747 Combi passenger-freighters to New York, Chicago and Tokyo in the winter of 1985/6 the capacity was increased, matched by the progressive introduction of larger cargo containers on passenger services across the network. This programme was completed by the winter of 1986/7. In addition, B. A. operates a substantial trucking network between the UK and continental points. As a result, the total volume of the airline's cargo carried has been increased.

## 5.4.3 Variance Analysis

Each month the Route Department collects reports of the actual costs compared with the budget from each department throughout B.A.. The Department picks up these

variances and changes the route cost budgets accordingly. These variances are not classified into controllable and for accountability purposes, but non-controllable are analysed by the department in terms of "Causal Factor" for each of the airline's costs. Recently, the airline has identify variances in terms of the attempted to responsibility of the marketing department or the operations department. Ideally, this development would be extended to all departments, though much work remains to be done.

All departments, when preparing their next budgets, should take into account not only these variances, but also others such as changes in prices of materials used, fuel costs, etc. These may arise from changes in the volume of operations or changes in staff numbers.

#### 5.4.4 Revenue Analysis

Concerning revenue analysis, the process is as follows: the marketing department examines market research information and forecasts from various companies throughout the world. From that information, schedules are considered for each individual route. Then the targeted revenue for route forecast is passed to the Route each Costs Hence, the expected operating result for each Department. route is obtained as follows:

The Operating Result =

The route revenue (budget) per route -The route costs (budget).

The revenue analysis department not only produces the revenue budget but also assists marketing.

## 5.4.5 Sensitivity Analysis

At the time of preparing the budget and during its implementation an examination is carried out of some sensitive items of costs, for example to determine the effect of increased fuel prices on the routes' results. Taking the London/Cyprus route as an example: the total fuel cost was budgeted in 1987/8 at £2,560,000, but with a 10% increase in fuel prices, this cost would became £2,816,000.

Similarly, it might be seen how the profitability of a given route would be affected if the Boeing 757 were to be replaced by the Boeing 737. Most costs and revenues differ according to the type of aircraft. The same process is applied to any other non-controllable variables.

#### 5.4.6 The Funds Statement

Funds are reported in an annual report called "The Application of Funds Statement". This statement is reported monthly during the year and also at the end of the budget period for the purpose of monitoring the airline's operations. Consequently, it is used as an internal control device for the airline's operations by showing the sources from which funds have flowed into the company and the way in which they have been used. In addition, it indicates the

funds generated by the airline's operations and any resulting surplus during the budget period.

## 5.5 Evaluation of the Control System

Two major points should be made about the information system: firstly, manual transfer is more time-consuming and therefore relatively inefficient. Secondly, there is a need to speed up the production of control data which at the moment are produced about three weeks after the end of the month. When the new system is fully in operation, these data could be produced in a week. This will make a significant difference to the management information system, enabling directors to take action earlier. It will also aid more effective planning, control and decision-making.

At the time of writing, the most difficult variables to control are catering costs and variable handling costs, both of which are scheduled for computerisation in the near future. Currently, the catering and passenger handling costs create some difficulties for monitoring purposes.

Despite the monthly reporting system on the airline' master budget, currently, there is no detailed weekly financial information available for controlling the company's operations.

With regard to cost allocation, it can be noted that certain costs are left outside route budgets. For the purpose of illustration, let us suppose that the London/Paris route has a cost of £1,000, the London/New

York route has a cost of £5,000 and the London/Australia-Sydney route has cost of £6,000, while the total routes budget is £20,000. Thus, there is a difference of £8,000 which represents overheads. These costs are not allocated because the airline believes that not only it is difficult to do so, but also it has little meaning in practice.

## 5.6 Accounting System

British Airways has an integrated financial accounting and management accounting system which consists of the general ledger to which transactions are posted and a budget ledger which forms a part of this overall integrated system. This system produces the accounts and budget statements so that each department can analyse its own variances. It also provides the management accounting department with the necessary information for preparing the management accounting packages for monitoring the budget's performance.

The A.S. is a computerised system based on a package of programmes purchased from Management Science America Inc. (MSA). The computerised general ledger system which is called General Ledger GL80, is a centralised book-keeping system into which all transactions are posted, and which contains all revenue and expenditure accounts. The GL 80 is split up into the Chart of Accounts which holds two main categories of codes: (1) Budget codes, called the "Account Centre Combination", and (2) Accounts codes. There is also a separate model in the system for budget reporting.

For each combination, there is a categorised budget which is held by the GL 80 month by month. As the financial year progresses, the actual expenditure is posted through this GL 80 and the budget variance statements are produced monthly. The major aim of the GL80 is to integrate the management accounting (M.A.) and the financial accounting system (F.A.S.) into one system, producing information for both M.A. and financial accounting purposes. This system is called the "Financial and Management Accounting Information System (FMAIS)".

# 5.6.1 Brief Description of the System

The GL80 is an integrated financial and management accounting system, holding the General Ledger for all British Airways PLC Head Office units, together with separate ledgers for overseas non-self-accounting stations, and control totals for overseas self-accounting stations. This system is based on a package of programmes purchased from Management Science America Inc. (MSA). The main features of the system can be briefly outlined as follows:

The GL80 Ledger system accepts input, either on-line via
 VDU, or by computer transfer from certain designated
 satellite computer systems.

2. On-line input is controlled by batch, and validated by the system. All input is processed and batch control and reject reports are produced overnight and distributed the following day.

3. Rejected items are allocated to the reject suspense account of the unit concerned.

4. The system produces monthly reports of transactions, balances, and other data, for both financial control and management accounting purposes.

5. The facility to view detailed transactions on-line is available on certain designated accounts.

6. GL80 passes financial data to the clearing account system.

7. Systems Flow Chart

The system's flow chart indicates:

a. The inter-relationship between all computer systems within the Finance Department, including those interfacing with Finance systems.

b. The inter-relationship between GL80 and the various satellite systems providing a direct interface.

c. The various inputs and outputs from GL80.

8. On-line Input

For those transactions not arising from a separate computer system with a direct interface to GL80, data is coded and recorded manually, and input to GL80 via on-line visual display units. This covers the following areas;

- Cash receipts, cash payments, and cheque payments (other than those generated by APPLE within the UK.),
- Journal Vouchers,
- Accruals for operating revenue and expenditure,
- Transactions arising on overseas stations, either from monthly summarises, or individual items,
- Re-input of fully allocated ACIs and ACCs;
- Re-input of items input by interface from other systems, but rejected on validation by GL80.

The following areas have on-line input to the GL80.

## i) General Finance

- Air Companies
- Assets Accounting
- Cargo Revenue
- Cash Services
- Central accounting
- Mail Revenue
- Passenger Revenue
- Pay Office
- Purchase Ledger
- Station Accounting Unit
- UK Sale Ledger

# ii) Operations

- Cashiers Queens Building
- Catering Services
- Engineering
- Flight Services
- Ground Operations -London
- Properties

## iii) Marketing

- Administration
- America/Africa Market Centres
- Cargo
- Eastern market Centres
- Europe/Domestic Market Centres
- Glasgow
- Manchester
- Marketing Services
- Revenue Pools

iv) Treasurer

- Funds

\_\_\_\_\_

- Foreign Exchange

# v) Purchasing and Supplies

- vi) Information Management
- vii) Service Department
- viii) Management Accounting/Budgets

## 9. Satellite Systems Input

## Payroll

The payroll system produces a monthly computer tape of all postings covering pay, pensions, social security and allowances relating to each Centre Code. This tape is fed into the General Ledger system. Control totals are posted to the respective Pay Office control accounts within the General Ledger.

## Purchase Ledger

A computer file is input to the General Ledger system three times weekly, covering all postings to accounts and centre codes arising from suppliers invoices and credit notes. Control totals are posted to the Purchase Ledger Control Accounts within the general Ledger. No details of personal accounts (i.e. accounts with specific suppliers) are held within GL80.

## UK Sales Ledger

The UK Sales Ledger system provides a weekly computer tape covering all postings to accounts and centre codes arising from General Invoices and Credit Notes. Control totals are posted to the respective Sales Ledger Control Accounts within the General Ledger. No details of personal accounts (i.e. accounts with specific customers) are held within GL80.

The Air Companies system provides data covering four types of transactions:

(i) Posting to accounts and centre codes arising from British Airways general invoices and credit notes raised on other airlines and general sales agents.

(ii) Posting to departmental control accounts arising from invoices and credit notes received from other airlines and general sales agents.

(iii) Posting to departmental control accounts arising from transactions taking place on overseas stations, where the responsibility for the cost lies in a Head Office department.

(iv) Posting to overseas self-accounting stations' current accounts, arising from transactions in Head Office which affect self-accounting stations' books of account.

The data is supplied on a weekly computer tape. Control totals are posted to a control account within the General Ledger. No details of personal accounts (i.e. accounts with specific air companies) are held in the system.

## Revenue

A daily file of transactions representing sales is input to the General Ledger.

#### 10. Assets Accounting (BEEPAC/SOFA)

#### BEEPAC:

This system is loaded with invoices received for supplies of capital items, and interfaces with GL80 to create postings to clear financial postings to the Capital work in Progress Account.

## SOFA:

This system inputs monthly depreciation by direct interface with GL80.

## 11. Relationship to Other Systems -Outputs

## Clearing Account Reconciliation System

A monthly file of transactions posted to all clearing accounts is created and transferred to the Clearing Account System. This system compares data (including matching references), and produces reports.

## 12. Outputs and Reports

Outputs and reports fall under three main headings which can be stated as follows:

## 13. Input Control Reports

- Batch proof lists
- Reject reports, including error messages
- Master file updated reports

- a. Monthly Control Reports
  - Trial balances
  - Detailed transaction listings
  - Reconciliation reports (Clearing Accounts only)
  - Aged transaction data (Clearing Accounts only)
- b. Monthly Management Information and Other Data
  - Budget variance statements
  - VAT category analysis
  - Turnover analysis
  - Supporting transaction listing
  - Functional analysis
  - Exchange rate analysis.

#### 5.6.2 Accounting Policies

According to the Report and Accounts, (p. 38), of the year ended 31 st March 1989, the airline follows the accounting principles generally accepted in the UK which differ in certain respects from those generally accepted in the USA. The main differences can be described as follows: a. Deferred taxation

The company provides for deferred taxation on the liability method on all material timing difference to the extent that it is probable that the liabilities will crystallise. Under the USA GAAP, as set out in Statement of Financial Accounting Standard No. 96 (FAS 96), deferred taxation is generally provided on a full liability basis.

#### b. Goodwill

According to the USA GAAP, goodwill arising on consolidation is amortised over its useful life. B.A. writes off goodwill arising on consolidation directly against retained earning.

# c. Property and fleet valuation

Under the US GAAP tangible assets must be stated at less accumulated depreciation in the financial cost valuation of properties and fleet The statements. incorporated by the company would not therefore have been included in the financial statements prepared in accordance with US GAAP. Properties were professionally valued at open market value for existing use. Regarding fleet valuation, apart from the Concorde aircraft which remain at nil book value, the fleet have been valued on a market value basis by Avmark International Ltd.

Another crucial point which should be considered is the depreciation; the fleet assets owned, or held on finance leases where the option exercise price is nominal, are depreciated at rates calculated to write down the cost or valuation to the estimated residual value at the end of the planned operational lives. Fleet assets held on finance lease where the option exercise price is other than nominal are depreciated over the primary lease period if shorter. Operational lives and residual values are reviewed annually.

#### d. Dividends

Under US GAAP dividends are only incorporated in the financial statements when declared. At B.A. the proposed final dividends and related Advance Corporation Tax would not have been included in the financial statements prepared in accordance with US GAAP.

### e. Foreign Exchange Policy

At B.A. foreign currency balances are translated into sterling at the rates ruling at the balance sheet date except for certain loan repayment instalments which, at the balance sheet date, have been carried forward and are translated at the forward contract rates. Changes in the sterling value of outstanding foreign currency loans and finance leases used for the acquisition of aircraft are reflected in the cost of those aircraft. Exchange differences arising from the translation of investment in overseas companies are recorded as movements on reserves. All other profits or losses arising on translation are dealt with through the profit and loss account.

Under US GAAP the exchange adjustments made to the cost of aircraft are required to be treated as exchange gains or losses and included in the determination of net income.

## 5.7 British Airways' Role in Fixing Fares

A distinction should be made between fixing fares for internal airline routes in any country, (defined as regular

flights between two or more points inside a country) and fixing fares for the airline's external routes (defined as regular flights between any two or more countries).

The first type of fare is almost totally controlled by the airline and its country's government. On the other hand, fares for external routes are normally determined under the supervision of IATA. All the airlines which are members of this association meet and discuss ways of fixing fares between countries; then IATA issues lists of international standard fares between different flight points throughout the world.

Once these fares are decided upon, no member can exceed the standard fare. Any airline which is a member of this association, which has the authority to control and check fares, must indicate the standard fare on each ticket sold, even though the actual fare paid may be lower.

It should be mentioned, however, that there are various crucial factors affecting airline fares, for example:

- a. The operating costs which vary from one type of aircraft to another and also from one route to another.
- b. The political, economic and geographic conditions and relations between the countries concerned.

c. Types of class required.

B.A. is a member of IATA. Thus, its fares are fixed according to negotiations between the British government and

the government of the country concerned -the Egyptian government for instance, in the case of fares for example, between Heathrow Airport and Cairo Airport. The IATA is also involved. B. A.'s role is to attempt to influence the British government to support the fare prices desired by the airline.

Why do the actual fares often differ from the standard fares? The explanation is that though the governments concerned eventually agree fares between two points, in practice, the market may indicate that it would be an advantage to the airline to offer a cheaper fare. Therefore, most actual fares are less than the standard ones because of the strong international competition where international market rules apply.

## 5.8 The Extent of Government Influence

B.A. operates in a highly competitive international market. In October 1984, the Government published a White paper on Airline Competition Policy which covered both domestic and international routes. The policy objectives include the encouragement of a sound and competitive multiairline industry; the promotion of competition, as long as it is fair and UK interests are not prejudiced; and ensuring adequate safeguards against anticompetitive behaviour. The Government considers that the regularity framework provides a stable environment for the industry as a whole.

After privatisation, in early 1987, in reply to the

question as to whether B. A. is free from government influence in taking financial decisions, Mr Dunkerley, the Assistant Controller Management Accounting (Reporting and Analysis), stated:

" It is very early to be specific -British Airways has only been privatised for a month , but the Government has always stated that British Airways will be free to make its own commercial decisions, and will have to stand on its own two feet; so I must assume that the government will not interfere with what British Airways wants to do ".

> [Interview with the Ass. Controller Management Accounting (Reporting and Analysis) of B.A., London, April, 1987].

However, there is a possibility of influence through the Civil Aviation Authority (C.A.A.) as the Government still has a civil aviation policy. It may, as indicated in chapter six for example, decide that it wants to allow other independent airlines to develop certain routes and since the C.A.A. has a route licensing function, it could possibly deny British Airways certain routes. Therefore, B. A. is subject to these conditions.

B. A. do not believe that the government would insist on operating routes uneconomically. Mr John, the Budget Manager, states;

" I do not think that will happen. I do not think we will be forced to operate routes that we do not want to. It is more likely that there are routes that they will not let us operate, because the Government thinks that other independent airlines should be given precedence over British Airways, in the new

routes, for instance ".

[Interview with the Budget Manager of B.A., London, April, 1987].

It is possible that B. A., as a nationalised industry, may have been directed in the past to operate routes that it did not want to and it has been subsidised on some of the more difficult routes. Although privatisation is comparatively recent, B. A. is confident that it will in the future have full commercial and financial freedom.

On the subject of the government influence on B. A. in terms of aircraft acquisitions from certain countries, now that the airline is a private company it can buy from whomever it wants according to its commercial judgement, without any influence from the government. However, this political influence is exercised sort of other on nationalised airlines throughout the world, such as Egyptair.

## 5.9 Summary

The major objective of this chapter has been to examine the control procedures in British Airways. Therefore, the investigation of these procedures covered various related areas such as the costing system, the control system and the budget, information flows within the airline, productivity measures and the company's accounting system and its adequacy for providing the appropriate information to planners and controllers at the airline.

In conclusion, the airline applies an integrated system of absorption and variable costing. Costs are classified mostly on the basis of personal judgement and are allocated to each route and aircraft before building up the airline's master budget, mainly on the basis of the proposed flying hours on each route.

The control system is mainly based upon a monthly reporting system which is carried out using a variety of forms showing the differences between actual and budgeted. Also, various productivity criteria are applied such as available seat- kilometre, available tonne- kilometre, revenue per passenger, revenue per tonne and overall load factor.

The accounting system is computerised. Its deficiency is that it is difficult to identify in detail each of the operating costs on a given route and for each of the company's fleet. In addition, other information is needed for planning and control purposes which cannot be provided by the system.

CHAPTER: SIX

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FINANCIAL PLANNING AT EGYPTAIR

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## 6.1 Introduction

The main objective of this chapter is to examine and investigate the financial planning process at Egyptair.

The investigation is organised into five main sections, covering the methods of collecting the data required for the investigation, the background of the company, financial planning at Egyptair and the evaluation of this system. Also, it is necessary to present an overview of the main features of Egyptian economic activity.

## 6.2 Brief Introduction of the Egyptian Economy

## 6.2.1 Economic Planning

Industrial activity before 1952 was limited to certain industries, mainly textiles and some food industries based on processing agricultural produce. The production of these industries only covered domestic demand, and the country remained dependent on imports of foreign products. After 1952, the Egyptian Government placed strong emphasis on industrialisation, introduced protectionist trade policies and relaxed import duties on machinery.

However, large scale planning was not undertaken in Egypt until 1955, when a new organisation was established under the name of "The National Planning Committee (N.P.C.)". This drew up a ten-year plan divided into two five-year plans, which were extremely ambitious, aiming to double national income in ten years. The first

phase began in 1959/60.

The planning process follows traditional а administrative pattern; the individual ministries and the organisation attached to them prepare schemes and investment projects within their own field. These suggestions are collected by the Ministry of Planning and examined by the N.P.C.. Therefore, the Egyptian Planning has been guided by the principles system of both centralisation of planning and supervision and decentralisation of management.

From the 1967 War until July 1974, the Egyptian government relied on annual development programmes rather than on true planning. Substantial military expenditure was involved in preparations for liberating the occupied land, which was achieved in the 1973 War. Also, the officials were obliged to adopt a deflationary economic policy during this period, as Kandil indicates (1981, p.146).

A development plan was prepared to cover the period from July 1974 to the end of 1975. The intention of this plan was to give the bodies responsible a chance to prepare an accurate five year plan which started from 1976.

6.2.2 The Main Features of Current Economic Activity

6.2.2.1 The Present Performance of the Egyptian Economy

Before the 1952 revolution, Egypt was a private enterprise economy with foreign influence in many fields

and with limited government intervention. The economy stagnated between the late 1960's and early 1970's. By 1971/2, public consumption had risen to 28% of the gross domestic product (G.D.P.), investment was a modest 13% and domestic savings were an even more modest 8%. The balance of payments was still heavily dependent on the cotton trade which generated around half the current receipts. Imports, severely constrained by the lack of convertible hard currency, were kept to under 20% of national income.

In 1973, a new economic policy, "The Economic Open Door policy" was adopted. A special law relating to Arab and foreign investments, known as "Law No. 43 for the investment of Arab and Foreign Funds and the Free Zones", was issued in 1974 and amended by Law No. 32 of 1977. The Egyptian government attempted to accelerate economic progress by giving the private sector and also Arabic and foreign investors, a powerful incentive to expand their business in Egypt.

Many additional incentives have been given such as:

- Exemption of tax on commercial and industrial profits for a period of five years, and
- Guarantees against nationalisation and reacquisition (Law No. 43 of 1974).

As a result, the Egyptian economy during 1981/2 witnessed sustained efforts dedicated to economic development, within the framework of the open door policy,

with emphasis placed on productive projects in the industrial and agricultural sectors.

The main economic measures pursued by Egypt during this period were reflected in the continued support given to projects relating to food, security, housing and public utilities. Moreover, according to the National Bank of Egypt Report (1983) the Egyptian government increased subsidy allocations from 1,556 million L.E. in the 1980/81 budget to 2,000 million in the 1981/2 budget in order to tackle these domestic problems and to develop the people's standard of living.

However, the object of monetary and fiscal policies pursued during the year was to combat inflation. This goal was sought through the raising of interest rates whilst restrictions on credit expansion were sustained. In respect of increasing interest rates, care was taken to fix varying rates with the aim of providing appropriate financing for industrial and agricultural projects as well as security for housing and food which enjoy priority over the trade sector.

On the one hand, the budget aimed to realise a current surplus to contain the inflationary pressure of domestic liquidity expansion. Consequently, the rate of inflation was confined to 16% in 1981/2. On the other hand, the foreign trade policies were consistent with the general targets of the national economy and the import/export balance was subject to rationalisation, with the aim of

bolstering the Egyptian pound by containing demand for foreign currencies.

In 1981/2, the balance of payments showed a current transactions deficit which had doubled (as compared with the preceding year) to 2.1 billion L.E. This was mainly attributable to the decline of 16% in invisible receipts, especially interest, dividends and other revenues which included remittances by Egyptian expatriates as well as travel and other receipts. Also, invisible payments increased by 22% of which the items of interest and dividends and Government expenses were the most important.

1987 witnessed serious efforts to implement a comprehensive programme for economic and financial reform based upon an agreement with the International Monetary Fund. Under this agreement, Egypt received the equivalent of  $SDR^{(1)}$  250 million conditional upon taking certain measures for improving economic performance, i.e. stepping up productivity, fostering the role of the private sector, easing restrictions on foreign exchange, raising prices for agricultural products and restraining credit with a view to reducing demand and curbing inflation.

Thus, a free market for foreign exchange was established in May, 1987 with a view to creating more channels for foreign exchange receipts and halting any

 <sup>(1)</sup> For more details about the SDR, refer to: Geisst, C.R., "A Guide to Financial Institutions", (The Macmillan Press Ltd., London, 1988, pp. 7-11).

further deterioration of the value of Egyptian currency due to speculation on the US dollar. Therefore, foreign exchange rates are announced daily, indicated by supply and demand functions.<sup>(1)</sup>

The savings of expatriates have come under scrutiny in recent years because of their vital importance. Table (6.1) shows that these average remittances account for 47% of the total sources during the period 1981-1987. It also indicates the impact of other factors on the balance of payments such as oil exports, the Suez Canal, cotton exports and tourism. The latter contributed an average of 6% of the total during the same period. Oil export was the second best, contributing an average of 30.5%, Suez Canal was the third with an average of 11.6%.

Table (6.2) illustrates the main economic features from 1981 to 1987. It shows an increase in foreign exchange in 1987 by 91 L.E. m., 11.5% more than the previous year, but there is a 6.5% decline in public finance for 1987, and of 87.4% in the surplus on invisibles, compared with 1986. The table also shows growth in gross domestic income of 54.2%.

(1) For more detail, refer to section 7.7.3 in the next chapter

#### Table (6.1)

#### Saving of Egyptian Expatriates Compared with the other Sectors During the period from 1980/1-1985/7

#### (value in L.E. Million)

Year	1980/1	1981/2	1982/3	1983/4	1984/5	1985/6	1986/7	Average Contribution
<u>Saving</u> of Expatriates								
Value	2,105.2	1,104.7	2,327.5	2,965.2	2,835.7	3,950,9	3,884.0	2,739.0
% of the total	40.4	31.4	43.7	49.4		57.6	62.3	47.0%
011 Exports								
Value		1,914.6						1,719.0
<pre>% of the total</pre>	36.8	42.8	34.9	30.0	28 <b>.9</b>	24.3	16.0	30.5*
<u>Suez Canal</u> dues								
Value	546.3	636.2	669.6	681 <b>.8</b>		719.8	803.6	669.3
<pre>% of the total</pre>	10.5	14.2	12.6	11.4	9.8	10.5	12.5	11.6%
Cotton Exports								
Value	228.4	204.0	220.1	321.3	741.8	115.4	240.3	595 <b>.9</b>
* of the total	4.4	4.5	4.2	5.3	11.7	1.7	3.7	5.1*
<u>Tourism</u> <u>Revenues</u>								
Value	413.5	317.5	247.1	232.2	332.2	401.4	481.2	346.4
<pre>% of the total</pre>	7.9	7.1	4.6	3.9	5.2	5.9	7.5	6.0%
Tota 1	5,212.8	4,479.0	5,323.6	5,988.4	6,381. <b>3</b>	6,854.5		5,811.5 100 <del>%</del>

Source: National Bank of Egypt, "Annual Reports", (Cairo, 1986 & 1987, p. 350 & p.94 respectively).

# Table (6.2)(i)Summary of the Main Economic Indications from 1980/1-1986/7<br/>(value in L.E. Million)

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	1980	/1 1981	/2 1982/	3 1983	/4 1984	/5 1985/	6 1986/7	Increase/Decrease
Gross Domestic Income	28,677.0	39,277.0	41,709.4	44,320.0	47,570.0	52,954.5	81,664.2	54.2%
Public Finance	14,831.6	19,353.4	21,265.6	24,266.0	27,757.8	32,535.9	30,413.4	(6.5%)
Money Supply & Domestic Liquidity	15,774.1	22,909.5	28,855.1	33,654.2	38,761.1	47,274.1	52,021.6	10.0%
Raw Cotton (In m. m. cant.)	22.4	24.1	22.7	21.2	10.0	19.0	_ <sup>(ii)</sup>	-
Oil Production (In m. tons)	32.3	34.5	36.7	92.4	47.1	47.3	48.6	2.7%
<u>Balance of</u> Payments								
Proceeds from exports (L.E.m.) Payments for	2,779.0	2,765.1	2,682.9	2,859.9	2,837.5	2,885.4	2,076.5	28.0*
<pre>imports (L.E.m.) Surplus (Def.) or</pre>	-	6,569.0	6,382.5	7,348.8	7 <b>,4</b> 95 <b>.9</b>	9,221.4	8,034.2	12.8
visibles Surplus (Def.) o	-3,899.8	-3,803.9	-3,699.6	-4.489.0	-4,658.1	-6,336.0	-5,957.7	(6.0%)
invisibles Transfers	2,767.7 68.1	1,937.2 35.7	2,927.7 17.9	3,372.9 18.3	3,201.9 155.5	2,334.5 355.2		(87.4%) 1061.0%
Banks:					_			
Resources Uses	2,341.4 2,648.6		2,438.1 2,752.8			4,341.6 5,364.5	4,881.0 5,007.6	12.4 <del>*</del> 6.6*
International Reserves:(\$ mn.)								
Tota]	716.0	698.0	771.0	773.0	918 <b>.</b> 0	-	_(ii)	-
Gold	775.0	578.0	757.0	679.0	578.0	-	-	-
Foreign		_						
Exchange	688.0	698.0	739.0	773.0	918.0	792.0	883.0	11.5%

Source : National Bank of Egypt, "Annual Reports", (Cairo, 1986, p.336 and 1987, pp. 76-78).

(i) Adjusted Figures.

(ii) These figures are not included in these reports.

6.2.2.2 The 1987/8-1991/2 Five-Year Plan: The Main Features

The second five-year plan, 1987/8-1991/2 represents the second step of a 20 year long-term plan up to the year 2,000, which is divided into four five-year plans beginning in 1982/3. This plan is a part of the national strategic planning which is intended to cover all economic, social and political aspects of Egyptian society.

The structure of Egyptian society is expected to change by the end of each period. Consequently, the objectives of each stage are modified to come closer to long-term strategic targets. The second five-year plan begins where the first one ended in June 1987. The fundamentals of the plan can be stated briefly as follows: 1- Improving the capacity of the national economy which

can be done by:

-emphasising commodity production in accordance with the emphasis of the first five-year plan on the formulation and modernisation of the production base:

-increasing production and productivity especially new productive capacity through investments;

-organising the export capacity.

-mobilising local sources of finance.

-strengthening the role of both the private and public sectors.

2- Strengthening the physical and social infrastructure.

3- Achieving population -location balance.

Increased production is essential for economic and social development. Thus, the main objective of the plan is to promote production in quality and quantity at such a rate as to enable the country to overcome the problem of increasing population. As illustrated by table (6.3), the plan aims to increase production for some of the major products, e.g. sheet glass at 291.7%, caustic soda 251%, transport units 218.2%, ready made clothes 119%, cars 117.4%, buses 92.3% and cement 77%.

In the second five-year plan, the G.D.P. is based on developing the rates of growth of commodity sectors and rationalising the relationship between G.D.P. and its uses through the channels of aggregate consumption, investment and foreign trade.

From table (6.4), which shows the expected G.D.P. at the end of the second five-year plan by economic sectors at cost and market value, it is evident that the basic intention is to achieve an increase in G.D.P. to L.E. 57.9 billion at market value, by having it grow by 31.9% over the plan period at an average annual rate of around 6.4%. This plan concentrates mainly on the growth of the commodity and trade and finance sectors.

It must be emphasised, however, that investment is the crucial factor in the achievement of the general objectives

#### Table (6.3)

#### Targeted Quantitative Production of Main Manufactured Products at the end of the Second Five Year Plan

Commodities	Volume of production in the base Year (1986/7)	Targeted production at the end of the Year 1991/2	Percentage increase
	(1000 s Tons)	(1000 s Tons)	Z
Sugar	855.0	1000.0	13.0
Edible	153.0	191.0 -	24.8
Margarine	212.0	346.0	63.3
Azotic	4,125.0	5,800.0	40.6
Phosphatic Fertilisers	1,170.0	1,350.0	15.4
Caustic Soda	51.0	179.0	251.0
Cement	10,000.0	17,700.0	77.0
Sheet Glass	24.0	94.0	291.7
Cotton Yarn (in million)	312.0	380.0	21.8
Cotton Textile (in million)	1,205.0	1,590.0	32.0
Ready Made Clothes (in million)	68.5	150.0	119.0
Buses (in units)	1,300.0	2,500.0	92.3
Transport trucks			
(in units)	2,200.0	7,000.0	218.2
Cars (in units)	23,000.0	50,000.0	117.4

Source : Ministry of Planning, "The Second Five-Year Plan", (Cairo, 1987. p. 30)

### Table (6.4)

#### Gross Domestic Product By Economic Sectors at the end of the Second Five-Year Plan (at market price)

Gross	Domestic Product	
Sectors	86/7	91/2
Agriculture	9.6	10.4
Industry & Mining	7.9	10.4
Petroleum		, 
Products	1.7	1.9
Electricity	0.5	0.7
Transport,		
Communication & Suez Canal	3.8	6.4
Trade, Finance &		
Insurance	9.6	12.6
Tourism	0.4	0.7
Housing Utilities	0.8	2.4
Social & Personal		
Services	1.8	2.4
Government Services	4.6	6.0
GDP at Cost Value	40.7	53.9
<pre>% Increase from the previous Five-Year</pre>		
plan	-	32.4
Average Annual Rate	-	6.5%
Net Indirect Taxes	3.2	4.0
GDP at Market Value	43.9	57.9
<pre>% Increase from the previous year</pre>	_	31.9
Average Annual Rate	-	6.4

(value in Billion L.E.)

Source: Ministry of Planning, "The Second Five Year Plan 1987/8-1991/2", ( Cairo, 1987, p. 31).

of development. The total investment, public and private, of the second five-year plan is about L.E. 49.3 <sup>(1)</sup> billion. Egyptian pounds compared with L.E. 36.4 billion during the first five-year plan.

The allocation of public sector investment in the fiveyear plan 1987/8-1991/2 compared with the previous fiveyear plan can be illustrated by table (6.5), which shows a total investment of 31.2 billion L.E. allocated to the public sector in the second plan, a slight increase at 4.7% compared with the first plan of 1982/3-1986/7. Further interpretation of these figures in table (6.5) illustrates that the planned investment in each of irrigation and drainage, electricity, education, health and public utilities is more than the preceding plan, the percentage investment in these sectors in relation to the second Plan's total investment being 13.1%, 15.4%, 5.1%, 2.6% and 12.9% respectively. Despite the housing problem, a rather low rate of capital was allocated to housing construction. Moreover, the planned investment in the production sector, particularly in the transport, commerce, finance and insurance was 17.7% of the total investment in the second plan, a considerable reduction compared with the previous plan. These figures reflect the lack of attention being given to the housing and transport crises.

Table (6.6) indicates the investment expenditure for both the public the private and sector in the second five-(1) For more detail refer to table (6.6).

#### Table (6.5)

Investments of the Public Sector During the Five-Year Plan 1987/8-1991/2 compared with the First One 1981/2-1986/7 (value in Billion L.E.)

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Economic, Services, Social & Investment & Unallocated	First Five Plan		Second Five Plan	e-Year
Reserve	Value	Z	Value	Z
<u>Commodity Sectors</u> Agriculture	0.8	2.8	0.9	2.9
Irrigation & Drainage	4.1	5.1	4.Í	13.1
Industry & Mining	6.1	22.3	5.8	18.6
Petroleum	1.4	5.1	1.1	3.5
Electricity	2.6	9.7	4.8	15.4
Contracting	0.7	2.8	0.6	1.9
Production Services Se	<u>ctors</u>			
Transport, Commerce, Finance & Insurance	8.4	30.9	5.5	17.7
Infrastructure Services				
Housing	0.3	1.0	0.2	0.6
Public Utilities	2.9	10.7	4.0	12.9
Education	0.7	2.7	1.6	5.1
Health	0.5	1.7	0.8	2.6
Other Social Services	0.8	3.1	1.1	3.5
Investment Expenditure & unallocated Reserve	0.5	2.1	0.7	2.2
Grand Total +/(-) from the previou	29.8	100.0	31.2	100.0
five-year plan	-	-	4.72	-

Source : Ministry of Planning, "The second Five-Year Plan 1987/8-1991/2", (Cairo, 1987, p. 35).

#### Table (6.6)

#### Public & Private Sectors' Investment During the Second Five-Year Plan 1987/8-1991/2

Economic Sector	Public	Private	Total
Commodity Sector	17.3	9.6	26.9
Production Services Sector	5.5	1.7	7.2
Infrastructure Services	6.6	6.7	13.3
Other Social Services	1.8	0.1	1.9
Total Investment	31.2	18.1	49.3 ====
Percentage of the total investment	63.3%	36.7%	100.0

#### (Value in L.E. Billion)

Source : 1- Ministry of Planning, (op. cit. p. 102). 2- Table (6.5).

year plan 1987/8-1991/2. The expected private sector's contribution to the total national investment during this plan is L.E. 18.1 b. compared with L.E. 31.2 b. for the public sector. This represents 36.7% and 63.3% respectively of the plan's total investment, L.E. 49.3 b. This indicate the important role of the private sector in developing the national economy.

According to the National Bank of Egypt's Annual Report (1987) it is intended that public sector investments be financed mainly through the National Investment Bank which is to provide about 51.6% of total public sector

investments. The second source of finance is the retained profit of the state enterprises which are expected to provide about 23%. Finally, there is foreign investment which is assumed to provide about 25.4% of the public sector total.

In conclusion, Egypt depends upon foreign loans to finance its development plans. This policy might be acceptable in the short-term, because of the particular environmental problems facing the Egyptian Government, for example the high growth rate of population, housing shortage, increased rate of unemployment, high inflation rate and inadequate transport system. Also, because of the international market conditions facing exports from the developing countries in general, the Egyptian economy has not been growing as fast as required. Accordingly, the government has been unable to finance the development process and repayment of the original loans and interest.

Therefore, to develop the national economy, an increase in domestic savings is urgently required. Moreover, it would be beneficial if the government were to employ a strategic policy of reducing its dependence on foreign borrowing and maximising the benefits of its own national assets, i.e. tourism, the Suez Canal and local industry.

#### 6.3 FINANCIAL PLANNING AT EGYPTAIR

#### 6.3.1 Procedure for Collecting the Data Required for the Empirical Study

As explained in the introductory chapter, two approaches were employed during the investigation:

- (1) Gathering data through in-depth personal interviews.
- (2) Gathering data from published sources, from Egyptair, the Ministry of Civil Aviation, the Ministry of Planning, the Ministry of Finance and the Civil Aviation Authority.

#### APPROACH " ONE ": Gathering Data Through In-Depth Personal Interviews

Representatives of top and middle management at Egyptair, the Ministry of Civil Aviation, the Ministry of Planning, the Ministry of Finance and the Civil Aviation Authority were interviewed to enable the financial planning and control procedures at Egyptair to be discussed in detail.

It was also felt useful to devise a checklist for discussion during the interviews concerning the following three main areas:

- a- Financial planning procedures,
- b- Control procedures, and
- c- The extent of Government influence through the Ministry of Planning, the Ministry of Finance, the Ministry of Civil Aviation, the Civil

Aviation Authority, the Central Agency for Auditing and the Central Agency for Public Mobilisation and Statistics. There are close relationships between the national airline and these authorities.

The following was the interview schedule:

- i) From the Ministry of Civil Aviation
- Deputy Minister for Financial & Management Affairs.

#### ii) From the Ministry of Finance

- Deputy Minister for Financial & Management Affairs.

#### iii) From the Ministry of Planning

- Deputy Minister for Planning.
- Director of the Air Transport Sector.

#### iv) From the Civil Aviation Authority

- Deputy of the Authority for Finance & Management Affairs.
- Director of the Planning Department.

#### (v) From Egyptair

- General Director of the Chairman's Office.
- Head of the Finance Sector.
- Director of the Internal Sales Offices.
- General Manager of the Budgeting & Research Department.
- General Manager of the Planning Sector.
- General Manager of the Personnel Affairs department.
- Director of the Costing Department.

- Director of the Marketing Department.
- Director of the Planning & Control Department.
- Director of the Statistics Department.

The following matters were included in the checklist:

- (A) Topics Related to the Financial Planning Process
  - 1. Strategic Objectives at Egyptair.
  - 2. How the Strategic Plan is formulated.
  - 3. Financial Planning targets at Egyptair.
  - 4. The role of the Marketing Department.
  - 5. Strategic and Financial Planning at Egyptair.
  - 6. Structure of the Financial Planning Process.
  - 7. The Finance Department.
  - 8. The Annual Budget Process.
  - 9. Operational Planning.
- 10. Manpower Planning.
- 11. The Capital Expenditure Budget.
- 12. Cash Budget Analysis.
- 13. Use of Quantitative Techniques at Egyptair.
- 14. Participation of the different management levels in the financial planning process.
- 15. The Possibility of Changing the Budget during the Budget Period.
- 16. Frequency with which top management approve the Departments' budgets.
- 17. Expected Modifications to the Financial Planning Process in the Future.

- 18. Evaluation of the Financial Planning System.
- (B) Topics Related to the Control Process
  - 1. The Budgetary Control System.
  - 2. Cost Accounting System.
  - 3. Cost Classification.
  - 4. Cost Allocation to routes and aircrafts.
  - 5. The Control Process.
  - 6. Productivity Measures at Egyptair.
  - 7. Variance Analysis.
  - 8. Revenue Analysis.
  - 9. Sensitivity Analysis.
- Level of authority of Heads of Departments to take their own cost decisions.
- 11. The Flow of Information Throughout the Airline.
- 12. The Correlation between Budgets and the Control System.
- 13. The Accounting System and its ability to provide the Information Required for Financial Planning and Control at Egyptair.
- 14. The Application of Resources and Uses Statements.
- (C) Topics Related to Government Influence on Egyptair

To examine the extent of Government influence on Egyptair, as a nationalised industry, in for example, setting strategic and financial targets, financial planning and control procedures, route operating policy, aircraft acquisition etc., in each of which different authorities are

involved, a variety of related points had to be investigated during the interviews in the following authorities:

- (1) Ministry of Civil Aviation
- The degree of harmony between the Ministry's and Egyptair's strategic objectives.
- The Ministry's influence on Egyptair in, for instance, setting financial goals, aircraft acquisition, routes policy etc.
- (2) Ministry of Finance

The role of the Ministry in setting Egyptair's financial plans and control procedures and accepting its financial statements at the end of the financial year.

#### (3) Ministry of Planning

- The targets set for the Civil Aviation Sector in the light of national objectives and the current five-year plan, 1987/88-1991/92.
- The role of the Ministry in the financial planning procedures of the Airline.
- The type of control system applied in respect of the performance of the Airline.
- (4) Civil Aviation Authority
- The degree of co-operation between the Authority and Egyptair.
- 2. The Civil Aviation Authority's influence on Egyptair.

3. The joint strategic and financial planning procedures between the Authority and the Airline.

In addition, the role of the CAA, CAPMAS and the National Investment Bank were discussed.

#### Approach "TWO": Gathering Data From Published Sources

After reviewing published material from Egyptair, the Civil Aviation Authority, the Ministry of Civil Aviation, the Ministry of Finance, and the Ministry of Planning it was concluded that the following were of significant value:

#### (a) Information obtained from Egyptair

 The Annual Operations Reports for the period 1984/5-1987/8, which include:

- Total operating hours for internal and external routes;
- The operating revenue for Egyptair as a whole, and also for each of the following sectors:
  - a. The Routes Sector.
  - b. The Services Sector.
  - c. The Tourism Sector, and
  - d. Sinai Route (which is known as Route
     Number 1);
- Total traffic of the regular routes -internal and external.
- The Annual Reports and Accounts for each sector and the consolidated reports for the airline as a whole for the financial years 1984/5-1987/8.

- 3. The Application of Resources and Uses Statements for each sector for the same period.
- 4. Statements of long and short-term loans (internal and external loans) for the same period.
- 5. Annual Reports on the activity of Egyptair.
- 6. Egyptair's Annual Budgets for the years 1987/8-1988/9.
- 7. Egyptair's organisational structure.
- (b) Information obtained from the Civil Aviation Authority
- 1. Annual Statistical Reports 1985-1988.
- 2. The Civil Aviation Authority's management structure.
- (c) Information obtained from Ministry of Planning
- 1. The Ministry's management structure.
- The final approved five-year plan 1987/8-1991/2 for the Civil Aviation Sector including Egyptair.
- 3. The targets required from the Civil Aviation Sector in general.
- 4. The national second five-year plan 1987/8-1991/2.
- (d) Information obtained from the Ministry of Finance
- The official requirements to be considered by each sector when implementing the approved budgets.
- The official forms and reports prepared quarterly and sent to both the Ministry and the National Investment Bank.

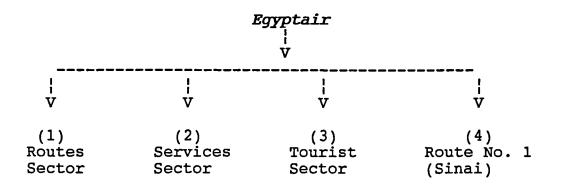
#### 6.3.2 The Egyptian Airline "Egyptair"

#### 6.3.2.1 Background of the Company

On the seventh of May 1932, the Egyptian King issued a special Act establishing the Egyptian Airline, under the name of "Egyptair", as one of Bank Misr's corporations. After one month the airline operated with capital of 20,000 Egyptian pounds (L.E.) and in October 1933 its capital was increased to L.E.40,000. By 30 th June, 1988 its invested capital had reached L.E. 1207 million compared with L.E. 869 m. for the previous year, an increase of 38.9%. Since the airline was established, it has developed in four main sectors as illustrated by figure (6.1). The major functions of each of these sectors can be stated, briefly as follows:

#### Figure (6.1)

Egyptair's Main Sectors



#### (1) Routes Sector

This sector is responsible for supervising and operating the company's fleet. Its main revenues come from the sale of tickets and cargo activity, which represent the major source of the airline's revenues. For example, it contributed L.E. 959 million in 1987/8, an increase of L.E. 416 million, or 76.6% over the previous year. The revenues gained from this sector in 1987/8 represented 89.5.% of the company's total revenues<sup>(1)</sup>.

(2) Services Sector

This sector supervises restaurants, catering services and aircraft supply, both for Egyptair and for other airlines, free Shops, cargo activity, Egyptair's hotel and ground services. It is the second major source of the revenue gained by the company. For example, its total revenues during the financial year 1987/8 amounted L.E. 112 million compared with L.E. 74 million gained in the previous year, an increase of  $51.4\%^{(1)}$ . Also, the revenue achieved by this sector amounted 10.5% of the total revenues of the airline.

(3) Tourist Sector

This sector is mainly concerned with supervision of the airport hotel, though it is also responsible for some other tourist activities.

(4) Route Number (1)

This route is actually known as the "Sinai Route" and represents a regular weekly flight between Cairo Airport and

<sup>(1)</sup> These figures are shown in detail in tables (7.4) and (7.5) in chapter seven.

Tel-Aviv, in accordance with the peace treaty agreed in 1978 by the Egyptian and Israeli governments.

#### 6.3.2.2 The Airline's Organisation Structure

Egyptair's present management structure came into being in 1978. Figure (6.2) indicates the principal management levels at the airline. The main responsibilities of these levels can briefly be stated as follows:

#### 1- Planning Sector

The main jobs of the planning sector are:

- a- preparing the feasibility studies for each proposed project;
- b- formulating the plans for achieving the airline's
   desired targets;
- c- studying the competitive position of Egyptair;
- d- studying the extent to which the budgets have been achieved at the end of the financial year, and making appropriate recommendations.
- 2- Commercial Sector

This sector supervises all the national and international marketing offices. The principal tasks are to: a- suggest the estimated budget for the sector in the light of the strategic policy of the airline;

b- prepare the network for the airline and recommend any modifications in the light of demand and the

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Figure (6.2): The Egyptair's Organisation Structure

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requirements of the international market;

- c- take part in preparing financial policy for the airline and representing the industry all over the world;
- d- appoint agencies throughout the world;
- e- prepare the sales and marketing policy for the airline;
- f- recommend appropriate policies for controlling
   relations with other airlines;
- g- represent the airline in discussion and approval of any international agreements;
- h- take a crucial part in preparing policy relating to passengers, aircraft acquisitions, and the encouragement of tourism, and formulating the training policy for the sector's staff.

#### 3- Services Sector

The major responsibilities of this sector are:

- a- preparing the necessary equipment for operations;
- b- discussing the various methods of handling the passengers for any airline;
- c- recommending the training programme for its staff;
- d- suggesting its own budget;
- e- making recommendations on the acquisition of appropriate technical equipment.

#### 4- Aircraft Services

This sector's main responsibilities are to:

a- supervise and develop the restaurants in Cairo

Airport and the transit hotel, and supply food and drink, not only to the Egyptair fleet, but also to all international aircraft which land at Cairo Airport;

- b- sign agreements with the various airlines for catering supplies;
- c- organise aircraft cabins according to the marketing research department's recommendations;
- d- suggest its own budget.

#### 5- Training Sector

This sector's responsibilities are to:

- a- suggest whether the airline can appoint external consultants, for special training courses, for example;
- b- suggest its own budget, the training budget;
- c- supervise the training centre and examinations;
- d- approve training grants;
- e- suggest training policy for the airline.
- 6- Personnel Affairs Department

This sector's duties are to:

- a- apply employment regulations throughout the airline;
- b- supervise the manpower planning scheme;
- c- suggest any modifications to the employment rules and their application;
- d- develop the airline's management structure.

#### 7- Finance sector

The finance sector's main responsibilities are to:

- a- supervise the preparation of the airline's budget in the light of the uniform accounting system;
- b- appoint a board for the examination of each sector's suggested budget;
- c- obtain any necessary financial or statistical information from all sectors of the \_\_\_\_\_\_ airline;
- d- submit the airline's overall budget to the public assembly for the airline for discussion and approval, and to prepare and submit financial statements at the end of the financial year;
- e- design accounting books and documents according to the requirements of the accounting system;
- f- control cash transactions;
- g- supervise all required insurance;
- h- supervise the internal audit programme;
- i- prepare and supervise the control reports;
- j- investigate the financial reports for the airline;
- k- prepare and submit all the required financial or control reports to the top management;
- 1- suggest the financial regulations required for the airline.

#### 8- Operations Sector

The main responsibilities of this sector are; a- taking part in discussing and preparing the fleet

operation plans;

- b- representing the airline at International Air Transportation Association (IATA) conferences and committees;
- c- preparing the crew schedule for each aircraft and flight;
- d- supervising the security system for the aircraft; esuggesting the crew training programme;
- f- supervising and achieving the planned network operations.
- 9- Security Department

The security department's main tasks are to:

- a- be responsible for the security of Egyptair's information, documents and properties;
- b- take appropriate action for the purpose of airline
   security;
- c- vet newly appointed employees and any of the airline's staff appointed to represent the company in any of its offices throughout the world;
- d- vet any person from outside the company who wishes to visit Egyptair for any reason;
- e- prepare all the security requirements for aircrafts;
- f- attend international conferences which deal with
   exchange of security information;
- g- suggest its own budget.

10- Computing Services Department

The principal tasks so far are:

- a- to prepare the computing services plan;
- b- to prepare statistical information;
- c- to be responsible for the security of the airline's documents and information;
- d- to deal with the revenue transactions received fromEgyptair's external sales offices.

However, as yet, the computing services have not been extended to include accounting transactions, which are being done manually, nor has it applied any quantitative techniques.

#### 11- Information Management

This is responsible for various duties such as:

- a- planning and designing the information policy;
- b- keeping good relations with the Ministry of Information, the press, hotels and tourist agencies;
- c- following up airline news in the press, on television, and in broadcasting and making necessary comments;
- d- preparing programmes for visitors and guests;
- e- organising conferences, parties etc.;
- f- taking care of passengers, especially children and the elderly,
- g- recommending any action in case of complaints in order to improve the airline's services;

h- suggesting its own budget.

#### 12- Free Shops Sector

The main duties of this sector are to:

- a- set the plan for this activity and take decisions for improving standards:
- b- suggest its own budget;
- c- decide what kind of goods should be displayed;
- d- fix prices;
- e- take the responsibility for transferring goods.
- 13- Cargo Sector

The cargo sector is mainly concerned with:

- a- setting cargo plans;
- b- suggesting its own budget;
- c- supervising the cargo village at Cairo Airport and setting sales policy;
- d- agreeing and setting policies to deal with other airlines;
- e- fixing prices for services;
- f- sharing with the commercial sector in attending various conferences inside and outside the country.

#### 14- Medical Sector

The main jobs of this sector are to supervise and direct Egyptair's hospital and take care of the health of airline staff.

#### 6.3.2.3 Egyptair's Fleet

The marketing research department in Egyptair has recently concluded that there is an increasing demand for Egyptair's flights world-wide. Therefore, the airline's top management has been trying to enlarge the present fleet by providing new aircraft. For example, two new passenger aircraft were delivered at the end of June 1988 at a cost of \$140 million. In addition, seven new Airbus 600/300 and 4/300 B, were ordered in April, 1989 to be delivered by October 1990 in order to replace some of the old aircraft which are currently in operation.

The present fleet includes 24 aircraft in service while two Boeing 707 are used for cargo activity. In addition, there are in service another two leased aircraft: a Boeing 747 and an Airbus 300. Table (6.7) indicates Egyptair's fleet situation in April 1989.

# Table (6.7)

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aircraft	Number in service	on	Average hours per year	Average No. of seats per aircraft
Boeing 707	5		3,600	165
Airbus	9	-	5,162	262
Boeing 737	7	-	2,623	121
Boeing 767	3	-	2,920	206
Fokker	2	-	1,095	42
Leased				
Boeing 747	1	-	4,891	392
Airbus 300	1	-	4,380	270
On order				
Airbus 600 and 4/300	•	7	-	382
Total	28	7	24,671	

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## Egyptair's Fleet in April 1989

Source: (1) Interview with the Director of the Statistics Department of Egyptair, November 1987 and confirmed in April, 1989.

#### 6.3.2.4 Egyptair's National and International Market

The Arab Republic of Egypt Centre is responsible for the operation of all Egyptair's domestic flights, as well as the international flights operated out of Alexandria and Luxor. The following main regions represent the airline's market:

- The Domestic Market,
- The Middle East Region,
- The European Region,
- The Far East Region,
- The East African Region,
- The West African Region, and
- The American Region.

Table (6.8) shows the number of passengers carried by Egyptair during the financial years 1984/5 and 1987/8. The table shows the relative importance of each region and their development during the years in question. The table illustrates that the airline carried a total of 7.45 million passengers in 1988, 41.6% on internal flights and 58.4% on the international network, compared with 41.3% and 58.7% respectively in the previous year, 1986/7. There was an overall increase of approximately 1.9 m. passengers in 1988 over the previous year.

With regard to the international marketing regions' contribution, it can be seen that the contributions of both the Middle East and European region were much higher than those of other regions over the period 1984/5-1987/8 because

#### Table (6.8)

#### The Number of Passengers carried by Egyptair's Fleet during the period 1984/5-1987/8 according to the Marketing Regions

(number in Million)

 { Region }					1986/7		•	
The Internal Routes					2.30			
The Middle East Region	1.50	38.9	1.00	24.6	1.30	23.3	1.50	20.1
The European Region	0.50	13.0	0.60	14.8	0.80	14.4	1.10	14.8
The Far East Region	0.20	5.2	0.10	2.5	0.15	2.7	0.18	2.4
The East African Region	0.30	7.8	0.40	9.8	0.60	10.8	0.90	12.1
The West African Region	0.30	7.8	0.30	7.4	0.32	5.7	0.37	5.0
The American Region	0.05	1.3	0.06	1.5	0.10	1.8	0.30	4.0
The Total Airline	3.85	100.0	4.06	100.0	5.57	100.0	7.45	100.0
Increase/ Decrease from the previous year %	-	-	5.45	-	37.2	-	33.8	

#### Source:

- (1) Interviews with the Statistical Manager of Egyptair, Cairo, November, 1987.
- (2) Egyptair's Reports and Accounts, 1984/5-1987/8.

of the increased demand on the these regions' flights, despite the fluctuating trend of the number of passengers the transferred in relation to the total carried by the company's fleet, 38.9%, 24.6%, 23.3% and 20.1%, for the Middle East region and 13%, 14.8%, 14.4% and 14.8 for the European region respectively during the period concerned.

In 1987/88, one of the lowest contributions was made by the American region, accounting for only 4% of the total. However, this represented an increase of 0.2 m. over 1986/7 due to a new direct weekly flight, Cairo/ New York/ Cairo. The contribution of this region is expected to increase further in 1989 because of the other new direct weekly flight, Cairo/ Los Angeles/ Cairo.

Table (6.9) shows the number of passengers carried free of charge during the same period. This number increased during 1987/8 by 12.5% over 1986/7. The greatest proportion of passengers carried free were on the Middle Eastern and European flights, 32.9% and 32.8% respectively of the total for 1988 respectively.

Generally, these free tickets are related to certain factors which should be given more attention by both Egyptair and the government, namely:

- i) the increased number of free tickets issued by the company to its staff, and
- ii) the political use of some of the airline's routes and flights, i.e. Sinai Route, Cairo/ Tel-Aviv.

#### Table (6.9)

#### The Number of Passengers carried free by Egyptair during 1984/5-1987/8

						(numne	r 11 00	, j
Region	•	5 %			1986/7			3 %
The Internal Routes	14.3	13.6					36.8	
The Middle East Region	41.3	39.3	43.3	36.1	46.5	34.7	49.9	32.9
The European Region	41.1	39.1	43.1	35.9	45.4	34.0	49.7	32.8
The Far East Region	5.1	4.8	5.4	4.5	6.0	3.6	9.2	6.1
The East African Region	1.7	1.6	1.6	1.3	2.0	1.6	2.7	1.8
The West African Region	1.4	1.3	1.5	1.2	1.9	1.5	2.3	1.5
The American Region	0.3	0.3	0.3	0.2	0.6	0.6	0.9	0.6
The Total Airline	105.2	100.0	120.2	100.0	134.7	100.0	151.5	100.0
Increase/ Decrease from the previous year %	-	-	14.3		12.1	-	12.5	-

(number in 000')

#### Source:

- (1) Adjusted figures from the Annual Operational Reports 1984/5-1987/8.
- (2) Interviews with the Manager of Statistical Manager of Egyptair, Cairo, November, 1987.
- (3) Egyptair's Reports and Accounts, 1984/5-1987/8.

#### 6.4.2 FINANCIAL PLANNING PROCEDURES AT EGYPTAIR

#### 6.4.2.1 The Five-Year Strategic Plan

Strategic planning for the Egyptian Airline Industry normally looks five years ahead and is based on government requirements which apply to all public enterprises in Egypt. It involves, for example, looking at fleet acquisition to determine what sort of aircraft will be needed over a longer period in the light of the market research department's recommendations. The plan also includes new building, new transport tools, etc.

#### 6.4.2.2 Processes of Setting the Strategic Plan

The strategic plan procedures at Egyptair pass through different stages:

(1) Each of the airline's sectors is required to prepare its own suggested plan for five years ahead. This plan should include:

- The buildings and construction required,
- Maintenance tools,
- Transport tools, and
- Furniture.

(2) Each sector usually make enquiries about the possible availability of the airline's fleet during the five-year period, number and types of aircraft, number of flying hours for fleet or crews, etc.

(3) Each sector should then determine its own projects. However, in the present five-year plan, 1987/8-1991/2, none of the projects included are new, but are previously undertaken or uncompleted projects except the two new aircraft which have already been bought.

(4) The planning sector is responsible for collecting the plans of each of the airline's sectors, and discussing them with the finance sector, after which it formulates the total five-year plan. The plan is discussed by a special board which includes representatives from:

- The Ministry of Civil Aviation.
- The Ministry of Finance.
- The Ministry of Planning.
- The Central Agency for Auditing.
- The National Workers Association. as well as other consultants.

When the plan is approved, it is forwarded to:

- (a) Ministry of Civil Aviation for discussion and approval,
- (b) Ministry of Planning to be investigated and approved; no plan is ever left without modification, and usually a major cut is demanded. One of the Ministry's arguments is that, not only the airline but all public sector enterprises are unrealistic in preparing their budgets.
- (5) The final stage is the granting of approval. Then the

airline receives the approved plan with the allocated budget which must not be exceeded.

It is interesting that, under these procedures, the plan is not submitted to the airline's top management for discussion and modifications, but is usually submitted to the special board without the approval of top management. In addition, it would seem unnecessary for the plan to be again to all the governmental authorities, in view of sent the fact that they are represented on that board. Furthermore, there are additional processes which have to be followed if the airline should ask for additional funds for any urgent purposes during the period of the plan.

The total projects under Egyptair's present five-year are depicted in table (6.10), which plan shows the proportion of investment given to each area of the company's activities. For example. it is noticeable that the in aircraft reconstruction and investment maintenance represents 57% of the airline's total investment for the five-year plan. The equivalent of L.E.44.8 m., or 46.7% of this investment <sup>(1)</sup> in new aircraft is to be financed in foreign currency, and L.E. 53.3% in by loans. (2)

<sup>(1)</sup> This investment refers to the L.E. 96 m. allocated for aircraft reconstruction and maintenance during the period of the plan.

<sup>(2)</sup> These percentages are calculated in relation to the investment concerned which indicated in number (1) above.

## Table (6.10)

## Egyptair's Five-Year Plan's Projects 1987/8-1991/2

Project	Capital Invested	<pre>% of the Total Investment</pre>	Method (	of Finance
			Local Currency	Foreign Currency
Aircraft acquisition	10.000	6.0	10.000	-
Aircraft Reconstruction and Maintenance	96.000	57.0	51.200 (1)	44.800 (1)
Offices	3.250	1.9	1.250	2.000
Hotel and Restaurant's Needs	0.825	0.5	0.498	0.327
Services Sector's Needs	11.600	6.9	0.600	11.000
Transport Equipment & Buses	5.575	3.3	2.225	3.350
Hospital Needs	0.900	0.5	0.700	0.200
Developing Aircraft Fuel Supply Units & Cargo Stores	6.900	4.1	3.440	3 460
Training Centres	5.000	3.0	0.630	3.460       
Central Reservations	9.000	5.3	1.500	7.500
Free Shops	1.100	0.7	0.985	0.115
Communications, Transport Equipments, Aircraft, Gates,				
Maintenance and others	18.225	10.8	8.175	10.050 (1)
Total	168.375	100.0	81.203	87.172

(value in m. L.E.)

Source: The National Five-Year Plan 1987/8-1991/2, Ministry of Planning, Cairo, Egypt.

(1) These figures represent 53.3% and 46.7% respectively of the investment, L.E. 96 m., allocated to aircraft reconstruction and maintenance during the five-year plan.

Discussions with the interviewees from both Egyptair and the Ministry of Planning concerning the allocated L.E. 10,000 m., only 6% of the palms' investment of investment, towards the purchase of two new aircraft, which are valued at \$140 m. as mentioned previously, revealed that the value of these two aircraft, which have been in operation since 1988, is excluded from the five-year plan because of Ministry of Planning directions to Egyptair that the latter should seek finance for this acquisition. Α senior official from the Ministry of Planning explained that if this value were to be stated in the plan, other state sectors might make increased claims to finance their activities, contrary to the policy of reducing the investment included in the plan proposals submitted by these sectors to the Ministry for approval.

# 6.4.2.3 The Airline's Annual Budget Process

The process by which the annual budget is set for the airline begins with individual departments expressing their views about their annual budgets in the light of the fiveyear plan,. The following processes are then followed:

# 1. Setting the Operating Plan

In general, there are two main seasons in any airline, which are normally considered in preparing the operating plan: the winter and summer seasons. In addition, at Egyptair, there are two seasons in which many private flights are arranged every year: one is the time of Haji

when Muslims visit Mecca, and the other is the time when Egyptian workers -especially teachers- return from employment in Arab countries such as Saudi Arabia, Kuwait, the United Arab Emirates etc. However, these need special flight schedules.

## 2. Role of the Marketing Research Department

The marketing department is mainly responsible for studying the international market situation and its effect on Egyptair; in other words, it investigates national and international demand for Egyptian Airline services, and passenger and cargo demand, not only for the present but also the future.

# How the Operating Schedule is prepared

The marketing department prepares a recommended schedule for the airline as follows:

- a. The department receives the national and international passenger and cargo demand figures for the coming year, and information on the share of Egyptair, number of required flights, type of aircraft and the time table, for each individual route. All this information is received through the airline's representatives in the national and international flight regions such as Europe, America, the Far East, etc.
- b. The department then prepares the operating schedules, one for the regular flights for both winter and summer

seasons, and an additional schedule for extra required flights on certain routes, after considering special factors, such as movements of immigrants, tourist movements, expected conferences and business movements. These forecasts are based on the actual results of the past two years for each region plus an appropriate multiple, 10% for example. These schedules are described as "Passengers and Cargo Trends".

c. These suggested operating schedules are sent to the planning department for discussion with other related sectors and for processing. Therefore, an estimated operational schedule for the airline during the year including the number of aircraft and pilots available, translated into flying hours for each route of the airline's network, has to be prepared by the planning department in the light of the marketing department's suggestions. There are three main schedules: the winter schedule from the 25 th of October to the 30 th of April, the summer schedule from the 1 st of May to the 24 of October and a special schedule for the private mentioned previously. flights

Moreover, these schedules in their final form should be approved by the I.A.T.A. in the light of other members' schedules, according to the international treaty; and at the time of preparing the network it should be considered that there is an international standard of flight hours for each type of aircraft. For example, the standard daily flight

time is 10.30 hours for a 747. Also each aircraft should have a rest of around three hours after landing and before taking off again.

# 3. Role of the Finance Department

The schedules are then passed to the finance department which formulates the airline's operating plan for passengers and cargo activities and translates this plan into an annual budget, which includes the expected expenses and revenues for the budget period. That budget is usually revised again by the finance sector but the effect of exchange rates on the budget is not examined at this stage.

Revenue calculations are based on estimated revenue per flying hour on each route, assessed according to past experience. Also, the total expected expenses are estimated in the light of the total operating hours. Thus, the budget revenues and expenses are calculated as follows:

(i) a- The total revenue for each route= the estimated flying hours on the route X the estimated revenue per hour for that route.

b- Hence:

the airline's Budget revenues = the total estimated revenues for all the routes in operational + the estimated revenue for the Service sector. <sup>(1)</sup>

<sup>(1)</sup> Perhaps the Service sector is required to prepare an estimations of its revenue and expense for the purpose of setting the company's plan/ Budget as well as the other department.

(ii) Also, the airline's Budget expenses = Total costs for operating the fleet, calculated on the basis of:

the total estimated hours for each aircraft x the total operating costs per flying hour of that aircraft.

It is, therefore, necessary that each item of expenses is estimated separately, for instance:

# a. Aircraft Depreciation

Egyptair calculates the aircraft's depreciation according to the rules set out in the accounting system. <sup>(1)</sup>

# b. Maintenance Costs

Maintenance costs are allocated to each type of aircraft on the basis of flying hours:

The maintenance cost per flying hour =

# Total maintenance costs ------Total estimated flying hours for the fleet

Costs can then be allocated to each type of aircraft accordingly. In the financial year 1986/7 the total maintenance costs for the airline reached L.E. 25 million.

## Fuel and Oil Costs

Fuel and oil costs should be calculated on the basis of the gallon price, but in practice, there are normally, two

<sup>(1)</sup> For more details about these rules, refer to section 7.7.2.2 of chapter seven.

prices per gallon: the domestic and external. For example, consider that Egyptair's Airbus is operated on the Cairo/ London/ Cairo route; when the aircraft uses fuel from Cairo Airport before its departure for London, the domestic price is applied. However, the external price is considered when it uses fuel from Heathrow Airport before its return journey to Cairo. Therefore, for the purpose of preparing the airline's budget, Egyptair uses an average of these two prices, the domestic and external, plus 10%.

4. At this stage, the annual budget for the airline is established. The next step is a discussion of the budget by the sectors concerned. It is then sent for approval to each of:

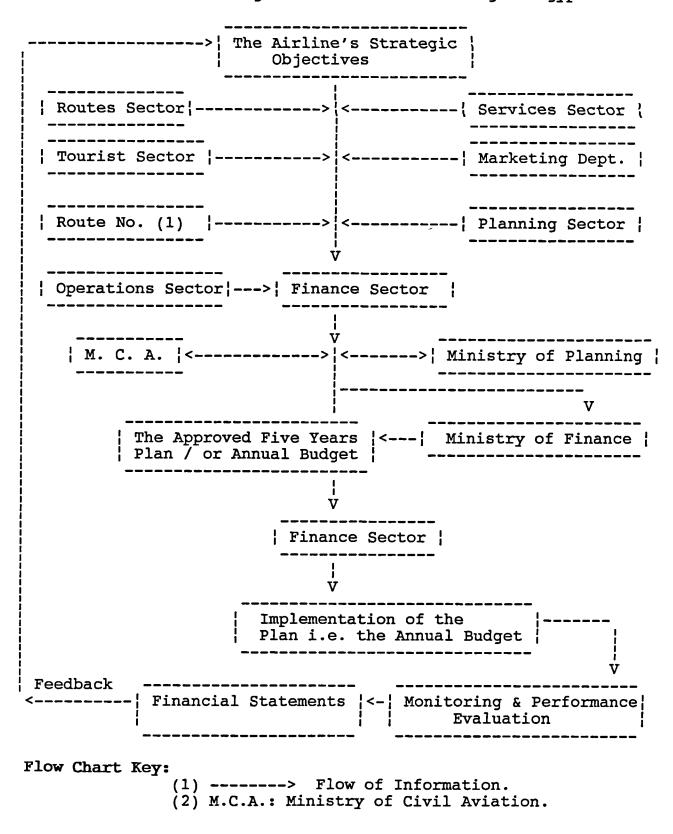
- The Ministry of Aviation,
- The Ministry of Planning,
- The Ministry of Finance,
- The Central Agency for Auditing and
- The Central Agency for Public Mobilisation and Statistics.

The same procedures in relation to preparing the annual budget have to be repeated as for the strategic plan, which poses difficulties for Egyptair.

In the light of this description of both the strategic planning and the annual budget, the procedures can be summarised in figure (6.3).

An examination of the airline's annual budget for the

Figure (6.3) Structure of the Long and Short-Term Planning at Egyptair



financial year 1988/9 compared with that for the previous year, as shown in table (6.11) revealed that the main features of the 1988/9 annual budget are:

(i) the revenues from normal routes and services operations were expected to increase by 20.4% over 1987/8. The major reason for this is the expected increase in activities as a result of increased demand, based on the findings of the marketing research department.

(ii) With regard to the expenses budget, there was an overall increase of 20.5% in 1988/9 compared with 1987/8, due to the expected growth in wages which was estimated at 17.9% more than the previous year because of a new training scheme during the budget period, 1988/89.

(iii) The expected costs of spare parts, maintenance and services for aircraft and other transport tools were estimated in 1988/9 at 13.7% more than 1987/8, while there were expected increases in other areas during the budget period, e.g. commodity requirements, the purchase of finished goods and current transferred expenses <sup>(1)</sup> at 16.1%, 40% and 44% respectively.

In finalising the budget's figures, the current inflation rate should be taken into account; however, in practice, inflation is not considered in the budgeting procedures. This may be due to the absence of official

<sup>(1)</sup> These expenses include: customs and taxes, rent, domestic and foreign interest (foreign currency exchange differences).

# Table (6.11)

# Egyptair's Comparative Annual Budgets for the financial years 1987/8 and 1988/9

(value in M. L.E.)

	1987/8	1988/9	Increase/Decrease from the previous year %	•	1987/8	1988/9	Increase/ Decrease from the previous year *
Revenue from Normal Operations	955	1150	20.4	Hages	117	138	17.9
				General Expenditure			
				   Commodity  Requirements	230	267	16.1
				; ; Finished Goods ; Purchased for Sale	15	21	40.0
				Service Acquired	380	432	13.7
	<i>/</i> • \			   Current Transferred   Expenses 	191	275	44.D
Revenues Transferred	23	29	26.1	:			
		£.j		• •			
	978	1179	20.5	1	933	1133	21.5
				Surplus from Normal Operations			
				i I	45	46	2.2
	 978	 1179	20.5		 978	 1179	 20.5
	e==	is such	Ging Skill.	l			63 E7

Source: Egyptair Annual Budgets for 1987/8 and 1988/9.

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(1) These revenues transferred, as they are treated in the Uniform Accounting System, represent; interest and rent earned, prior years' revenues, compensations' earned, capital profits, variance of imputed rent, variance of imputed interest and others revenues. regulations concerning inflation and its impact upon budgeting and performance.

# 6.4.2.4 Manpower Planning

Manpower planning is normally included in the annual budget, and all departments are required to produce detailed statements of their manpower needs including, for example, requirements such as skills or qualifications. The Personnel Affairs Department examines all these statements.

At the present time there is a shortage of manpower in some jobs and a surplus in others. Where there is no work, there are special training programmes for employees in order that they may convert to other jobs where the airline has a manpower shortage, but the airline is prevented by law from making people redundant.

Tables (6.12), (6.13) and (6.14), give a picture of the staff movement at the end of the financial year 1987/8 compared with the years 1984/5-1986/7. Also, these tables show the company's workforce, its turnover and the number of employees who did not take part in production during the period concerned. Examination of these tables suggests the following major points:

 Despite the slight increase in the number of terminations in respect of the total staff, the manpower on the 30 th of June, 1988 had increased by 5.32% compared with 1987, the latter being 4.54% more

# Table (6.12)

# The Manpower Situation in the years 1984/5-1987/8

			1000/-	1007/0
	1984/5	1985/6	1986/7	1987/8
Manpower at the Beginning	11 500	11 0/0	10 / 50	
of the Financial Year (000's)	11,522	11,940	12,450	13,015
New Jobs (Numbers)	520	672	778	973
<pre>% Increase/Decrease of New Jobs from the previous</pre>				
year	-	29.2%	15.8%	25.1 <b>Z</b>
Terminations (Numbers)	(102)	(162)	(213)	(280)
		<u> </u>		
Total Manpower at the End of the Financial Year (000's)	11,940	12,450	13,015	13,708
Overall <b>I</b> Increase/Decrease from the previous year	-	4.272	4.54 <b>%</b>	5.32 <b>X</b>
Number of Aircraft in Service	- <sup>(a)</sup>	- <sup>(a)</sup>	26	28
Average Number of Staff per Aircraft	-	-	500.6	489.6
Percentage Increase/Decrease from the previous year	-	-	-	(2.2%)
=		Distances 2:	2222722222	

Source:	(1)	interview with the General Manager of	the	Personnel
		Department at Egyptair, Cairo, 1987.		

- (2) Egyptair's Annual Reports 1984/5-1987/8.
- (3) Table (6.7), Egyptair's Fleet in April 1989.

Note:

(a) The data for the years of 1984/5 and 1985/6 were not available.

# Table (6.13)

The Manpower Turnover during the period from 1984/5-1987/8

1984/5	1985/6	1986/7	1987/8
11,731	12,195	12,733	13,362
102	162	213	280
0.87%	1.33%	1.67%	2.10%
	11,731 102	11,731 12,195 102 162	102 162 213

- Source: Table (6.12), The Manpower Situation during the period 1984/5-1987/8.
- (1) The average number of staff is calculated as follows: The number of staff at the beginning of the year (Plus) The number of staff at the end of the year divided by 2.
- (2) The manpower turnover is derived by dividing the annual terminations by the average number of staff of each year.

# Table (6.14)

Number of Employees who did not take part in production during the period from 1984/5-1987/8

	1984/5		19	1985/6 19		86/7	198	7/8
-	No.	8	No.		No.	<u> </u>	No.	÷
Unpaid Holidays	486	92.4	316	89.8	196	85.6	260	88.7
Lending Staff to c State Firms (their wages paid by	:		20			0.7	10	<i>с</i> .
Egyptair)	34	6.5	28	8.0	20	8.7	18	6.1
Military Service	6	1.1	8	2.2	13	5.7	15	5.2
Total	526	100 0	352	100.0	229	100 0	203	100 0

Source: (1) The General Manager of the Personnel Department of Egyptair, (ibid).

(2) Egyptair's Annual Reports, (ibid.).

than 1985/6. This growth was partly due to the continued increase in new jobs, 25.1%, 15.8% and 29.2% during the financial years to 30 th June, 1988, 1987 and 1986 respectively and partly due to the state policy on employment in general. The average number of staff per aircraft declined by about 2.2% in 1987/8 because of the increase of the fleet in service from 26 to 28 aircraft in 1988.

- ii) Manpower turnover steadily increased during the period, mainly due to the increase in the number of staff resigning during the period. <sup>(1)</sup>
- iii) Table (6.14) shows that during this period a considerable number of staff were lent to other state firms, their wages still being paid by the airline, according to government regulations. This amounted to 100 employees over the period 1984/5-1987/8.

## 6.4.2.5 The Cash Budget Analysis

The cash budget is a highly significant tool in financial planning and control. However, the interviews revealed that Egyptair does not prepare a cash budget and consequently does not forecast cash flows for financial planning purposes. They believe that it is difficult to deal with such analytical techniques and that they are not worth adopting. However, it would be useful to prepare such

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<sup>(1)</sup> The interviewee explained that most of these resignations were female workers.

a statement for the purpose of flow of funds analysis. Thus, tables (6.15) and (6.16), which can be used as a basis for setting the cash budget for a year ahead, show the resources and uses statements for the airline for the period 1985/6-1987/8.

The tables illustrate an overall improvement in total resources in 1987/88, of 209.4% over 1986/87, while the increase in the latter year was only 7.7% over the previous year. The major reason for this growth was that the airline had to approximately double its borrowing during 1987/88 to finance the acquisition of two new aircraft.

This acquisition led to the increase in accounts payable in 1987/88 at 450% more than 1986/7, although the reserves in 1987/8 were 320.3% greater than in the previous year because of the growth of retained revenue as a result of the expansion in the airline's network. As a result, loan payments declined in 1987/88 by 21.8% compared with the previous year.

In conclusion, the importance of cash budget analysis arises from its necessity in the financial planning process. The resources and uses statements which are required by the uniform accounting system can also be used as a basis for forecasting the company's cash flows.

# Table (6.15)

Egyptair's Comparative Resources & Uses Statements <sup>(1)</sup> for the Financial years 1985/6-1987/8 (value in Million L.E.)

		1985/6	-		•	1985 <b>/6</b>	•	•
	Finance	*****			Investment Uses			
	Capital	-	6.0	-				
	Reserves &							
	forwarded surplus	13.0	69.0	290.0 (2)	Fixed Assets	187.0	68.0	752.0()
	Allowances	84.0	112.0	334.0	Inventory	10.0	14.0	49.0
					i Projects in			
					Process	4.0	67.0	163.0
iqu	idity				l Capital Transfers			
	Cost of Scrapped							
	Assets	29.0	-	-	l Loans	0.2	2.0	2.0
					• • • • • • • • • • • • • • • • • • •			
	Inventory				Securities	5.0	3.0	0.1
	Reduction	0.1	0.7	5.0	6 0 1			
	Accounts Receivab	le			Accounts Receivable			
	Reduction	0.1	9.0	12.0	Increase	29.0	20.0	71.0
					Loans Payments	139.0	165.0	129.0(
	Loans	253.0	296.0	611.0	l Ouch Januara	170 0	FC 0	205 0
	Accounts Payable				Cash Increase	178.0	56.0	306.0
	Increase	175.0	104.0	572.1(2)	Accounts Payable			
					Reduction	2.0	201.7	374.0
	Credit Banks	•	-	22.0				
		554.2	596.7	1,846.1		554.2	596.7	1,845.1

Source: Adjusted figures from Egyptair's Financial Statements for the years 1985/6-1987/8.

Notes:

- The resources and uses statement being prepared in accordance with the U.A.S.'s requirements. It is based upon the increase and decrease in the items concerned.
- (2) The percentage increase in these items in 1987/88 over the previous year were: a-Reserves and forwarded surplus at 320.3%; and b- Accounts payable at 450%;
- (3) The reduction in loans payment was 21.8% in relation to 1986/87.

# Table (6.16)

	1985/6	1986/7	1987/8		1985/6	1986/7	1967/8
Self Finance				Investment Uses			
Capital	-	1.00	-				
Reserves &							
forwarded surplu	s 2.30	11.70	15.70	Fixed Assets	33.80	11.40	<b>40.</b> 7
Allowances	15.20	18.70	18.10	Inventory	1.80	2.30	2.7
				Projects in			
Liquidity				Process	0.70	11.20	8.8
				Capital Transfers			
Cost of Scrapped			ł				
Assets	5.20	-	-	Loans	0.04	0.30	0.1
Inventory				Securities	0.90	0.50	0.0
Reduction	0.02	0.10	0.30				
Accounts Receivai	ble			Accounts Receivable			
Reduction	0.02	1.5	0.70	Increase	5.20	3.40	3.8
			1	Loans Payments	25.10	27.70	7.00
Loans	45.70	49.60	33.10	-			
			1	Cash Increase	32.06	9.40	16.60
Accounts Payable Increase	31.56	17.40	i 30.90	Accounts Payable			
	51.50	1/140	1	Reduction	0.40	33.80	20.25
Credit Banks	-	-	1.20				
	100.0	100.0	100.00		100.0	100.0	100.0
• Increase f					in 90 mp	3 ao 39	
<pre>% Increase from previous year</pre>	-	7.7%	i 209.4 <del>*</del> ¦				

# Egyptair's Comparative Resources & Uses Statements for the Financial years 1985/6-1987/8 as percentages of the Total (Vertically)

Source: The calculation of these percentages have been based upon table (8.10).

# 6.5 Evaluation of the Financial Planning System

In the light of the foregoing description of the financial planning processes at Egyptair, both long-term (the five year plan) and short-term (the annual budget), it is evident that the processes have to be gone over twice, which takes a long time. There are many procedures to be followed and many authorities are involved, including the Ministry of Civil Aviation, the Ministry of Planning, the Ministry of Finance, the Central Agency for Auditing and the Central Agency for Public Mobilisation and Statistics, each of which has the power to change either the five-year plan or the annual budget.

These lengthy procedures may be justifiable in setting the five-year plan because the airline is a nationalised industry, but it may be questioned why all these processes have to be gone through also when preparing the annual budget. In fact this has a detrimental impact on the airline's activities and restricts the performance of Egyptair as a whole.

In addition, neither the airline's five-year plan nor the annual budget is, under the present system, fully discussed by the top management who send them directly to the authorities concerned for discussion, modification and approval; it appears that such discussion is not seen as part of the management's job. Certainly, they do not believe that it is their job. Furthermore, because there are so many restricting procedures and so many separate

authorities involved when changes are needed, the airline's top management feels little interest in producing a realistic strategic plan or annual budget. Also, the airline does not prepare a tactical plan -a medium-term plan- as B.A. does. Thus, there is a lack of planning process in general and financial planning in particular.

It has also been shown that there is a failure to take into account changes in the inflation rate and their effect on performance in relation to planning the airline's investment as well as the annual budget.

With regard to the use of quantitative techniques or operational research, the discussions indicated that these techniques are not applied in the airline, particularly for forecasting purposes.

# 6.6 Summary

The main objective of this chapter has been to focus upon the financial planning process at Egyptair. Various related areas were investigated by means of in-depth and documentary analysis. Topics covered interviews included the background of the company, its international fleet, the strategic planning and the annual market, its procedures, manpower planning and cash budget budget analysis. Also, a brief introduction of the Egyptian economy was presented.

International market conditions affect the exports of

developing countries and investigation of the first fiveyear plan 1981/2-1986/7 has revealed that the performance of the Egyptian economy has been affected not only by these conditions, but also by other problems.

In conclusion, the financial planning procedures for setting either the strategic plans or the annual budget at Egyptair must follow a regular, official process. In this respect, different government authorities are involved; the long and short-term plan proposals must be examined by each of the Ministry of Civil Aviation, the Ministry of Finance and Ministry of Planning, the CAA and the CAPMAS. This involvement poses difficulties and restrictions for the airline.

With regard to the manpower and operational plans which represent a part of the company's master budget, the investigation revealed that despite the shortage in certain skilled workers there is overall over-manning as a result of the government employment policy. The operational plan is limited to preparing the summer and winter scheduled flights, which is regarded as an early stage in setting the airline's budgets, and the company has not yet utilised quantitative techniques either to overcome the problems that arise during the operations or for planning purposes.

CHAPTER SEVEN

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CONTROL PROCEDURES AT EGYPTAIR

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## 7.1 Introduction

This chapter has three major objectives, which can be stated as follows: firstly, to explain the control process at Egyptair; secondly, to highlight the uniform accounting system (UAS) and its use in respect of planning and control on the macro and micro level; and thirdly, to discuss government influence on the airline.

investigation has been carried out within five This main sections; the first concerns the company's costing system; the second focuses upon the control process as operated by the airline; the third is devoted to an evaluation of the control system; the fourth section examines the UAS, which is applied compulsorily to the company as a nationalised industry, and its ability to provide the data required for financial planning and control The final section examines the extent purposes. of government influence on Egyptair.

# 7.2 The Cost Accounting System

The major function of the cost accounting system is to provide the management with the quantitative and financial information it requires in order to tackle the problems it faces in:

- a- Setting strategic and financial plans;
- b- Controlling the performance of the firm; and
- c- Taking the correct actions and decisions at the right time.

Up to 1983 there was no cost accounting system applied at the company. However, in October of that year, a consultancy firm was appointed to formulate a costing system appropriate to the airline. A survey and investigation were carried out and a cost accounting system was put forward for adoption.

Unfortunately, Egyptair did not accept this suggestion, believing that the proposal for identifying "Cost Units" as part of the recommended costing system did not correspond with the airline's activities. The proposed cost units were: passenger- kilometre and tonnes- kilometre. The airline believed that the cost units should be flying hour/ aircraft type/ route as explained in interview by the Director of Costing Department.

Thus, the consultants' recommendations were rejected. In fact this was not the first time consultants had been called in, for Egyptair had used consultants in the late seventies but their recommendations had also been rejected.

Currently, the only aim of the system at Egyptair is to define certain expense items in order to work out an average cost per flying hour for these items. The information produced is not considered for planning and control purposes because of its inadequacy, but it is used as statistical information. The average cost per flying hour is worked out as follows:

The average cost per flying hour =

## The total airline costs ------The total flying hours

#### How are flight hours calculated ?

At Egyptair there are different views regarding the calculation of flight hours; for instance, according to the costing manager, the actual flight hours should be calculated from the moment the aircraft takes off, whereas the technical department says they should be counted from the moment of turning on the aircraft engine. Therefore, at the end of the day there are two readings of the flight hours for the same period.

## Cost Allocation to Aircraft

Practical examples of the way the operating costs are allocated can be explained as follows <sup>(1)</sup>:

# 1. Aircraft Depreciation

An average depreciation cost per flying hour is calculated, and then allocated to each type of aircraft.

The average depreciation cost per flying hour =

The total depreciation costs The total flying hours

<sup>(1)</sup> It must be stated that the method utilised to allocate the operating costs is inappropriate in relation to both the related literature and in comparison with the methods being adopted by B.A. for cost classification and allocation.

#### 2. Fuel and Oil Cost

In the airline industry, there is a standard cost per hour of fuel and oil for each type of aircraft. In addition, there are certain other factors affecting the consumption of fuel and oil, such as crew skills and how high the aircraft is flying, for the greater the height, the lower the fuel and oil consumption.

Therefore, when preparing the budget, Egyptair allocates fuel and oil costs, as explained previously, by averaging domestic and external fuel prices and allowing average consumption plus 10%. However, to allocate the actual fuel and oil costs, the average cost per flying hour is used, because the Egyptair fleet obtains 52% of its fuel and oil from world-wide airports, and 48% from Cairo Airport, where there is a book for each aircraft called the "Fuel and oil control book", which is used to record the amount of fuel and oil used, together with their costs.

It can be seen that there is a difficulty in allocating the operating cost in question arising from the existence of two different prices for fuel, the internal or local price and the external or international one; added to this, the international price is quoted in different currencies and varies according to the international oil market. However, an average cost per flying hour is used and then allocated to each type of aircraft. This method is clearly defective but this problem could be related to the nature of the

industry itself.

### 3. Marketing Costs

There are some difficulties in allocating marketing In practice, like all airlines, Egyptair is costs. represented in many sales offices all over the world. Thus, the marketing cost for each office is allocated to the main route operated from that centre; for example the marketing costs of Egyptair's offices in the UK are allocated to the main regular route from the UK to Egypt in this case is London/ Cairo, although there which are other sub-routes from London to Cairo in operation. The costs are considered as direct costs to that specific route; as a result, the flying costs per hour on that route do not reflect the actual cost.

The second type of marketing costs concern the internal sales offices in the A.R.E. which are allocated according to the ratio of the offices' contribution of revenue - which is represented by the tickets sold during the period concerned.

The last type of marketing costs are Egyptair's Commercial Sector costs which represent the headquarters in Cairo. These costs are not allocated.

Thus the company, in reality, does not apply a proper cost accounting system, for costs can not be allocated to each type of aircraft or individual operating route of the network, due to the lack of a cost classification system for this sort of analysis and allocation. Examples of such

#### systems are:

1- An absorption costing system which is sometimes termed total costing and is probably the oldest type of cost accounting in operation. Although this system was introduced at a very early stage in the development of costing, it is still widely used because it is a simple and basic system of ascertaining costs.

2- A marginal costing system (variable costing system) applies only the variable cost of the product or service because its essential task is to categorise the overhead costs into fixed, variable and semi-variable. This system, particularly when based upon standards is adequate for managerial use, i.e. planning, controlling and decisionmaking. The major conceptual difference between these two systems is that the latter system treats fixed overheads as period costs which are charged directly against revenue rather than assigned to the units produced

# 7.3 The Control Procedures

It may be argued that the internal control process for the airline's operations is weak. The main reasons are:

- i) There is no adequate costing system.
- ii) There is no proper management information system.
- iii) Management auditing has not yet been adopted for evaluating the efficiency and effectiveness of operations.

In addition, until the end of the 1984/5, Egyptair used

to produce an annual statistical report, containing statistics on the airline's activities, such as actual flying hours, available seats, cargo activities etc.. However, this is no longer available, because in 1987, it decided to discontinue this report. This decision was was many made in order to rationalise the company's one of required by the government authorities expenses as concerned.

The only existing control system is for external use by the Ministry of Finance and the National Investment Bank. According to government regulations the airline, like other state enterprises, should prepare certain form, as shown in figure (7.1), quarterly regarding their approved annual budgets.

The last form is to be submitted to the authorities concerned, especially the Ministry of Planning, the Ministry of Finance and the National Investment Bank at the end of the year after modification of the financial statements according to the comments of the Ministry of Finance and the Central Agency for Auditing. The contents of this form, which is an official form, correspond with the final version of the financial statements. It should include certain information in relation to each of the following matters:

i) The budget projects approved for the airline.

# Figure (7.1)

The Form required by the Government Authorities for following up	p
the Budgeting achievement by the State Enterprise concerned	

					1			
				•	1			
	: 	 			   			
					!			
The modifications which have been approved by the Ministers Committee or Minister of Planning are ; <u>The value</u> <u>Date</u> <u>The Body who approves</u> <u>Source of Finance</u>								
Date	The bouy w		<u> </u>		ce_of_Finance			
	h have been appro							

Source: Ministry of Planning, "The Annual Principles and Regulations for following the Budgets", Cairo, 1987.

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- ii) Type of each project;
- iii) The proposed date of commencing the project;
  - iv) The total value of each of the projects;
    - v) Method of financing the project, i.e. how much of its value is to be financed in local currency and how much in foreign currency;
- vi) The proportion of the project completed up to the time of preparing the report; and
- vii) Finally, this report should indicate the approved modifications to any project and also detailed information in relation to the process of approving the modifications<sup>(1)</sup>.

### 7.4 Productivity Measures at Egyptair

With regard to the airline's productivity the interviews revealed that it is being assessed on the basis of comparing an overall target set at the time of budget with the actual achieved at the end of the budget period. However, there are other productivity measures relative to the airline industry which could be used, for instance: revenue- passenger- kilometre, revenue- tonnes- kilometre, available seats- kilometre, average profit per worker and the number of hours worked per member of the flight crew.

Up to 1980, Egyptair experienced financial losses and

<sup>(1)</sup> In practice, after the approval of the annual budget the company may have to modify some of the planned projects because of any unexpected events which may affect the budget. In this case the company should follow the planning procedures explained previously to obtain approval for these modifications.

was supported by the government. Overall, the financial statements for the financial year 1987/8 show a net profit of about L.E. 52 million compared with L.E. 33 million in the previous year. Tables (7.1), (7.2) and (7.3) summarise the company's activities and economic indicators during the period 1985/6-1987/8. Table (7.1) includes calculations required for preparing both tables (7.2) and (7.3). Several conclusions can be drawn as follows:

i) One of the significant uses of the concept of value added is its incorporation in the company's incentive schemes. The analysis of the total value added in 1987/88 compared with 1985/6 and 1986/7 reveals that it steadily increased during the period in question, particularly in 1987/88 and 1986/87, 74% and 56.5% respectively. Net value added for the year 1987/88 was 94.4% more than the previous year. This was due to the increase of revenue gained by 74.1% in 1987/88.

ii) The examination of the average value added per employee indicates that there was an overall improvement during the years 1987/88 and 1986/87, 91.67% and 71.43% respectively.

It should be pointed out that there are specific limitations in this analysis such as the treatment of depreciation, the valuation of production in process and finished goods, and the impact of inflation.

# Table (7.1)

	1982/6-1987/8		e in Million
The Item	1985/6	<u>    1986/7</u>	<u>1987/8</u>
Revenue from Normal Operations	432.0	615.0	1,071.0
<pre>(-) Purchase of    Finished Goods for    sale</pre>	10.0	11.0	29.0
Cost of the Total Production at Market Pric	 ce 422.0	604.0	1,042.0
+ Production & Export Subsidies	-	_	_
(-) Taxes & Customs	0.5	9.0	0.5
Cost of the Total Production at Existing Ex Factory Price	421.5	595.0	1,041.5
(-) Commodity Requirement & Services Acquired	263.0	347.0	610.0
Total Value Added	158.5	248.0	431.5
(-) Depreciation	76.0	96.0	136.0
Net Value Added	82.5	152.0	295.5
Current Operating Surplus Excluding the differences imputed Rent & Interest		16.0	===== 36.0
Currency Value Difference	es 26.0	17.0	16.0
Distributable Surplus	(9.0)	33.0	52.0
Total Wages	====== 83.0	===== 99.0	===== 140.0
Average Number of Staff at the end of the year	12,195.0	12,733.0	13,362.0
Source (1) Egyptair's An	inual Reports,	Cairo, 198	5/6-1987/8.

Summary of the Company's Main Activity during the period 1985/6-1987/8.

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(2) Table (6.13) in chapter six.

# Table (7.2)

Development of the Company's Revenue, Total Value Added, Net Value Added, Wages and Average Number of Staff during the period 1985/6-1987/8.

(value in Million)

		Ň	,
The Item	1985/6	1986/7	1987/8
Revenue from Normal Operations	432.0	615.0	1,071.0
<pre>% Increase from the previous year</pre>	-	42.48	74.1%
Total Value Added	158.5	248.0	431.5
<pre>% Increase from the previous year</pre>	-	56.5%	74.0 <del>8</del>
Net Value Added	82.5	152.0	295.5
<pre>% Increase from the previous year</pre>	_	84.2%	94.4%
Total Wages	83.0	99.0	140.0
<pre>% Increase from the previous year</pre>	-	19.3%	14.4%
Average Number of Staff at the end of the year	12,195.0	12,733.0	13,362.0
<pre>% Increase from the previous year</pre>	-	4.4%	4.9%
Productivity per employee (000's)	(753.76)	2,535.5	3,793.41
<pre>%Increased/Decrease from the previous year</pre>	c –	436.4%	49.6%
	-============================		2222222222

Source (1) Table (7.1).

## Table (7.3)

# Company's Economic Indicators during 1985/6-1987/8 (Value in Million L.E.)

Ratio	Method of Calculation	<u>1985/6</u> <u>Value</u>	<u>1986</u> <u>Value</u>	<u>/7</u> <u>*</u>	<u>1987/</u> <u>Value</u>	<u>8</u> <u>*</u> (a)
Ratio of Value Added to Production	Net Value Added divided by Cost of Total Production at Market Price.	0.19	0.25	31.60	0.28	0.30
Ratio of Operating Profitability to Value Added	Current Operations Surplus excluding the differences in imputed Rent and Interest					
	divided by Net Value Added.	(0.42)	0.11	126.19	0.12	9.10
Productivity of One L.E. of Wages	Costs of Production at Market Pr divided by Total Wages.	rice 5.10	6.10	19.60	7.44	21.97
Ratio of Total Value Added to Wages	Total Value Added divided by Wages.	1.90	2.50	32.0	3.08	23.20
Ratio of Net Value Added to Wages	Net Value Added divided by Wages.	0.99	1.54	56.00	2.11	37.00
Profitability of One L.E. of Wages	Distributable Surplus divided by Wages.	(0.11)	0.33	400.00	0.37	12.00
Average Value Added per Employee (000.s)	Net Value Added divided by Average number of Staff.	7.00	12.00	71.43	23.00	91.67
Average Wages per Employee (000's)	Total Wages divided by Average number of Staff.	7.00	8.00	14.29	10.00	25.00
				وي وي حي إي ا	اطنبت کط چیچ	

Sources: The calculations included in this table are based upon table (9.1).

Note: (a) These percentages represent the increase or decrease in the year concerned from the previous year.

iii) Analysis also indicated that productivity of one L.E. of wages rose in 1986/87 and 1987/88 by 19.6% and 21.97% respectively, because of the significant overall increase of the airline's surplus, particularly in 1988. Moreover, the average number of staff increased at a lower rate than that of wages; thus, the average income per employee rose by 14.29% and 25% respectively during the years 1986/87 and 1987/88, while the productivity per employee showed a particularly favourable development during the period 1986/7-1987/8, increasing by 436.4% and 49.6% respectively due to the growth profit for the airline.

# 7.5 Revenue Analysis

At the end of each financial year up to 1984 the airline produced a statistical report which included the total revenue allocated to the main national and international regions.

However, at present, Egyptair is not able to carry out variance analysis either for revenue or for costs, as explained previously, it has not adopted a proper cost accounting system, under which cost classification, cost allocation, variance analysis etc. can be carried out.

Tables (7.4) and (7.5) indicate the contribution of both Routes and Services, the airline's main sectors, to the total revenue generated from operations during the period 1984/5-1987/8.

#### Table (7.4)

The Routes Sector Revenues during the period 1984/5-1987/8

Revenue	1984/5		1985/	1985/6		1986/7		 B
	M. 1.E.	 *	 M.L.E.	*	 M. L.E	. +	M. L.E	 . *
Scheduled Routes	364	95.5	345	95.3	514	94.7	950	99.1
Non-Scheduled Routes	4	1.0	5	1.3	12	2.2	-	_(1)
Pool Revenues	5	1.3	4	1.1	7	1.3	3	0.3
Route Number (1)	3	0.9	2	0.6	3	0.5	4	0.4
Tourist	1	0.3	2	0.6	2	0.4	2	0.2
Egyptair's Hotel	4	1.0	4	1.1	5	0.9	-	(1)
Total % Increase/ Decr	ease	100.0	362	100.0	543	100.0	959	100.0
from the previou year	s -	-	(5)	-	5%	-	76.6%	-
Overall Revenue o the Airline	f 440	-	432	-	617	-	1,071	-
<pre>% of the sector' contribution</pre>	s 86.6%	-	83.8*	-	88.0%	- 8	9.5 * <sup>(2)</sup>	)_

(value in M. L.E.)

Source: Egyptair's Annual Reports and Accounts for 1984/5-1987/8.

(1) These figures are not available.

(2) These rates represent the sector's contribution in relation to the total revenue of the company.

#### Table (7.5)

Revenue	1984/5		1985/6		1986/7		1987/8	
	M. 1.E.	*	M.L.E.	*	 M. L.E	E. ¥	M. L.E.	*
Sales on the		*****						
Aircraft	1	1.6	2	2.9	3	4.1	2	1.8
Free Shops	16	27.2	15	21.4	17	22.9	32	28 <b>.6</b>
Catering & Restaurants	4	6.8	4	5.7	5	6.8	5	4.5
Cargo	5	8.5	6	8.6	6	8.1	6	5.4
Aircraft Supply	19	32.2	21	30 <b>.0</b>	22	29.7	41	36.6
Egyptair's Hotel	1	1.7	9	12.8	1	1.4	1	0.8
Ground Services	13	22.0	13	18.6	20	27.0	25	22.3
Total	59	100.0	70	100.0	74	100.0	112	100.0
<pre>% Increase/ Decrease from the previous year</pre>	-	-	18.64	-	5.74	-	51.4%	-
Overall Revenue of the								
Airline	440	-	432	-	617	-	1,071	-
<pre>% of the sector's</pre>							1	(1)
contribution	13.44	•	16.2*	-	12.04	-	10.5*	-/

The Services Sector Revenues during the period 1984/5--1987/8

(value in M. L.E.)

Source: Egyptair's Annual Reports and Accounts for 1984/5-1987/8.

(1) These rates represent the sector's contribution in relation to the total revenue of the company.

•

These tables highlight not only the airline's major sources of revenues, but also their development during the period concerned. Two major conclusions can be drawn from the analysis:

i) The highest contribution to the airline's revenues is that of the Route Sector, 86.6%, 83.8%, 88% and 89.5% during 1984/85-1987/88 respectively. The examination of causes for this growth suggests that the scheduled flights of both the Middle East and European regions have played a vital role.

ii) The contribution achieved by Services Sector fluctuated during the period in question. This is due to the Minister of Tourism and Civil Aviation's decision to take the dutyfree shops franchise at Cairo Airport, especially in the new terminal number two, away from Egyptair. It was taken-over by a foreign company. This might be taken to indicate that the Minister, who has transferred 16 of the 17 publiclyowned hotels to the private sector, has now turned his attention to the airline, Egyptair, with privatisation in mind.

iii) Despite that decision, the Free Shops activity constitutes an essential element of the Services Sector's contribution.

Despite the absence of adequate, flexible budgeting based and a costing system which could be used as a basis for analysing variances, and using instead the data available from the existing systems, an analysis has been

made of the main sectors' costs and revenues compared with what was budgeted in the year 1987/88 which shown in table (7.6). The analysis of this table reveals that:

i) As a result of the increased number of passengers carried by the airline's fleet during the financial year 1987/88, 33.8% over 1986/87 <sup>(1)</sup> there has been noticeable growth, 6.5%, in the revenues yielded by the Routes sector compared with budget as a result of the fleet airline's network expansion and consequently the improvement of the fleet operations.

ii) Regarding the Services Sector revenues, there was a favourable variance of 25.6% over what was planned.

iii) In 1987/8, the company exceeded the budgeted costs by 9.1% and 9.9% for the Routes and Services Sectors respectively, the main reasons being the increase in wages during this year as a result of the growth in the workforce, 4.9% <sup>(1)</sup> in the year concerned.

7.6 Evaluation of the Control System

It is important to emphasise certain key points:

- i) The internal control process is poor because there is no control system applied in the airline.
- ii) The company has not yet adopted a cost accounting system, and thus lacks a key management accounting tool

<sup>(1)</sup> For more detail, refer to table (6.8) in chapter six and table (7.2) in this chapter.

## Table (7.6)

# The Company's Main Sectors actual Revenues and Costs compared with the Budgets for the year 1987/88.

#### (value in Million L.E.)

Sector	1987 Budget	7/8 Actual	Varia	ariances	
			actual	ring the with the for 1988	
(a) Revenues					
<u>Routes</u> Revenues from normal					
operations	873	930	57	6.5%	
Revenues Transferred	18	29	11	61.0%	
<u>Services</u> Revenues from normal operations	82	103	21	25.6%	
Revenues Transferred (a)	5	9	4	80.0%	
Total Revenues	978	1,071	93	9.5% (Overall favourable	
(b) Costs	=====	=====	==	variance) =====	
Routes	791	863	72	9.1%	
Services	142	156	14	9.9%	
Total Costs	 933	1,019	86	(9.2%) (Overall unfavourable variance)	
	====	===22	==	=====	
Source: (1) Egyptair' Budge	et for 19	87/8.			
(2) Egyptair's Fina (3) Tables (7.4) ar			r 1987/8	•	

Note: (a) For more details about the nature of these revenues, refer to table (6.11) in chapter six.

for planning and control purposes.

- iii) The assessment of operations is weak because there is no evidence of the application of performance criteria, or of a management auditing system.
  - iv) Despite the establishment, about four years ago, of а Computer Services Centre at Cairo Airport, the facilities provided by this centre do not yet include transactions, and are limited to accounting the In addition, the flow of reservation system. throughout Egyptair's departments information is inadequate, for there is no proper management information system. Thus, management suffers from the lack of the information required for preparing the budget or controlling the company's operations.

All of these issues have a negative impact on the efficiency and effectiveness of the financial planning and control procedures.

#### 7.7 The Accounting System

the early sixties, after the foundation of the In National Planning Committee (N.P.C.) to supervise the planning process at the macro level, the Egyptian government planning and controlling realised that for state enterprises' activities, a uniform accounting system should be implemented. Thus, in 1966 a uniform accounting system (U.A.S.) was introduced by the Egyptian Central Agency for Auditing.

7.7.1 Foundation of the Central Agency for Auditing (C.A.A)

The Egyptian Central Agency for Auditing (C.A.A.) was formally established by a presidential decree issued in 1964. In addition to its responsibility for monitoring the implementation by public industries of the U.A.S.'s rules and procedures, it has been authorised to undertake, as pointed out by Briston (1979, p. 327), the following functions in controlling public enterprises:

- a- auditing the records of the social and economic
   development plan;
- b- auditing the costs and results of the various activities and comparing them with planned objectives, using various performance measures being performed;
- c- controlling the projects of the social and economic development plan and following-up the implementation of these projects in order to ensure that they are implemented at the estimated costs and according to the expected time schedules.
- d- auditing all the state departments which receive or spend public funds;
- e- calculating changes in national consumption, savings and national income, and estimating the plan's effectiveness in achieving economic balance among the different sectors.

The system is compulsory for the entire public sector, with the exception of banks and insurance companies, which

come under different regulations. The application of the system to the private sector has been left to the relevant minister.

## 7.7.2 Structure of the U.A.S. and its Relationship to Planning and Control

Three major objectives have been sought from the introduction of the system.<sup>(1)</sup>

- 1- provide the information required for co-ordination and control at all levels between state industries, public administrative organisations and government agencies;
- 2- provide a link between the accounts of each economic unit and national accounts, facilitating the preparation of national accounts and other statistical data for the purpose of planning and monitoring economic activity;
- 3- facilitate the classification and storage of data by an enterprise, enabling it to provide the information requested by administrators in a uniform format and with uniform treatment.

Furthermore, at the time of preparing this system various factors were taken into considerations such as: 1- Simplicity, flexibility and applicability; 2- Accounting principles and standards; and 3- Matching the needs of an individual economic unit with

<sup>(1)</sup> Central Agency for Auditing, "The Uniform Accounting System", Cairo, 1966, Vol. pp. 8-11 (in Arabic).

those of other units.

The structure of the system can be described briefly as follows:

It includes uniform accounting classifications, measures and reports. Three volumes are devoted to the organisation of the system. The first contains the main features of the system and is divided into two sections: the first deals with objectives and methodology of the system and the areas of economic activity. The second is concerned with the uniform chart of accounts to be followed, the principles, rules, procedures, terminology, definitions to be applied, the number and format of the required financial and cash budgeting reports and the rules for its preparation.

second volume contains five sections which deal The depreciation, the financial control with rules and procedures which should be followed; definitions of periodic analytical information in relation to of production capacities, quantity and quality of output, employment, commodity input requirements, and various financial ratios and efficiency indices, <sup>(1)</sup> other information requested by government authority for planning, description of the the special purpose records to be kept each by economic unit;

<sup>(1)</sup> Despite the U.A.S.'s requirements, Egyptair has not yet used such financial analysis techniques or ratios regarding the assessment of its performance and efficiency. The interviewee said; "I have no reason why we haven't applied this kind of analysis to the airline's activities".

and, finally, the documents concerning the preparation, authorisation and publication of the uniform system.

The third volume is devoted to a description of the methods for classifying economic activities along with appropriate numbering systems by, for example, kind of commodity and nature of occupation.

7.7.2.1 System's Chart of Accounts

The system's accounts have been classified into homogeneous groups in a way which assists in the preparation of national accounts as well as satisfying the needs of the traditional financial accountant. Also, a distinctive codification system is used in which the accounts are classified into groups as follows:

Group 1: Assets.

Group 2: Liabilities.

These two groups are known as: balance sheet accounts Group 3: Uses of resources (which constitute the various

items of costs).

Group 4: Resources (these are the revenue items).

These classes, 3 and 4, are named the operating and revenue accounts.

Groups 5,6 7, 8 and 9 represent control accounts, which are closed at the end of the financial period and are kept for the purpose of analysing uses of resources in cost centres. Each group number represents a control account of one of the

five cost centres, i.e. the production centre, the production service centre, the marketing service centre, the administrative and finance centre and the capital transaction centre.

The existing U.A.S.'s chart of accounts can be illustrated by table (7.7).

The classification of these accounts, as explained by Kilani (1988, pp. 717-718), provides links between financial and cost accounts, and between enterprise and national accounts. Also, the chart includes "Opposite Twin Accounts" for linking micro accounts to macro accounts. These accounts appear at an equal value on both sides of the current operating account.

Furthermore, the system adds an account for current operating to reflect the result of the entity's current This account, called "Production activities. Trading Account", is also linked to the traditional financial A uniform accounting treatment of current statements. activities surplus is provided by the system in that the surplus includes the variance of imputed rent and interest, and variance of inventory valuation of sales price, while excluding expenses and revenue which are not related to current activities, in order to facilitate computation of value added in accordance with economic concepts and to enable comparison to be made between the current activities surplus of different entities.

## Table (7.7)

### The Egyptian Uniform Chart of Accounts

Balance She	et Accounts	Operat	ting & Revenue	e <u>Accounts</u>	<u>Analysis</u> of	Uses of Reso	urces	
1 Assets Li	2 abilities	3 Use of Resources		Centres Control	Service	7 Marketing Service Control	8 Admin. & Finance Service Control	9 Capital Transaction Centres Control
ll Fixed Assets	21 Capital	-	41 Revenue from normal operation	531 Wages	631 Wages	731 Wages	831 Wages	931 Wages
12 Incompleted Projects	22 Reserves & forward surplus	32 Commodity Requirements	42 Subsidies	532 Commodity Requirements	-	732 Commodity Requirements	832 Commodity Requirements	932 Commodity s Requirements
13 Inventory	23 Allowances	33 Service Acquired	43 Revenue from Securities	533 Service Acquired	633 Service Acquired	733 Service Acquired	833 Service Acquired	933 Service Acquired
14 Long-terma Lending	24 Long-term Loans	34 Finished Goods Purch- ased for sal	revenues	534 Finished Good purchased for sale	-	-	-	-
15 Financial investment	25 Credit banks surplus	35 Current transferred expense	45 -	535 Current transferred expenses	635 Current transferred expenses		835 Current transferred expenses	935 Current transferred expenses
16 Incompleted Projects	26 Reserves & forward surplus	36 Commodity Requirements			-	-	-	-
17 Incompleted Projects	27 Reserves & forward surplus	37 Commodity Requirements	-	-	-	-	-	-

Source: Briston and Al-Ashker, (1985, p. 11).

#### 7.7.2.2 Relationship of the U.A.S. to Planning and Control Processes and its implication to Egyptair

As stated previously, the collection, standardisation and classification of financial and non-financial data to provide the government with information was one of the major objectives in adopting the U.A.S. Accordingly, the information produced by system has an important role in planning and control in such main ways as follows:

1. The information provided by the U.A.S. enables the economic planner to take decisions with regard to:

- a- the targeted investments;
- b- savings in the public sector which can be obtained from the self-finance items in the sources and uses statement for each economic entity.
- c- estimation of the size of the demand for goods and services and the domestic savings; and
- d- estimation of the size of the additional or cancelled production capacity;

This information has led to a rational estimation of investment targets. The investment target in the economic plan represents the amount of resources required for acquiring production capacity in order to:

- a- create new production capacity and maintain existing capacity in operation; and
- b- increase the services provided for the public by government organisations.

2. The U.A.S. provides information concerning the production capacity and its utilisation, i.e the system provides particular models, forms, for budgeting purposes <sup>(1)</sup> which include all the information needed for planning production capacity at all the state enterprise levels.

3. With regard to the cost accounting system which is mainly used for planning and controlling the operations concerned, the U.A.S. lays down a general framework for each state enterprise which includes the following main elements:

a- Concept of cost accounting and the accounts required.b- Definition of the costing system terminology.

c\_ Determination of cost centres.

d- Classification of cost elements.

Although over twenty years have passed since the introduction of the U.A.S., uniformity of cost accounting has not yet been achieved.

4. It is believed that accounting analysis represents an essential step for transforming the U.A.S. into a managerial system in order to determine the weaknesses and strengths of any public industry's performance. However, the U.A.S., although it does not state any rules regarding accounting (1) As an examples of these models/ forms, which being

prepared by the airline, refer to tables (6.10) and (6.11) in chapter six.

analysis techniques, has contributed to the process of such analysis through preparation of uniform financial statements, which include a variety of information which can be used as a basis for such analysis.

The U.A.S. pays particular attention to control, especially over the long and short-term planning processes and financial transactions as follows:

1. The government authorities monitor the implementation of financial policies of all public industries and government departments and discuss and approve the strategic plans and annual budgets of these entities.

2. The codification of the system's accounts was prepared to enable information to be gathered at any level, creating flexibility in monitoring this information.

3. The system allows control of budgeting expenditures at the macro level.

4. The periodic reports produced by the system enable the government to monitor the financial position of the entity concerned and take the appropriate action.

6. It produces economic measures regarding enterprise performance.

7. Historical data must be kept for a period of 10 years in case an investigation of these data should be necessary.

The investigation of the existence of these

characteristics, items from 1 to 7, in relation to Egyptair, which has applied the uniform accounting system, revealed that:

- The follow-up process would be more effective if it was carried out only by one government authority, for example, the Central Agency for Auditing which is responsible for implementation of the U.A.S.'s rules and procedures to all state entities.
- There is a lack of attention given to the internal control policy.
- 3. The airline has not yet produced such statement concerning the application of the economic criteria stated by the system.
- 4. Since the introduction of the system in late 1960s until early 1980s, Many of the financial statements produced by the company had not been approved by the CAA. This situation can be related to the failure to implement the sound accounting principles required by the system.

Furthermore, in practice there are several difficulties which face the airline in its implementation to the U.A.S. such as:

1. The CAA and the Ministry of Finance have the authority to accept or reject the airline's financial statements at the end of the financial year, even though a representative

of the CAA is permanently at Egyptair's headquarters, to give directions and opinions, while the Ministry of Finance is represented in the special board which meets at the airline at the time of discussing the financial statements.

2. The Central Agency for Auditing (CAA) insists on the use of the manual system, which has discouraged the computerisation of the accounting system.

3. The airline can not take a purchase decision without consulting the CAA and the CAPMAS. This even covers the case of an item such as a small photocopying machine.

5. The U.A.S. has determined that the depreciation of fixed assets should be calculated on the basis of the following main rules:

- i) depreciation is explained in section one of the Uniform Accounting System Regulations, which define depreciation as: "Distribution of the Asset's Cost over its estimated production period using a reasonable method".
- ii) All assets except land are supposed to be depreciated.
- iii) The system uses historical cost, rather than current value as a basis for calculating depreciation.

The Historical Cost = The asset purchase price + Customs + Licence Costs + Installation Costs + All

costs which have had to be paid until the asset became ready for use.

- iv) The system uses the "Annual Fixed Instalment" for depreciation according to the following assumptions:
  - That there are 300 days in a year,
  - That the daily operating period for any asset is only one shift,
  - That any asset is considered as a new one.
- v) For assets which have not operated during the year, the system requires that their depreciation should be 50% of the regular depreciation rate
- vi) For assets which have operated more than 300 days during the year and more than one shift a day, depreciation is calculated as follows:

Suppose the rate is 6% a year and the asset operated 350 days during the year then its depreciation is =

$$\begin{array}{cccc}
6 & 350 \\
--- & + & (3 \times --- ) = 6.5 & \\
2 & 300 & =====\end{array}$$

- vii) The depreciation rate of assets bought second hand should be calculated on the basis of 150% of their purchase prices.
- viii) Assets with a book value of zero, which are still in use, should be depreciated at 50% of the regular

depreciation rate. The U.A.S. requires the depreciation of these assets to be transferred to a separate balance sheet account, namely "Reserve for increase in Assets Prices", given an account code of 226. Also, 5% of the distributable surplus should be charged to it at the end of the financial year. The account was specifically intended overcome the inflation problem in relation to the increased prices of the assets concerned.

It can be argued that this accounting treatment cannot be considered as a cost allocation principle, nor does it conform with accounting principles in general, in that provision of such a reserve is subject to the formation of retained profit. It would be more realistic if the company concerned were to re-value the asset(s), with no book value, in accordance with the potential capacity of such asset(s). Depreciation, in that case, would be applied on the basis of the U.A.S.'s rules regarding the second hand assets as explained before.

However, Egyptair's staff believe these methods to be inappropriate to the airline industry, especially in case of aircraft depreciation, maintenance and replacement. An interviewee at the airline indicated that it would be more appropriate for the fleet operations if aircraft depreciation were calculated on the basis of such a method as flying hours.

These, then, are some of the application problems of

the U.A.S. which affect, in some degree, the performance of the airline.

7.7.3 The Exchange Rate Policy

The exchange rate in Egypt is viewed in relation to the American dollar. From 1957 until May 1987, many ministerial decrees were issued to regulate the exchange rate. There have been four distinct stages in the development of the exchange rate of the Egyptian pound against the American dollar. Table (7.8) shows these stages covering the period 1957-1988.

The official rate is limited to government transactions such as exports and imports of essential goods, e.g. food stuffs, while the prevailing rate is the rate applied to state enterprises, including Egyptair, and also the transactions of foreign investment firms.

In March, 1985 the Minister of Economics and External Trade issued a decree to raise the prevailing rate to L.E. 1.85 The fourth stage, which was an essential step in reforming the exchange rate, began in 1987 when on the 10th of May, ministerial decrees numbers 222, 223 and 224 were issued to organise and govern the new Egyptian stock exchange market. A few months from the beginning of the free market, a new exchange rate to the dollar came into effect, averaging L.E. 2.50 in April 1989 compared with an average of L.E. 2.20 in November 1987. The free market

#### Table (7.8)

#### Development of the Exchange Rate of the L.E. against the American Dollar from 1957 to 1988

Stage	From	То	Prevailing Rate	Official Rate
<u>Stage 1</u>	1961	1961	0.42	0.35
<u>Stage 2</u>	1962	1967	-	0.43
	1968	1971	0.58	0.43
Мау	1972	-	0.65	0.43
Feb	. Sept.	1973	0.59	0.39
<u>Staqe</u> 3 Jan		1974	0.59	0.39
Мау		1976	0.67	0.39
Dec	•	1979	0.69	0.39
Jan	. Dec.	1980	0.77	0.70
Jan	. Dec.	1981	0.83	0.70
Jan	. Dec.	1982	0.83	0.70
Jan	. Dec.	1983	0.83	0.70
Jan	. Dec.	1984	0.83	0.70
Jan	Dec.	1985	0.83	0.70
Jan	Dec.	1986	1.35	0.70
<u>Stage 4</u> Jan	Dec.	1987	1.85	0.70
Jan	Dec.	1988	1.85	0.70

Source : (1) The Finance and Economic Affairs Committee, "Report of the Exchange Rate's Problems from 1957-1986", El-Shoura Council, Cairo, p. 16, 1986.

> (2) Ministry of Economic and External Trade, Cairo, 1988.

exchange rate is restricted to the public interest and neither the state enterprises or the foreign investment firms <sup>(1)</sup> can officially use this rate for their transactions, but as explained previously, the prevailing rate is available for them with some observations.

The Permanent Technical Committee for Developing the U.A.S.'s, as a result of the exchange rate deterioration, has made the following proposals:<sup>(2)</sup>

1. The valuation of fixed assets, financed in foreign currency should be modified in terms of the prevailing rate in accordance with ministerial decree No. 167 in 1985 provided that a separate account is drawn up, namely "Foreign Currency Differences Account/ Fixed Assets Cost".<sup>(3)</sup>

2. In respect of the purchase of a fixed asset, as a credit and in foreign currency, the problem of foreign currency differences arises at the end of each payment due, in respect of the difference between the book value and the actual value of that asset.

(2) The Public sector is required to consider the Committee's recommendations as official rules.

(3) Central Department for Financial Control over the Public Sector, "Memorandum to the CAA Board on the 26 of June, 1986", Cairo, Egypt.

The Committee recommends that these differences should be treated as a fixed asset and transferred to the above mentioned account, "Foreign Currency Differences Account/ Fixed Assets Cost", given an account code corresponding to that of the related asset and depreciated on the basis of the remaining period of the asset's productive life.

3. When evaluating the inventory, if foreign currency transactions are involved, the currency difference problem will occur. The U.A.S. rules require that these differences should be transferred to the same account mentioned above in examples 1 and 2 and the adjustment of inventory consumed is added to the "Prior Years Expenses Account", code No. 365 in the Company's Current Operations Account.

In order to examine this exchange rate policy in relation to Egyptair let us as an examples take the purchase in 1983 of an Airbus which was financed by a loan of \$34 m., purchase in 1988 of two Boeing at \$140 m.. The first loan was repaid during the 1986/7 and payments have not yet started on the second as shown in table (7.9).

In the light of the calculations in this table using both the prevailing rate, required by the government, and the free market exchange rates during this period, two conclusions can be drawn:

i) With regard to the first loan, the company had to pay L.E. 46 m., L.E. 18 m. more than the original amount.

#### Table (7.9)

## Effect of the Foreign Exchange Policy on Egyptair's Loans<sup>(1)</sup> (Value in million)

Item	Value of the Loan	1983	1986 Balance on 30/6/86	198 Balance		1988 s Balance Paid		rency Exchange Differences
	Value in \$	Value in L.E.	Value in L.E.	Value	in L.E.	Value in L.E.	L.E.	Value in L.E.
Airbus	34.0	28.0 <sup>(2)</sup>	45.0 <sup>(3)</sup>	46.0 <sup>(4)</sup>	30.0	16.0 16.0	46.0	18.0 (5)
Two Boeing 747	140.0 (6)	-	-	-	-	259.0 (7) _	350.0 <sup>(8)</sup>	91.0 <sup>(9)</sup>

Source: Egyptair's Annual Reports 1984-1988.

(1) The interest on these loans is not included in these figures.

(2) The prevailing rate in 1983, \$1 = L.E. 0.83, is used as a basis for calculation: \$34 m.X 0.83 =L.E. 28 m.

(3) The new prevailing rate in 1986, \$1 = L.E. 1.35, is used for calculation: \$34 m. X 1.35 = L.E. 46 m.

(4) Another new prevailing rate has been applied since 1987 which is \$1 = L.E. 1.85 So: \$34 m. X 1.85 = L.E. 63 m.

(5) The differences in foreign currency is: 46 m. - 28 m. = L.E. 18 m.

(6) For financing these two aircraft, the company would not get the value of this loan in dollar at the prevailing rate of \$1 = L.E. 1.85 through the Central Bank of Egypt. Thus, it had to get this amount at the Free Market rate of L.E. 2.50.

(7) The calculation of this amount is: \$140 m. X 1.85 = L.E. 259 m.

- (8) This is based upon the the average Free Market rate in April of 1989; \$140 m. X 2.50 = L.E. 350 m.
- (9) The differences in foreign currency is: 350 m. 259 m. = L.E. 91 m.

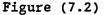
as a result of the change in the prevailing rate.

ii) Concerning the second loan, the company had to take responsibility for financing this purchase, and had to obtain the amount from the free market. Hence, the foreign currency difference is L.E. 91 million. According to the U.A.S. requirements, the related values of fixed assets should be inflated by this difference and the depreciation allowance should be modified accordingly. This would affect both the balance sheet and the profit and loss account.

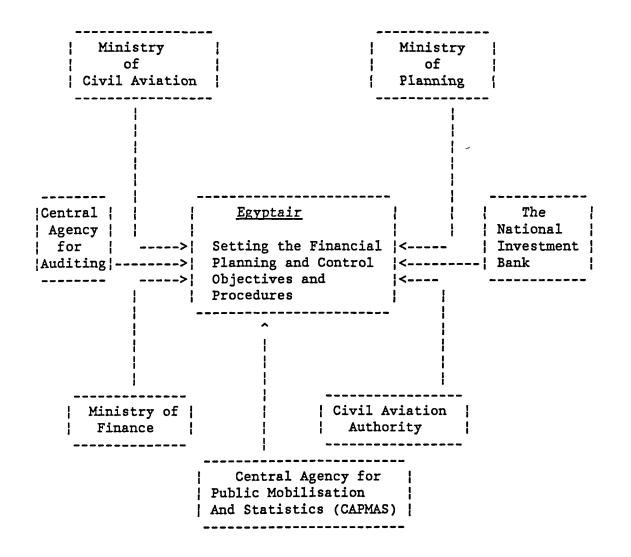
Thus, it can be argued that not only the exchange rate policy has an unfavourable impact on Egyptair's financial statements, but also the weakness of the Egyptian pound as a result of deterioration of the national economy which is the main cause for these problems in the first place. Consequently, these statements do not reflect the actual operating results at the end of the financial year. Also, there are many limitations and pressures facing the Egyptian Airline Industry, all of which combine to affect its efficiency.

#### 7.8 The Extent of Government Influence

Many government authorities exercise different types of influence on Egyptair's activities, as illustrated by figure (7.2).



The Relationships between Government Authorities and Egyptair



#### 7.8.1 Ministry of Civil Aviation

The ministry has the authority to take any decisions connected with the appointment of top and middle management. Egyptair's top management can appoint staff to lower management positions, but even so, they must send these decisions to the ministry for final approval. Also, the appointment of any of the airline's staff to represent the company in any of its external sales offices in any country requires a protracted procedure starting with the Ministry of Civil Aviation. which may change the decision.

At the end of the financial year, after the financial statements are prepared, they must be submitted to a special board for discussion headed by the Minister for Civil Aviation.

Another example of the ministry's influence on Egyptair is in the Free Shops zone at Cairo Airport which used to be supervised by Egyptair and represents a large part of the airline's revenues. Recently it has been decided to separate this activity and hand it to a British company for reasons not given. In other words, the Ministry has forced the airline to accept the Ministry's view.

## 7.8.2 Ministry of Finance

The Ministry of Finance's role could be summarised as follows:

a- It has the authority to approve, reject or change the airline's plan or budget.

- b- It must be represented on the board responsible for discussing the airline's financial statements at the end of the financial year, and may make any comments and suggestions.
- c- It determines the deadline for submission of the financial statements after considering all the comments made to the Ministry, in order to consolidate the national financial statements. These are presented by the Finance Minister to the Egyptian Parliament by the end of May of the year following the relevant financial year, according to Act number 127 in 1981 and Ministry of Finance Act number 181 in 1982.

In addition, the ministry issues regulations each year to all public enterprises and local authorities, which must be followed in preparing their current annual budgets. These regulations are made through the "Public Act for the Financial Year" and the "General Forms for Preparing the Budget".

#### 7.8.3 Ministry of Planning

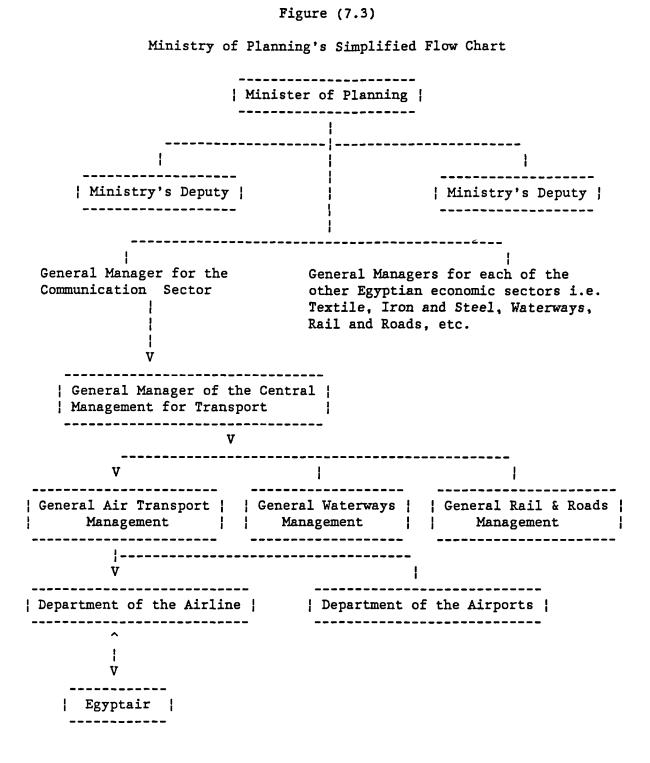
Briston and El-Ashker (op. cit., p. 5) have described the planning process under the Egyptian uniform accounting system as follows:

"The first step in the process of planning is the Cabinet, which recommends general objectives for the country as a whole. The objectives are not intended as specific goals; rather they represent some of the targets and general policies which the government chooses

to adopt, such as increasing national income, improving the standard of living, achieving more economic self-sufficiency, adopting new economic policies such as the open-door policy, promoting light industry rather than heavy industry (or vice versa), encouraging private capital, reducing (or increasing) private capital, reducing (or increasing) subsidies to industry, etc. The Ministry of Planning is responsible for the next stage. The Ministry, taking account of the Cabinet's recommendations, draw up a general plan for the country as a whole. This plan specifies the goals that need to be achieved by each economic sector and the interrelationship among these sectors. The minister responsible for each sector examines its role in the general plan and might modify it under certain conditions subject to the agreement of the Ministry of Planning. Plans, having been fixed at ministry level, are then allocated to the various organisations within the ministry taking into account the ability of each organisation to achieve the required goals".

Interviews at the Ministry of Planning, General Manager for Communications sector, in Cairo revealed that there is a separate department, supervised by the General Air Transport Management. This department, the "Department of the Airline", is responsible for the airline 's affairs, as seen in the Ministry's Management Structure shown in figure (7.3), Thus, the Ministry's role in financial planning and control procedures concerning Egyptair can be stated as follows:

a- The Ministry receives, through the General Air Transport Department, the proposed five-year plan from Egyptair which is required to complete and submit its strategic plan in a special form, planning document, as shown in figure (7.4). This form must include:



Source: Interview with the General Manager of the Air Transport Management, Ministry of Planning, Cairo, October, 1987.

#### Figure (7.4)

The Governmental Form which should be used in setting the five-year plan

Ministry of Civil Aviation Egyptair

Model for Setting the Five-Year Plan 1987/8-1991/2

Project's Name :

Project Value :

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Local Currency :

Foreign Currency :

Number	Requirements'	The Total Value of	Method of ;	Project's Time	Notes
1	Description	the Project	Finance	Table	
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	-	-	-		
shou	ild be notified.				

Code Number :

- Number of projects desired to be undertaken by the company during the five-year plan and description of these projects;
- ii) The total value of these projects and the methods of financing them; and
- iii) The initial time-table for each project.
- b- Then, the Ministry examines it in the light of national targets and asks for more information, modifications and changes.
- c- The next step is to discuss the plan with the Ministry of Finance to reach an agreement.
- d- After the submission of this plan to Parliament by the relevant Minister for discussion and approval, a special law is issued. The airline is notified by its approved plan.
- c- At this stage, any modifications must go through the same procedures and must be approved by both the Ministry of Planning and the Ministry of Finance, according to "The Public Act for Preparing the Budget".
- d- The same process must be followed for setting the annual budget.

#### 7.8.4 The National Investment Bank

When the plan and the budget have been agreed, the National Investment bank is also notified by the Ministries. The bank normally opens an account for the airline as well as for each of the other public sector enterprises.

The airline is required to give an explanation supported by the necessary evidence each time money is withdrawn, either in hard or local currency. This money belongs to the airline in the first instance, but, according to government regulations, the company has to deposit its cash, in whatever currency, with the Central Bank of Egypt. In addition the airline is required to submit a report to the National Investment Bank about its progress.

#### 7.8.5 Civil Aviation Authority

The Egyptian Civil Aviation Authority is mainly responsible for:

- 1. Supervising airline services in Egypt;
- 2. Organising all aviation affairs;
- 3. Signing all international aviation treaties;
- 4. Supervising the Institute of Training which graduates aircraft crew; this institute was supervised by Egyptair until the beginning of the nineteen eighties;
- 5. Licensing any operating airlines;

The interview at the CAA revealed that there is a strong interrelationship between the Authority and Egyptair. Indeed, there are three general managements at the Authority whose responsibilities relate to the airline. These managements are: Air Control, Airports Control and Technical Control and Aviation. These management levels have duties in common with the airline and in some cases the Authority has the right to intervene in certain agreements between

Egyptair and foreign airline companies.

For further illustration of the government influence on the airline, let us take the following specific example:

(1) Egyptair is required to pay customs on aircraft maintenance in the free zone area. This policy could be applied to any other transport, tools or maintenance such as cars, vans etc.

(2) In some cases, the government forces the airline to buy certain models of car, for example from the Egyptian Car Industry. The airline believes that these models are not in keeping with the airline's position and reputation.

(3) There are long procedures and complicated routines which must be followed for most important decisions. These need to be taken urgently and the time factor is of great importance.

The airline is sometimes advised to appoint employees (4) who are not qualified or have lower qualifications than others. This course of action has been imposed by the Ministry of Civil Aviation which is authorised to take any decision related to the airline's services and operations. at the beginning of July 1988, the new For example, composition of Egyptair's board announced. was Unfortunately, only five of the total of eleven members represent Egyptair, and the other six represent different governmental authorities. In contrast, the previous board

had consisted of nine members, the majority of whom represented the airline.

(5) There are many accounts owing to Egyptair from other airlines, totalling 75 million dollars. There are difficulties in receiving these accounts because the airlines concerned have money-transfer problems with other Egyptian government sectors and treat Egyptair in the same way. The government has done nothing about this problem.

(6) Another serious problem facing Egyptair is that a large amount of indirect subsidies, in hard currency, have been given to the foreign airlines which have branches or sales offices in Egypt each year. An interviewee at Egyptair explained that these subsidies were estimated in 1987 at about L. E. 140 million. This occurs because of the weakness of the economy and the fluctuated exchange rate policy employed.

Finally, it should be stressed that government interference has limited the quality of the services offered by Egyptair.

#### 7.9 Summary

this chapter, the main objectives have been to In and investigate the control procedures at Egyptair examine and the impact of government intervention on the airline's activities. Various areas of interest have been investigated, either by means of interviews at Egyptair and with the authorities concerned, or by the examination of

documents and reports related to accounting procedures and monitoring of performance. Furthermore, the relationship of the U.A.S. to these processes, its ability to provide the information required for financial planning and control purposes and other accounting matters, such as government foreign exchange policy, have been reviewed.

In conclusion, examination shows that the internal control process at the airline is weak. This is mainly due to the lack of managerial audit, a deficient costing system, the fact that budgeting is not based on standards, the lack of relevant performance measures and an inadequate MIS, which creates difficulties in terms of setting plans, monitoring operations and decision-making.

With regard to the reliability of the U.A.S. in relation to planning and control, it has been argued that the system is more concerned with the requirements of national planners and external control purposes, but it has been found that this system limited in relation to the planning and control procedures at the airline.

Further, the government influence through various authorities on the airline and its policy towards the foreign exchange rate have been found to have a detrimental effect upon the financial performance and efficiency of the company and consequently the quality of the services provided.

CHAPTER: EIGHT

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SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

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### 8.1 Introduction

In periods of rapid change, descriptions of financial planning and control theory and their functions can be especially difficult.

A great deal of technical research has been undertaken in the planning and control areas in certain industries, in order to improve their efficiency and to bring them into line with national economic growth requirements. Unfortunately, little work has been carried out regarding financial planning and control procedures in the airline industry.

Therefore, the present research aims to investigate the existing systems operated by these two airlines and to provide a methodology for developing the procedures concerned and consequently improving the quality of the services presented.

More specifically, the major objectives of this research were to:

- Identify the procedures applied by British Airways and Egyptair concerning financial planning and control of their operations;
- Determine the views and attitudes towards these processes of corporate executives representing top, middle and lower management levels at both airlines;
- 3. Assess the capability of the accounting systems in

relation to financial planning and control; particular attention was paid to the Egyptian Uniform Accounting System in this respect;

- 4. Examine the extent of government influence on each airline and the effect of this intervention on efficiency and effectiveness;
- 5. Intensify the impact of the existing systems and procedures on the airlines' performance; and
- 6. Analyse the feasibility of the proposed framework to meet the desired strategic and short-term targets of the airlines concerned, Egyptair in particular.

In order to achieve these objectives, it was necessary to examine related areas such as accounting data and its importance to planning and control procedures, and the features and problems of these procedures in nationalised industries in general. As a result of reviewing these areas and a survey of the planning and control literature, an attempt to produce a practical methodology for an integrated framework was discussed and introduced, prior to the examination of financial planning and control at British Airways as an example of a developed industry, to determine the extent to which the procedures there might be relevant to Egyptair's environment.

To this end, the contribution of transport to the Egyptian economy was examined in order to ascertain its

crucial role in the economic plan. Finally, financial planning and control at Egyptair, the U.A.S., and government influence on the company were empirically investigated in order to suggest an appropriate approach for the airline industry in Egypt.

As explained in the introductory chapter, the material required for the investigation was obtained mainly by means of in-depth interviews with top, middle and lower management staff in B.A., Egyptair and the government bodies concerned, i.e. the Egyptian Ministry of Civil Aviation, Ministry of and the Civil Aviation Authority. Also, Planning an extensive examination was made of data related to the first and second five-year plans, annual budgets, relationships of operational planning and manpower to the overall planning process, annual reports and accounts, other reports and various government regulations. Thus, it was necessary to visit B.A., Egyptair and the government authorities concerned.

This research summary discusses the major findings of each chapter after which overall conclusions and recommendations are drawn.

### 8.2 Summary of the Research

In its early form, accounting was utilised only for bookkeeping, recording the day-to-day financial transactions of a business in order to present the financial position of the organisation.

During the last two decades, accounting data has become a vital tool to provide management with the information required to enable it to meet the challenge of decision-making, setting strategic plans and implementing financial planning and control processes in order to ensure that the organisation's performance is in accordance with what was planned.

Information is essential, not only to the day-to-day routine of running a business, but also for achieving success. It makes the decision-making process smoother, more reliable and more appropriate to the situation.

The literature relating to accounting information systems (AIS) was investigated. The AIS as a part of the management information system (MIS) should provide timely, relevant and accurate information to enable management at any level not only to take the right action at the right time, but also to establish the desired financial plans and monitor the firm's progress and performance. In the case of controlled and directed economic enterprises, in which a type of uniform accounting system is implemented, the plans of all state industries must be approved by the national planning bodies.

The designation and implementation of an organisational control system based on the AIS and responsibility accounting is a vital factor, and the designers of an AIS may want to consider the management accounting system as a

part of a larger organisational control system.

The existence of set rules, procedures and policies for the organisation's reports may influence the structure of the accounting system. Management control systems can vary in terms of many features such as reporting frequency, influence in target-setting, importance of key functions, planning consideration and measurement, response to variances and influence on day-to-day routine (Macintosh and Daft, op. cit., pp. 51-58).

The implementation of a new control system governed by a rational technical logic often produces contrary responses due to the underlying value and belief structure lodged within the prevailing control system (Williams and Hinings, 1988, p. 191). Simons (1987, pp. 370-371) supports this view in his investigation of the relationship between business strategy and accounting based on a control system, and points out that:

Understanding the link between strategy and control appears to be important; as a first step, a significant challenge remains to gather more first hand data concerning the evolution and choice of control in firms following different strategies. Future research may be able to uncover the complex relationship between specific accounting control systems (e.g. cost accounting systems, budgeting systems, responsibility reporting systems), the variety of business strategies used by organisations and the achievement of organisational goals".

Emphasis on the vital role of accounting in planning and control comes from Coombs (1987, p. 404) writing on

accounting in health administration, who concludes:

" Control is therefore not a zero-sum game in this context, and the willingness of doctor managers to use accounting systems designed by administrators may benefit both groups. It may therefore be asked: to what extent will new accounting techniques control doctors or account for their control?".

The great majority of scheduled international airlines are publicly owned. Thus, it was essential to make a general investigation of the problems of financial planning and control in public enterprises, illustrating their role in economic development and government intervention in their objectives and activities.

The scope of nationalisation in a number of European countries, e.g. Italy, France, West Germany and the U. K. was discussed. It was found that certain industries and services tend to be nationalised in most countries.

The Eqyptian government applied nationalisation for the time in July 1956, when the Suez Canal first was In the early 1960's, particularly 1961, nationalised. the policy was extended in accordance with "The 1961 Decrees" include most manufacturing and service industries, to such banks, transportation, hospitals, factories and food as production and supply etc. However, large-scale nationalisation changes the distribution of power within a society. Those making the operating decisions, for example prices, investment and technology, should be responsible to

the public.

Nationalised industries have played an important part in economic progress and welfare, especially in developing nations. Government policies may require these industries to operate at a minimum cost, to earn a reasonable return and to improve performance. In addition, public enterprises are used in the process of achieving efficiency and as instruments of economic and social policy. Where social considerations arise, specific subsidies may be provided by the government, which vary from one to another.

Therefore, public corporations are involved in many types of activity: in most countries, these include transportation, including airlines and telecommunication, basic goods industries such as oil, textiles, iron and steel, cars, finance, education and health. Through public ownership the government usually exercises its influence on these industries. This can be seen in the transport sector, and particularly in the airline industry, which is seen by many countries as capable of furthering a variety of national objectives. There are several general governmental areas of interference policies regarding which are especially relevant, such as capital investment decisions, resources allocation, replacement and expansion, employment, and the appointment of staff at all management levels, which may have a detrimental impact on performance.

Consequently, the government influence on the public industries affects the financial planning and control

processes, where many government authorities are involved and the procedures require the approval of several official bodies, though in some decisions time is a crucial factor. As a result, there are difficulties facing the top management of public sector enterprises concerning their operational decisions.

In contrast, in recent years the U. K.'s conservative government has implemented a policy of privatisation. For example B. A. was privatised in January 1987, as was British Gas and it is intended to privatised the Water Industry during 1989/1990. Jowett and Rothwell (1988, p. 83) argue that:

"The conservative government elected in 1979 considered privatisation to be the most strategy appropriate for improving the performance of nationalised industries, and within a relatively short period of time a significant number had been transferred to the private sector.

Thatcher administration believed The that throughout the post-war period the lack of clearly defined objectives combined with the emphasis upon non-financial targets had been responsible for the disappointing and often performance poor of many nationalised industries; where privatisation was not considered to be suitable, various attempts were made to introduce specific commercial criteria as a basis for assessment".

Above all, it was considered necessary to mention in relation to the airline industry, an example of uniformity, the system discussed being that applied to USA domestic airlines and required by the CAB. Another uniform system, that applied at Egyptair, was examined in greater detail in

chapter seven and will be reviewed later in this chapter.

However, the focus of this study is to analyse the financial planning and control procedures at both B.A. and Egyptair. This necessitated the formulation of a conceptual framework for the examination. In order to undertake this course of action, a conceptual survey of planning in general and of financial planning and control in particular, was conducted in chapter three.

The area of planning and control has been widely discussed in the literature. Planning represents the core of management in any business: it involves not only different managerial levels, but also serves multiple goals such as resource allocation, setting long and short-term targets for the organisation, and decision-making. Where risk and uncertainty exist, various scientific techniques are needed. All planning aspects are deeply concerned with a review of ways and means to achieve the planned targets and there is a correlation between effective planning and top management success.

Because this study is concerned with all aspects of the influence which financial planning and control may have on the organisation's overall planning, different planning concepts were discussed. It was realised that an explanation of corporate and operational planning in addition to the indepth examination of financial planning was essential. Corporate planning is a way of managing a business by setting strategic objectives which should be translated into

specific long-term plan(s) which reflect the way to meet these objectives, and also the means to monitor not only the overall performance of the organisation, but also the individual divisions. Hence, corrective actions and decisions can be considered.

Operational planning deals with setting plans for the organisation's operations, expressed in physical and financial terms and reflecting the outcomes and resource implementations as planned previously. The importance of operational planning comes indirectly from its impact on resource allocation and also because it provides a basis for feedback about the organisation's performance, not only for the sub-units and functional departments, but also for the organisation as a whole.

finance function has always played an important The in business management, and it should be emphasised role financial planning represents a strong element in any that industry's strategic planning cycle. It involves long and short-range financial trends, the present and the future of general economic situation and the relation to each the of the organisation's activities such as costs, marketing, research and development (R D), sales & general administration and manpower plans. As Robinson (1985, p. 26) argues:

"The business strategy should therefore, define the main aim of the organisation and alternative approaches may be used to advance it. The most favoured approach is selected by top management and objectives are agreed for each of the functions in the organisation. Part of this process would be a resource plan which would determine among other things, what manpower would be needed and what result would be required from them".

Financial planning enables management in any industry to assess financial risk and explains, at least in part, why all business managers find it increasingly useful, if not imperative, to devote time and energy to planning future activities and programmes. Furthermore, it expresses the organisation's plans in such a way that they positively identify financial needs, problems and opportunities.

The crucial aspect of financial planning is its reflection of the operational plans in financial terms, e. g. whether the available funds and resources are adequate; and in addition, it is a simple way of ensuring that the best use is made of the organisation's invested capital. The preparation of financial plans in the light of the available information leads to decisions being made more effectively and efficiently.

Financial planning explains and recognises the significant interrelationships within the organisation, evaluates all the available alternatives and determines the financial effect of each of them, presenting a view, not only of present resource availability, but also of the future, so that plans can be formulated in accordance with the organisation's liquidity and needs. A reasonable and successful financial planning process is one which can

enable the planners to avoid waste by increasing coordination between the various functions of the business enterprise.

Risks and uncertainty exist in relation to future conditions, which cannot be accurately forecast, and the setting of the plans, particularly those which are related the long-term, i. e. the five and ten year horizon, to is limited. However, plans which cover a short range -one year- are usually more reliable since most of the internal and external factors affecting the organisation can be predicted with an adequate degree of accuracy. It should be noted that there are some constraints on the capability of the organisation's planning system, such as environmental availability of resources, conditions, the market fluctuations and competition, particularly if the organisation operates at the international level, as in the case of the airline industry. Thus, the type and nature of the industry's activities affect its planning decisions and are related to the limitations imposed on its pricing policy by the external environment, most commonly the government.

Forecasting is a financial planning tool which is crucial for the application of such a planning system. One of the vital areas requiring close correlation between forecasting and financial planning is that of preparing the cash budget analysis, in which statistical, mathematical and computerised models can be applied. This should be the starting point in the financial planning process of every

item involved, e. g. costs, marketing, production, sales, profit etc. These forecasts of future trends are used as a basis for setting the desired plans.

The benefits obtained from cash budget analysis as one of the financial planning techniques have been debated in literature. For instance, it is useful for predicting the firm's trends concerning cash inflows and outflows. Thus, the planners may search for additional finance required for the firm's operations.

As soon as the financial plans are set, monitoring of the organisation's performance is urgently needed in order to meet the planned objectives. To ensure a high quality performance and efficiency, reasonable and realistic control procedures must be taken into account at the time of setting the plans. This view is illustrated by Machin and Wilson (1979, p. 17) who argue that:

"On the one hand, planning is concerned with choosing which variables will be included within the plan and then looking at such difficulties as exist within the substantive environment in moving towards the achievement of a desired position; on the other hand, control is concerned with reacting to difficulties that are created as a result of past patterns of behaviour proving to be unsuitable for coping with the present situation".

When financial plans are made, based upon forecasts of costs and revenues, then it is possible to determine the break-even point and funds requirements under multiple sets of assumptions regarding income and expenses, marketing and service use. Then, analysis of the financial and non-

financial data can be conducted.

It was also necessary to examine theoretically the topic of control and its importance for the success of an organisation. It was concluded that in the running of any business, no matter what kind of activities it deals with, high quality control procedures are required in order to achieve the desired targets. Accounting analysis techniques are also involved, not only to assess the performance of the organisation as a whole, but also at the departmental and individual level where variances analysis and a system for reporting on performance should be implemented.

Budgeting and budgetary control systems are effective tools which should be used by top management to assist in planning, control and decision-making. The application of these systems enables the management two to plan effectively, and then to monitor the achievement of the planned targets by measuring the actual performance and comparing it with what was budgeted, taking corrective However, a distinction between actions as necessary. budgeting and budgetary control should be drawn, in that budgeting normally presents an approved financial statement of expenditure and income of a firm for a defined period, in order to meet the planned targets, whereas budgetary control looks at the difference between the plan and performance. Also, it relates departmental and individual responsibilities to the requirements of an organisation's

objectives and policies.

The importance of basing budgets on standardised costing systems for planning and control functions gives rise to two major points: any plan is only as good as the data on which it is based, and there is a high degree of interdependence among organisations and among sectors of any economy when all of their activities are controlled by a master plan.

All business plans aim to define in advance the expected targets from each functional department, and use the budgets as a control device. Thus, there will be a number of different budgets in the development of an organisation's overall plans which all have to be coordinated in the budgeting process. As a result, budgeting and budgetary control, as essential elements of the management control system, enable integrated financial planning and control processes to be employed and the actual performance to be evaluated.

To sum up, once all the required sub-plans and the overall or master plan are implemented, a follow-up system is immediately required and then control action will be taken. At the same time, information on the expected effect of that action should be provided. Moreover, a feedback system is needed to ascertain whether the control action has had the desired effect.

Having established the theoretical background to this

study, it was necessary to formulate a financial planning and control conceptual framework against which to examine study these processes in the and airline industry. Therefore, a model was outlined in the light of the preceding literature survey. It must be mentioned, however, that the suggested framework in which a computerised information system should be included is subject, especially in airline industry, the to some non-controllable constraints such as political affairs, as any nationalised airline's activities are affected by its government's political relations, the impact of international agreements, IATA regulations, etc.

Within the fourth, fifth, sixth and seventh chapters the financial planning and control procedures at both British Airways and Egyptair were fully examined and discussed. Investigation was carried out by means of indepth interviews with a variety of representatives of the top management in both airlines. In addition, documentary evidence considered necessary for the analysis was examined. This included the published reports and financial and nonfinancial data.

British Airways, which has been privatised since January 1987, is subject to international competition from other airlines and its financial results depend upon cyclical variations in air traffic (Arnold and Wearing, 1986, p. 2). As a result of the study of the financial planning and control processes at B. A. it can be concluded

that dramatic changes have been undergone recently. It was found that there is a long-term strategic plan for fleet acquisition, for example. Short-term plans are also implemented. An example is the method of preparing the tactical budget for the summer, which represents the high season and for the winter which represents the low season.

revealed in chapter five, certain procedures have As been accomplished and some of the financial information is computerised. The accounting system, GL80, which forms a crucial element of the airline's overall management accounting information system, is computerised and is reliable in providing the information needed for financial planning and control.

The management accounting packages which are used for monitoring the airline's performance were discussed in relation to the cost accounting and reporting systems. There is a director for management information, who reports to the Chief Executive and is responsible for providing the data required for planning and control. He is also in charge of the management programmes implemented to assist in the achievement of operational and strategic targets. The introduction of a new computerised information system is planned.

Chapters six and seven were devoted to the investigation of financial planning and control procedures at Egyptair. This investigation was conducted through in-

depth interviews, discussions and an examination of published reports. The study examined not only the method of implementing the strategic planning procedures, but also the annual budget process and means of monitoring the airline's performance. In addition, an overview of the main features of the Egyptian economy was highlighted by means of an explanation of the desired objectives of the economic sectors during the second five-year plan 1987/8-1991/2. These objectives were seen in the light of the performance of these sectors during the first five-year 1981/2-1986/7.

Planning on a large scale was introduced in Egypt after 1955, when a new committee for national planning was formed, namely, "The National Planning Committee (N.P.C.). The national planning effort was presented in relation to the Egyptian economy's main features.

Further, shortage of capital, population and disguised unemployment are crucial features of the economy. The Egyptian government faces a serious population problem in that the rapid growth rate of population at an average 2.5% per annum is creating a huge gap between overall demand and supply. As a result, many problems have arisen in such areas as housing, transport, food, and employment and the inflation rate is increasing rapidly. Increased attention has been paid to these problems, particularly regarding preparation of national planning policies. It is true that there is a need for population redistribution, with a move out of the narrow valley into more spacious areas where

agricultural, industrial and tourist communities can be established.

Another vital feature of Egyptian economy is the establishment of the free exchange market in 1987. This can be regarded as an essential step towards economic reform.

The application of the uniform accounting system in Egyptair was examined in terms of its ability to provide the accounting information needed for planning, co-ordination, and monitoring of the strategic plans and budgets concerned. It was explained that the U.A.S. was introduced at the beginning of the second half of the 1960's. A governmental authority, the CAA, was formed to be responsible for monitoring the system. The system, as explained in chapter ten, is compulsory and applied to all public industries, though its application to private corporations is at the discretion of the relevant minister. Multinational and foreign investment enterprises are excluded as each applies its own accounting system which is relevant to its own operations and policies.

It has been argued that the system is adequate for planning and control at the macro level where there is a link between the financial and national accounts (Zebun, 1988, p. 599). In contrast, its effectiveness at the micro level was found to be limited, and investigation revealed some problems regarding the application of system's procedures to the airline's activities.

Finally, it was necessary to examine government interference in the airline's operations and activities, and the government was found to exert considerable influence on public enterprises, including Egyptair.

# 8.3 Conclusions

The examination and analysis have revealed that:

1. There is a lack in both quantity and quality of specialised and empirical research related to financial planning and control in the airline industry.

2. In the developed countries, and more especially in the developing nations, accounting is a major source of data required by the national planners and top management in order to perform their tasks effectively. Also, the effectiveness of the information supplied by both micro and macro accounting systems is subject to its accuracy and reliability.

3. Accounting data is a vital element in economic development, in the measurement of costs and benefits for investment appraisal, planning at the micro and macro level and in ensuring that all related elements have been incorporated in the process concerned. In this respect Hassan (op. cit. p. 7) argues that:

"Business accounting represents a major and important source of data required for the compilation of aggregates at the national level. If financial accounting data are not channelled adequately by a well-structured

system, the compilation of national accounts can be a very difficult task indeed".

adoption of effective micro and macro accounting 4. The procedures is essential for collecting data for the purpose economic planning, decision-making and control, for of the the national economy and to enhance growth of the profitability of economic enterprises. In this way, planning and control processes may be rationalised. Some developed nations such as France and the Soviet Union have employed a uniform accounting system to this end (Al-Abdullah, 1985, pp. 533 and 567). Some developing countries, e.g. Egypt, have also taken up the idea of uniformity and adopted а uniform accounting system, as explained previously.

5. The public sector in particular, plays an important role in the economic development of such countries.

6. As regards planning and control, the government still has the power to exert an influence on state corporations. Consequently, the quality of planning and control is subject to the state attitude, the economic situation and the political environment.

importance of planning has rapidly increased 7. The in recent Developed countries have implemented years. planning for a long time for the growth of their economies. In contrast, the economies of developing nations suffer from of capital finance for а lack project investment, especially where there is unemployment, a huge balance of

payments deficit, high inflation, large interest payments on foreign loans and a lack of the financial information needed for planning and controlling the performance of public corporations.

8. Planning in general and financial planning and control in particular are essential to any firm, and particularly to the airline industry, to enable it to withstand strong international competition.

9. The in-depth interviews provided insights into the reliability of the accounting system used by British Airways. It is a ready-made computerised system, GL80, based upon a programme package purchased from the Management Science American Inc.. As explained previously, the system is quite adequate in terms of information flows and provide the data required for financial planning and control purposes. However, some financial transactions are still prepared and processed manually which causes some delay in reporting on the company's operations.

Although B.A. uses the M.A.P., i.e. special control forms, this system of reporting on the budget performance can be regarded as insufficient in terms of the application of a flexible budgeting system and consequently, the variance analysis system is in need of development for performance assessment.

10. In contrast, regarding the application of the uniform accounting system to Egyptair's activities, despite the

advantages of the system, particularly in terms of its ability to satisfy the national planners and controllers, it was found that there are several difficulties in its use.

These problems are related to the system's procedures, rules and accounting treatments rather than to the technical accounting adjustments and bookkeeping transactions. For concerning the calculation of fixed example, assets' depreciation, discussed in chapter seven, the Egyptian uniform accounting system imposes certain rules which must followed. However, in the case of the airline industry, be regarding for example, commercial aircraft depreciation, it found that depreciation depends largely upon such was as number of flying hours, type of aircraft and factors Thus, the application of the U.A.S.'s maintenance etc.. rules may not be appropriate to the airline industry.

11. In respect of the cost accounting and internal control systems at Egyptair, it was found that the systems adopted are inadequate.

12. The Egyptian airline's financial planning was found to be limited by the budgeting system. This accordingly affects the overall national plan, which is a consolidated budget of all the public corporations.

13. There is a lack of realism in preparing the overall budget for Egyptair, as the planners begin with the knowledge that considerable modification to the budget will subsequently be made by the governmental authorities; this

explains the significant variances between the budget and actual performance which suggests that the budget is prepared with insufficient care. For instance, Egyptair in its five-year plan 1987/8-1991/2 asked for about \$140 million for the acquisition of two new aircraft. However, the government agreed to only L.E. 10 million as seen in table (6.10).

14. There is a noticeable gap between financial planning and control at Egyptair, which urgently needs to be corrected. It is not possible to meet the desired economic and social objectives while the system retains this weakness.

15. There is a lack of understanding and consideration between the airline and the government authorities in relation to planning and control.

16. A representative of the CAA is permanently located at the airline's Headquarters, monitoring the company's financial and administration procedures, giving directions, ensuring that the uniform accounting system's regulations are applied and voicing an opinion on certain decisions. The establishment of relations with top management rather than other management levels has harmful effects on the attitudes of the majority of the staff.

17. In Egypt, as in many developing countries, public ownership is a major feature at both micro and macro levels. There is direct government intervention and involvement, not only at the macro economic level, but also on almost every

decision at the micro-level.

18. As a result of this intervention and the ceaseless regulations, considerable confusion is created for the companies concerned.

19. The consideration of the human factor in preparing and monitoring the plans was found adequate at B.A., while at Egyptair participation of the company's staff is limited in this regard. In other words, the planning system is mostly top-down.

20. Although some development is required, information flows at B.A. were found to be quite reasonable. However, at Egyptair the system is extremely poor. This can be easily understood from the frequency of the departments' complaints of difficulties in obtaining information from other departments. There are no set rules, and informal personal connections form the only channel of information.

21. There is a lack of a budgetary control system, lack of comparative performance measures, poor feedback and consequently, failure to initiate corrective actions in response to budget variances at Egyptair.

22. The economic analyst may have some difficulty in analysing and understanding the financial information produced by the existing systems at Egyptair.

23. At British Airways, a market and performance unit which is separate from the marketing function was established.

this unit a "Future Auditing Team" has been Within formulated, the major responsibilities of which are to scan the total environment in which the airline is likely to be operating in the foreseeable future, and work with the Chief Executive and Senior Director, especially in planning development, modifying strategies and developing new ones. This illustrates the need for airlines to deal in corporate planning with all aspects relating to the main political, social, technical and economic trends which have an impact on the airline's strategies. In addition, considerable attention is given to marketing, aircraft acquisition and equipment, operating scheduling, fleet utilisation and giving guidance on developing control procedures. This function is not yet available at Egyptair.

24. Planning at Egyptair does not reflect clear financial objectives. Therefore, the strategic targets of the airline cannot be understood within the planned budgets, as these are not prepared on the basis of standard costs. At the present time not even a costing system based on historical data is implemented.

25. Internal control procedures at Egyptair are totally absent. Costs and revenues are not allocated to any of the operating aircraft or to the scheduled routes and as a result, the analysis of costs and revenues is ignored. Thus, the follow-up system is weak, in that a lack of information flow within the airline was found.

26. The only existing control device at Egyptair is external control over the airline by government bodies, as explained in chapter seven. Such bodies include the CAA, Ministry of Civil Aviation, Ministry of Planning, Ministry of Finance and the Investment Bank. Thus, external control has been exercised by these authorities according to the needs of national economic planning only. The quarterly submission of certain official forms to these authorities is required, but in practice, submission is less frequent.

27. Any employee in an Egyptian state organisation believes that he or she is safe as long as the governmental rules have not been broken, and that becomes the overriding concern.

28. Planning and control procedures at Egyptair suffer from major disadvantages. These procedures are set with the aim of serving and satisfying the national planners and other official bodies, rather than achieving the airline's targets. Always there is a lack of close connection between long and short term planning and control.

29. Productivity at B.A. is measured and evaluated independently by using different techniques and measures such as RPK, RTK, ASK. At Egyptair, evaluation of productivity was found to be limited to an overall indication within the financial statements at the end of the budget period, when the operating results were compared with the previous year's performance.

Regarding manpower planning, it was found that 30. Egyptair was not in the same position as B.A., in that, despite the recent advanced technology the Egyptian airline is still heavily labour-intensive. This is because of the state's employment policy, according to which it is the responsibility to find a job for government's every No public company can reject the regular new graduate. employees list which comes from the Ministry of Workers. Therefore, the average number of staff per aircraft at B. A. and Egyptair is 223.2 and 489.6 respectively in 1987/88, and consequently the productivity of each worker is £2,297 at B. 3,793,41 <sup>(1)</sup> at Egyptair. L.E. Α. and The latter productivity equals £892.57 <sup>(2)</sup>, a percentage of 61.14% less than the productivity per worker at B.A.

31. With regard to the use of cash budget analysis, B.A. prepares only the application of funds statements at the end of the year, but Egyptair does not have such a statement of this budget. Therefore, at both airlines, cash budget analysis is considered of little importance. There is also no consideration of its benefits, especially its utilisation in forecasting, which is crucial in preparing the financial plans.

<sup>(1)</sup> These calculations are based on the figures provided in tables; (4.3), (5.4), (6.12) and (7.1) in chapters four, five, six and seven respectively.

<sup>(2)</sup> This figure is calculated on the basis of the average exchange rate in the Egyptian market,  $\pounds l = L.E. 4.25$  in November, 1988.

32. Quantitative techniques and computerisation of information are not employed at the Egyptian airline. However, B.A. uses some of these techniques and most of the financial and non-financial data is computerised.

33. At Egyptair, the number of free-of-charge tickets either on internal and external flights has increased. This number reached 151,500 during 1987/88, 24.3% of this number on the internal and 75.7% on the international flights. <sup>(1)</sup>

34. Egyptair's fleet capacity, as indicated by the marketing manager, has not yet been fully utilised.

One of the most important issues was the extent of 35. ministerial and government influence on the airline. In the case of B.A. this influence was found to be limited even airline was nationalised, while this when the now interference may come only through the British Civil Aviation Authority, which has control in the area of operating routes licences. The situation is completely different at Egyptair where, as was seen in chapter seven, a variety of government bodies are involved in single decision in relation to the airline's every operations and day-to-day routine.

In the light of the preceding arguments and the explanation of the practice of financial planning and control procedures at both B.A. and Egyptair, it can be  $\overline{(1)}$  Refer to table (6.3) in chapter six.

concluded that public control has been operated in several areas, many government authorities being involved in the financial planning control processes at Egyptair, with the power to modify, accept or reject any process. It was found that a number of problems or difficulties face the airline which limit and restrict its performance.

In conclusion, the needs are great in many areas; efforts being made to meet these needs are insufficient and fundamental changes are required in order to achieve the best possible results.

## 8.4 Recommendations

The intention of the comparative study of British Airways and Egyptair, was to observe the major differences and similarities and to suggest modification where appropriate. The detailed investigation made throughout the course of this research revealed a serious lack of financial planning and omission of internal control systems especially at Egyptair.

Thus, the following recommendations are made, which might play a role in the development of these systems by Egyptair, while other areas of potential improvement, which are worth to be considered by both airlines, are also suggested.

## (i) Recommendations for Egyptair

1. The airline should introduce and implement not only comprehensive and clear strategic targets, but also medium and short-term goals i.e. financial and non-financial targets such as IRR, social objectives.

2. Egyptair should introduce medium-term planning (tactical planning) which is normally prepared for two years ahead, in contrast to the long-term strategic planning. Tactical planning is incorporated within the airline's long-term plans, and includes, for example, aircraft maintenance, operating schedules, seasonal budget, etc.

3. It is strongly recommended that the Planning, Programming and Budgeting System (P.P.B.S.) which requires a strong co-ordination between the economists and specialists concerned, would be appropriate for application to the airline's operations.

The adoption of this P.P.B.S. would be beneficial for the company, mainly because it involves various areas of interest in relation to the planning and control functions e.g. cost benefit analysis and the identification of the social costs and benefits resulting from a programme. More specifically, it would help the airline's top management to develop many areas of its activities such as:

- a- determining the company's objectives and performance indicators;
- b- evolving strategic and action programmes for

improvement;

- c- paying more attention to considerations of all-round effectiveness, in that the main thrust of the system is towards the achievement of planned objectives and efficiency of the auditing function;
- d- identifying and analysing performance problems which impede the development of the services presented; and
- e- developing the internal control process.

Thus, the P.P.B.S. is considered not only as tool for planning or budgeting purposes, but also for the implementation and control process.

4. The problem of over-manning should be given immediate consideration by the Egyptian authorities. Also, the enhancement of training programmes, with particular emphasis being placed upon the middle and bottom management levels of Egyptair should be seriously considered.

5. Participation of the airline's staff is necessary for the success of the plan. Not only the government authorities concerned, but also Egyptair should consider this fact and take a step towards the application of this policy.

6. A reasonable link should be established between the company's departments for better understanding and cooperation, consequently improving the effectiveness of the financial planning and control systems.

7. For more effective control and greater accountability, a management accounting package including frequent and

effective reporting system is essential.

8. The main objective of the cost accounting system, specifically, a marginal costing system, based upon standard cost, is to provide the management concerned with the financial and non-financial information needed in order to plan and monitor its activities effectively. Admittedly, such a system is being considered as the most suitable for planning, controlling and decision-making\_purposes. Thus, a proper cost accounting system for the airline is urgently required.

9. The adoption of a new market-place performance unit/department, would be useful for Egyptair if it could be introduced. The implementation of this unit/ department, which forms a link between the airline's board and the departments involved in the planning function, would enable the company, for example, to:

- a- monitor the standard of operations and services throughout the world;
- b- provide information regarding e.g. aircraft acquisition and the utilisation of the available fleet; and
- c- take part in developing the overall planning and internal control functions within the airline.

10. Because Egyptair is publicly owned, some routes have been operated for political reasons, not on an economic basis. Thus, it is suggested that the state should take this

into account and consider special treatment for Egyptair e. g. more facilities, exemption from certain official rules, financial support, etc. to compensate for the political aspects of its operations.

11. Particular consideration must be given to a revision of the company's free-ticket policy.

12. Concerning the utilisation of the company's fleet, it is suggested that the operating capacity of the route sector should be fully absorbed.

13. The Egyptian Central Agency for Auditing (CAA) and the Central Agency for Organisation and Administration (CAOA) should give special attention to revising and adjusting the procedures and the government regulations U.A.S. in accordance with the nature of the airline's operations. might include setting a new purchasing policy, This simplifying the process for approving the company's financial statements and modifying the rules regarding e.g. the such elements as depreciation of the company' fleet, perhaps by considering the aircraft productive unit, flying hours, as a basis for calculating depreciation which may be more appropriate to the nature of operating aircraft.

14. It should be stressed that the assessment of the efficiency of airline activities would require more than merely an overall performance measure; a variety of efficiency criteria should be employed e.g. revenue- seats-kilometre, revenue- tonne- kilometre, available- seat-

kilometre and ratio analysis for financial and non-financial data, etc.

15. More emphasis should be given to internal rather than external control.

16. The external control system should be limited to one government body, the Central Agency for Auditing (C.A.A.) who monitors the implication of the U.A.S. to the state enterprises, rather than various government agencies e.g. Ministry of Finance, Ministry of Planning, Central Agency for Organisation and Administration and the National Investment Bank.

The CAA is the best and most powerful government department to meet this challenge because it has been given the power to control the planned social and economic projects and monitor their implementation in accordance with what was scheduled. Its responsibilities extend not only to the auditing of public funds, but also to developing performance evaluation indicators for these enterprises, as explained earlier, <sup>(1)</sup>

17. The company should be given more legal and executive authority to develop the efficiency of its services.

18. Computerisation of the airlines transactions and information should make a good contribution to the

(1) For more details, refer to section 7.7 in chapter seven.

development of information throughout the airline.

19. Regarding the government policy towards the exchange rate, it is recommended that Egyptair should be given the authority to apply the market rate to all its transactions rather than the prevailing rate. Further, it should also have a free hand in dealing with its retained foreign currency.

20. As a result of the government policy which allows public corporations or state departments to lend any of their staff to others for an indefinite period, their wages continuing to be paid by the original companies/ departments, the performance of these companies/ departments have been affected. Thus, this policy should be revised.

(ii) Recommendations for Both Egyptair and British Airways

1. In theory, internal control should be exercised through an integrated management control system. Thus,

(i) Egyptair must seek the adoption of a relevant MIS.

(ii) There is a need to develop and computerise B.A.'s MIS as some financial information is still prepared and processed manually, creating difficulty in preparing the control reports at the right time.

2. Regarding budgetary control, a budget prepared on the basis of flexibility and adaptability to unforeseen changes in the environment and internal structure, must be adopted

in parallel with a standard marginal costing system, which is necessary for the successful implementation of the budgetary control system.

3. This budget should be based upon the standard costs.

4. Because of the special nature of the industry's services, particular attention should be given to the following areas:

(i) it would be worth encouraging academic courses in relation to airline economics and accounting systems.

(ii) Study should be undertaken of the possibility of an international uniform accounting system applied to this industry, which could be arranged through I.A.T.A..

(iii) Failing this, a uniform system for the Middle Eastern airlines could be arranged through the Arab Accountants and Auditors Association and the Arab League: an example of such a system is that of the American C.A.B., which was discussed in chapter two. In the meantime, immediate attention should be given by the Egyptian CAA and other government bodies, to the airline's accounting problems and ways of overcoming them.

5. The use of accounting analysis techniques is highly recommended in relation to the assessment of performance i.e. break-even analysis, variance analysis, sensitivity analysis, ratio analysis, etc.

6. The managerial audit function should be employed in

parallel with the financial and compliance audit.

7. Cash budget analysis, as an essential techniques of the financial planning, should be used by both Egyptair and B.A. based upon a proper forecasting model.

8. It is strongly recommended that each company consider a convenient system for the allocation of responsibility in respect of the implementation of plans.

9. Emphasis should be placed on the use of forecasting techniques and operation research methods in order to plan operations effectively.

10. A greater emphasis on the use of accounting information for planning, monitoring and decision-making regarding operations is strongly needed.

11. Inflation has been a major problem, particularly in Egypt. Thus, because of the impact of inflation on airline operations it is recommended that both companies should take it into account at the time of preparing the annual budget.

12. The assessment of top management performance should be based upon the achievement of the planned economic objectives.

13. The classification of the departments or divisions of the two airlines into cost, investment and profit centres for the purpose of determining responsibility has been ignored. Therefore, it is recommended that this system

should be implemented in parallel with a degree of decentralisation. This would enable the management concerned to evaluate its department's or division's efficiency.

All in all, the research findings and conclusions drawn from both theoretical perspectives and empirical investigation make this study highly relevant. The recommendations of the study, it is hoped, will be an appropriate step towards the reform of the financial planning and control systems, especially in Egyptair.

Finally, for the benefit of policy-makers, planners and controllers, whatever their concern and interest and whether they represent the airline or the government, this study provides a new picture of effectiveness of planning and control systems and the impact of government policy on the overall performance of the airlines.

	APPENDIX 
PART ONE:	Interview Guide for both airlines: British Airways and Egyptair.
	Section (i) Financial Planning Procedures. Section (ii) Control Procedures. Section (iii) General Questions Concerning the Relationship between Financial Planning and Control Processes.
	Interview Guide for Government Authorities concerned.

# Introduction

The examination of the financial planning and control systems in both commercial airlines, B.A. and Egyptair, was achieved mainly by means of in-depth interviews. Thus, it was necessary to design interview guides for the airlines and for the government officials concerned. The following questions were used as a guide to survey particular aspects related to the objectives of this research. These covered the following major areas:

- (1) Financial Planning Procedures;
- (2) Control Procedures; and
- (3) The extent of Government influence on the airlines.

The interview guide is divided into two parts. The first part concerns the investigation of the procedures for financial planning and control employed by B.A. and Egyptair. The second deals with the examination of government intervention in the airlines' activities, particularly in the case of Egyptair as a public company.

It should be mentioned, however, that these questionnaires represent the basic guides for investigating the procedures concerned and some additional questions were raised during the interviews.

### PART "ONE"

## INTERVIEW GUIDE FOR BOTH AIRLINES; BRITISH AIRWAYS AND EGYPTAIR

# Section (i) Financial Planning Procedures

Statement:

This part aims to examine the current planning system in general, and in particular the financial planning process utilised by both B.A. and Egyptair. Thus, the following questionnaire has been designed to fulfil this purpose.

1. Do you have strategic objectives for the airline?

Yes No

2. If the answer is Yes, these objectives are:	
a. Maximising profit	
b. Paying sufficient dividend to	
shareholders	
c. Minimising the operations' costs	
d. Numbers a and b	
e. Numbers a, b and c	
f. None	
g. Others ( Please specify)	
3. Who decides on the resources which should be	used in
order to achieve these objectives?	
(Please specify)	

\_......

4. Do you think planning is important for the airline's operations ?



5. If yes, how important is it?

 Highly
 Fairly
 Most

 important
 important
 important

 Important
 Important
 Important

6. Do you have a planning system for the company?



- 7. If the answer is Yes, please tick the level of planning which is applied to your company?
  - i) Long-term planning: ten/ five-year plan.
  - ii) Medium-term tactical planning: two/three-year plan.
  - iii) Short-term planning (annual budget) one-year plan.
- 8. Does your company have a separate corporate planning department ?

Yes No

- 9. Could you please explain briefly the main responsibilities of this department?
- 10. Who decides on the tasks/ responsibilities that are to be performed for meeting the airline's objectives?

(Please specify)

\_........

#### Statement:

Once plans for the airline's activities e.g. fleet acquisition, other assets acquisition, scheduled flights, manpower, ground services, purchases, marketing, sales, etc. are prepared, funds will be required. Then, the company must set a financial plan in order to determine where the necessary funds are to come from. This called "Financial Planning". Thus, the following questions deal with the investigation of financial planning systems at the airlines concerned.

13. Does the airline have a financial planning system?

Yes No

14. If yes; Please describe the relationship between the strategic and financial planning?

\_.........

15. Do you think the financial planning is useful or could be useful for the:

(a) (b) (c) (d) Department Company as a whole Government All of them | | 16. How useful is it? Useful Extremely Not useful useful | | | | 1 1 17. What percentage of your time in the past year did you spend discussing or meeting with others on the financial planning ? Zero 1-25% 25-50% 50-75% 75-100% | | 18. What was the nature of activity? (Please specify) 19. How often are the financial plans prepared for the company/ department? Monthly Quarterly Half-yearly Yearly 20. In the process of financial planning, does the airline identify specific targets? Yes No 21. If yes, could you please state these targets? 22. After the identification of these targets, in which

area(s) is/are the detailed plan(s) normally required? \_........ 23. Does the airline use forecasting techniques at the time of planning? Yes No -----24. If Yes, please specify for what periods? a. Long-term b. Medium-term ---c. Short-term there any specific methods/ techniques 25. Are implemented? Yes No -----| | 26. If Yes, pleas specify? 27. For which of the following purposes does the airline carry out forecasts? a. Profit forecast \_\_\_\_ b. Sales forecast c. Variable cost forecast ---d. Fixed costs forecast \_\_\_\_ e. Debtors forecast ---f. Creditors forecast \_\_\_\_ q. Cash flow forecast \_\_\_\_ h. Others ----

28. Do these forecasts cover the whole planned period

concerned?

Yes No

29. Do you face the problem of examining a large number of alternatives?



30. If Yes, is it possible to evaluate precisely all these alternatives?



31. If Yes, please explain the process of evaluation and the criteria being used in this process?

\_........

32. Does the airline apply any quantitative techniques for project appraisal in order to determine the most promising project for better meeting the company's targets?

Yes		N	0
ľ		ł	

a. Pay-back period.
b. Discounted cash flow.
c. Rate of return.
d. Average rate of return on investment.
e. Others.
34. If discounted cash flow is employed, which technique

33. If Yes, please specify these techniques?

is being used?

a. Net present value

b. Others

35. Does the company prepare a capital expenditure budget?



----

\_\_\_\_

\_\_\_\_

36. If Yes, please explain its process?

- 37. Regarding fleet acquisition, what is the main factor considered?
  - a. Increase in operations and consequently the airline's sales -----
  - b. Reduction in the acquisition costs -----
  - c. Costs to be carried e.g. purchase price -----
  - d. Others -----
- 38. Is there government intervention/ influence on one or more of the following?
  - a. Determining the airline's objectives -----
  - b. Determining the planning system -----
  - c. Determining the way in which the company fiances its plan. -----

d. Does the government finance/ subsidise the airline?

Yes		N	0
1 I	L	1	1
L	I	I	1

- e. Documents/ data required for the government bodies use
- f. Fleet acquisition
- g. Manpower required

- h. Application of specific exchange rate to the airline's operations
   i. Operating certain routes
- j. Routes licences -----
- 39. Do you think that the government often interferes in the company's activities?

Yes No

40. Are you satisfied with the government objectives in this respect?

41. Does the company prepare a cash budget?

**42.** If Yes, how do you prepare it?

\_.....

43. Does the airline set its master budget on the basis of standardisation?

Yes No

44. If No, could you please indicate your view regarding the use of standardisation for planning purposes?

\_.......

45. Could you describe the annual budget process?

\_.....

46. Does the airline plan for manpower?



47. If yes, how do you prepare this plan?

\_........

#### Statement:

With regard to the participation and co-operation of management levels concerning the planning process, the following questions are essential to be examined.

48. Do you think there is co-operation between the management levels in in the airline in relation to planning procedures?

49. If yes, please indicate whether this co-operation is between:

a -	Top-middle management	
b -	Top-lower management	
с –	Top-middle-lower management	

50. If yes, how effective is this co-operation?

Very effective	Effective	Not effective
''	· · ·	

51. In the company, the financial planning procedures or the way of setting up the financial plans are normally carried out by:

a. Laying down of the plans without discussion with the

different management levels

- b. Laying down of the plans with discussion with the different management levels -----
- 52. Do you determine a specific rate of return on investment for each planning horizon?



53. If Yes, please indicate whether this rate is for:

- a. Each department ----b. The airline as a whole ----c. Both ----d. I do not know ----
  - d. I do not know
- 54. Does the airline apply any quantitative techniques to its operation?

Yes		No	
		~~	
1	1	1	1
1 I	I	1	1



59. Does the planning department consider the exchange rate at the time of preparing the airline's budget?



\_\_\_\_

\_ \_ \_ \_ \_

60. If Yes, which exchange rate is applied?

- a. Free market rate
- b. Prevailing rate
- c. Other
- 61. Does the airline consider the inflation rate at the time of preparing the plan?



- 62. What are the benefits of applying such a financial planning system for each of:
  - a The company

\_......

- b The individual department
- \_\_.....
  - c The government

\_\_....

**63.** Do you have any intention to change your current approach to financial planning?

Yes		N	Э
!	!	!	!
I	i	1	

64. If Yes, please explain why?

Statement:

In order to to achieve the company's planned targets, a proper internal control system should be incorporated. Thus, the following questions are related to the investigation of such a system being implemented at the airline concerned.

65. Does the airline use a budgetary control system?

Yes		N	0
!	!	i.	
1	1	1	

66. If Yes, is the budgetary control process linked with the overall planning system?



67. If Yes, could you explain this relationship?

68. Does the company use any of the following budgeting systems?

a. Flexible budget

b. Inflexible budget

- Sudget -----
- 69. If a flexible budget is used, please specify the activity levels on which the flexible budget is based

\_......

70. Does the airline adopt a cost accounting system? Yes No | | | | | -----

71. If Yes, which of the following systems is implemented?

a. Absorption costing system
b. Marginal costing system
72. The applied cost accounting system is based upon:
a - Actual performance
b - Estimated performance
----c - Standard performance

73. Is the costing system correlated with the budgetary control system?

Yes No

74. What is the main purpose of adopting such a costing system?

75. If the company has not yet employed such a system, could you please specify the reasons?

76. Is there any relationship between the budgetary and costing system and the internal control process at the airline?



77. If Yes, please explain this relationship?

78. Does the company classify the operating costs?

Yes No

79. If Yes, the operating costs are classified into: a. Variable costs \_\_\_\_ b. Fixed costs \_\_\_\_ c. Semi-variable costs \_\_\_\_ d. Semi-fixed costs 80. If the costs have been classified, then the method used to determine the cost variability is: a. Engineering or analytic approach \_\_\_\_ b. Account analysis approach \_\_\_\_ C. Statistical regression analysis 81. Does the airline have a separate costing department? No Yes -----82. If Yes, what are the major responsibilities of this department? 83. If Yes, does this department allocate costs to: a. Each of the airline fleet b. Each operating routes c. Each department \_\_\_\_ d. There is no such system for costs allocation \_\_\_\_

84. Regarding the management control system, does the airline employ such a system?

Yes		No	C
I.	I.	i	ļ
1	1	1	1

85. If Yes, please explain the process of this system?

86. Does the company utilise a management information
 system (MIS)? Yes No



87. If Yes, could you identify the main elements of this system?

\_.........

88. What are the non-controllable variables?

89. Are there any complaints of difficulty in obtaining from the existing accounting system, information required either for planning or control purposes?

Yes No

90. If Yes, pleas explain these difficulties and the reasons for them?

\_......

91. Do the airline's departments, particularly the finance department, have any difficulty in the application of the current accounting system rules to the financial transactions?



92. If Yes, please clarify.

\_......

93. Do you prepare any reports/ statements according to the information provided by the accounting system?



94. Do these reports/ statements reflect the actual performance compared with what was planned?



95. Do you think the accounting system is adequate for the airline in terms of its ability to provide the information required for planning and control?

Yes		No
	 i	

96. If Yes, how adequate is it?

 Very adequate
 Adequate

 \_\_\_\_\_\_
 \_\_\_\_\_\_

 |
 |

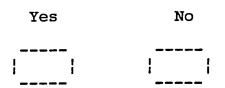
97. Do you analyse variances of the actual performance from the budget figures?



98. If Yes, please indicate whether variances have been analysed in order to:

b Device the budgeted figures and modify them	
b. Revise the budgeted figures and modify them	
if necessarily	
c. Measure and evaluate the performance of	
departments	
d. For the purpose of control	
e. Other purpose	

99. Does the airline adopt criteria for assessing either the top management or the departments' efficiency?



100. If Yes, please specify the company's performance measures?

<u>\_</u>......

101. Do you take corrective action (s) On the basis of variance analysis?

Yes No

102. Do you have a profit planning programme?

Yes		No	
-		ł	-

103. If Yes, this programme is for:

a -	The airline	
b -	Each department	
с –	Both	~

104. The traditional pattern of control process has been:

	a.	Top-down	
	b.	Bottom-down	
105	. Hav	e the airline's departments been considered a	s;
	a.	Investment centres	
	b.	Profit centres	
	c.	Cost centres	
	d.	Other	
	e.	None	
106.	The	reason(s) for these classifications is/are:	
	a.	To measure the departments' efficiency	
	b.	Control only	
	c.	Financial planning only	
	d.	A, B and C	
	e.	B and C	
107.	Does	s the company employ a system for designing	an
	actio	on plan? Ves No	

Yes		No		
1		ł		

108.	If	Yes, which of the following functions does it	serve?
	a.	To maintain strength	
	b.	To correct weakness	
	c.	Other	

Section (iii) GENERAL QUESTIONS CONCERNING THE RELATIONSHIP BETWEEN FINANCIAL PLANNING AND CONTROL PROCESSES

109. Is there any link between the financial planning and control system at the airline?



110. If No, please indicate the gap and recommendations for development.

111. Does the company have a model(s) for;

- a. Planning in general
- b. Especially for financial planning \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_

\_\_\_\_

- c. Management control purpose
- d. A, B and C
- e. B and C
- f. None

c. Both

112. Do you usually exchange important information within the airline for financial planning and control purposes?

Yes No

- 113. If Yes, please tick the appropriate answer. This exchange is for:
  - a. Financial planning purpose only -----
  - b. Control purpose only ----

114. Do you consider any modifications to the airline

financial plans during the planning period, if necessary?

Yes		Ne	D
ł	ł	ł	ł

115. Doe	s the	airline	employ	either	of	the	following
ana	lysis:						
a.	Break-ever	n analys	is				
b.	Sensitivi	ty analys	is				
116. If	either of	f these	techniq	ues is a	applie	d, pl	lease
expl	ain how an	nd why.					
	•••••	• • • • • • • • • •		•••••			• • •
117. On	what basi	is are the	e planni	ng staff	chose	n?	
a.	Length of	E experie	nce				
b.	After giv	ving spec:	ial train	ning			
c.	Other						
118. Do	you apply	y a comput	ter syste	em to th	ne ai	rline	
oper	ations?	77.		Na			
		 	es 	No	<b>-</b> .		
		¦	!	¦ 	-		
119. If	No, could	l you plea	ase expla	ain why?			
							•••
120. Gen	erally,	regardi	ng the	e fina	ancial	pl	anning
and	control	procedui	res at	the air	cline,	how	would
rate	them?						
a.	Very suit	able					
b.	Fairly su	itable					
c.	Slightly	suitable					
d.	Suitable	to some e	extent				

e. Not suitable

- 121. How important do you think it is, that the adopted financial planning and control processes should be changed:
  - a. Very important \_\_\_\_\_

\_\_\_\_

\_\_\_\_

- b. Important -----
- c. Not important
- 122. Could you please explain the relationship between Egyptair and the government authorities such as: Ministry of Civil Aviation, Ministry of Planning, Ministry of Finance, Central Agency for Auditing, Civil Aviation Authority, CAPMAS and National Investment Bank?

123. Do you have any role regarding fixing the air fares?



Yes		No	
		~~~·	
!	!	!	!
I	I	I	I

#### PART (TWO)

### INTERVIEW GUIDE FOR GOVERNMENT AUTHORITIES

Statement:

With regard to Egyptair as a state company, different government authorities are involved. Thus part of the interview guide aims to examine the extent of government influence on the airline and its objectives. Thus, the following questionnaire covers this area.

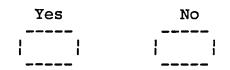
 Could you please explain the relationship between the authority and Egyptair?

\_......

2. What are the objectives that the government wants to be achieved by the airline?

\_\_....

- 3. With regard to the preparation of the five-year plan/ the annual budget for the company, what is the major role of the authority?
- 4. Does this have any impact on Egyptair's financial planning and control processes?



\_\_\_\_\_

5. If yes, the impact of this policy on the airline performance is:

a. Beneficial -----

b. Detrimental

6. Could you please state the official requirements

regarding setting such a plan for the airline?

6. Could you describe the planning process concerning the approval of the five-year plan and the annual budget?

\_.....

7. Could you please explain the follow-up system you apply to the airline's operations?

8. Does the authority receive any complaints from the airline regarding the planning and external control processes?

9. If Yes, please provide some examples.

\_....

10. Could you please describe the basis on which the airline's productivity is assessed?

11. By what sort of reporting system is information required for following-up purpose collected from the company?

\_......

12. Please indicate how you make a judgement as to whether or not the airline's productivity is satisfactory?

\_......

13. Could you please explain the basis on which corrective action (s) is (are) undertaken?

\_......

- 14. How accurate and adequate is the information provided by the company regarding setting the plan/ budget and its performance?
  - a. Very accurate-----b. Accurate-----c. Not very accurate-----d. Adequate----
    - e. Inadequate -----
- 15. How important do you think it is, that the current planning and control processes should be changed?
  - a. Very important-----b. Important-----c. Not important-----
- 16. What is your opinion concerning the political operation of some of the airline's routes?

\_.....

17. Do have any further comments?

=.....

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