

THE UNIVERSITY OF HULL

ACCOUNTING, RESOURCE ALLOCATION, PLANNING AND EFFICIENCY:
CASE STUDIES OF THE UNITED KINGDOM AND IRAQI UNIVERSITIES

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by

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This work is dedicated to all those whose continuing concern, support, and love sustained me during its preparation.

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ABSTRACT

This study investigates the accounting, resource allocation, planning and efficiency of UK and Iraqi universities, concentrating on the efficiency with which universities manage their resource allocation in practice, which is seen in relation to university funding, goals and objectives, and governance. It evaluates financial planning and fund monitoring in UK and Iraqi universities in order to identify ways of improving their efficiency in these areas. In addition, a comparison is made between the two systems in terms of the efficiency or otherwise of their accounting and resource allocation. The study is structured as follows:

PART ONE: THEORY AND METHODOLOGY

This reviews the background to the research and contains three chapters.

CHAPTER ONE: Introduction and purpose of the study.

CHAPTER TWO: Review of literature on the concept of efficiency and the role of accounting.

CHAPTER THREE: The research methodology

PART TWO: UNITED KINGDOM UNIVERSITIES

A variety of literature on higher education is discussed as a background to this research. **CHAPTER FOUR:** Covers higher education in the United Kingdom. The accounting system of the public sector and universities in particular is discussed in **CHAPTER FIVE:** The practice and evaluation of the public sector accounting system in the United Kingdom. These background chapters serve to introduce **CHAPTER SIX:** Efficiency in UK universities - a case study, which attempts to analyse the efficiency of universities in relation to the influences of central government, the University Grants Committee(UGC), the Committee of Vice-Chancellors and Principals (CVCP), University goals and objectives, and

the governance of universities. The efficiency of university financial planning, resource allocation and fund monitoring is the focus of CHAPTER SEVEN: Accounting, resource allocation and planning in UK universities, in order to identify ways of improving their efficiency in these areas.

PART THREE: IRAQI UNIVERSITIES

Background information is presented in a discussion based on literature and documentary evidence; CHAPTER EIGHT: Higher education in Iraq, and CHAPTER NINE: Accounting in developing countries and Iraqi public sector accounting and finance. Following these chapters is a discussion of the empirical investigation based on a structured questionnaire which forms CHAPTER TEN: Administrative efficiency of Iraqi universities, a case study, and CHAPTER ELEVEN: Accounting and financial efficiency of Iraqi universities. Suggestions for improvement are made in this chapter. CHAPTER TWELVE: A broad normative analysis of the Iraqi universities' case study.

PART FOUR: COMPARISON BETWEEN THE UNIVERSITIES OF THE UNITED KINGDOM AND IRAQ

A broad comparison of the findings of the study and what has been learned from the previous chapters is made in CHAPTER THIRTEEN: University accounting, resource allocation, planning and efficiency in United Kingdom and Iraqi universities.

The appendices to the thesis are as follows:

- Appendix No. 1: Question Guide
- Appendix No. 2: The Exchequer and Audit Department Acts
- Appendix No. 3: Form 3
- Appendix No. 4: Report of the Auditors to the members of Court of the University of Hull
- Appendix No. 5: Accounts chart of the Uniform Accounting System in Iraqi universities

Definitions

Bibliography

TABLE OF CONTENTS

	<u>Page</u>
ACKNOWLEDGEMENTS	i
ABSTRACT	ii
TABLE OF CONTENTS	iv
LIST OF FIGURES	xii
ABBREVIATIONS	xv
<u>PART ONE: THEORY AND METHODOLOGY</u>	
<u>CHAPTER ONE</u> INTRODUCTION AND PURPOSE OF THE STUDY	2
1.1 INTRODUCTION	3
1.2 BRIEF INTRODUCTION TO THE GENERAL PLANNING, RESOURCE ALLOCATION AND FINANCING OF UNIVERSITIES IN THE UNITED KINGDOM	3
1.2.1 The legal basis of the United Kingdom universities	5
1.2.2 United Kingdom universities' administration	5
1.3 INTRODUCTION TO AND ESTABLISHMENT OF IRAQI AND ARAB UNIVERSITIES	10
1.3.1 The university and government in the Middle East	11
1.3.2 Nationalism and independence as factors in higher education	11
1.3.3 The legal basis of universities	13
1.3.4 Higher governance of the universities	14
1.3.5 A brief survey of Iraq's higher educational development	15
1.4 BRIEF CHARACTERISTICS AND PROBLEMS OF NON-PROFIT MAKING ORGANIZATIONS	17
1.5 THE PURPOSE OF THE THESIS	19
1.6 THESIS STRUCTURE	20
<u>CHAPTER TWO</u> REVIEW OF LITERATURE ON EFFICIENCY AND THE ROLE OF ACCOUNTING	22
2.1 INTRODUCTION	23
2.2 ECONOMIC EFFICIENCY AND ITS DEFINITION	23
2.3 EFFICIENCY AND AUDITING IN THE PUBLIC SECTOR	27
2.4 EFFICIENCY AND ACCOUNTING SYSTEMS	30
2.5 UNITED KINGDOM HIGHER EDUCATION EFFICIENCY	34
2.6 DEVELOPING COUNTRIES' ACCOUNTING AND FINANCIAL MANAGEMENT EFFICIENCY	43

	<u>Page</u>
2.7 ECONOMY, EFFICIENCY AND EFFECTIVENESS AND THEIR IMPORTANCE TO ORGANISATIONS	48
2.7.1 Effectiveness and the public sector	50
2.7.2 'X' inefficiency and the public sector	58
<u>CHAPTER THREE THE RESEARCH METHODOLOGY</u>	64
3.1 INTRODUCTION	65
3.2 A BRIEF CASE STUDY BETWEEN THE UNITED KINGDOM AND IRAQI UNIVERSITIES	65
3.2.1 Iraqi universities	67
3.2.2 The governance of universities and their efficiency in the use of their resources	70
3.2.3 The background to strategic planning and the decision-making process	71
3.2.4 Planning, resource allocation and the monitoring process	72
3.3 THE CASE STUDY METHOD	76
3.4 METHODOLOGICAL APPROACHES AND DATA COLLECTION	77
3.4.1 Pre-collection, review of literature and interview outline	78
3.4.2 The United Kingdom's case studies information collection	78
3.4.3 Iraqi case study information, interviews and collection of available information	79
3.4.3.1 The population of interviewees and the outline of research	80
3.5 THE CURRENT RESEARCH LIMITATIONS	82
3.6 PRE-FINDINGS OF THE QUESTION GUIDE OF THE UNITED KINGDOM AND IRAQ CASE STUDIES	83
<u>PART TWO: UNITED KINGDOM UNIVERSITIES</u>	
<u>CHAPTER FOUR THE UNITED KINGDOM'S HIGHER EDUCATION</u>	85
4.1 INTRODUCTION	86
4.2 DEVELOPMENT OF HIGHER EDUCATION	86
4.3 THE GENERAL EDUCATION SYSTEM AND ITS FUNDING	89
4.4 THE UNIVERSITIES OF THE UNITED KINGDOM	92
4.4.1 Universities' internal government	92
4.4.2 The tasks of United Kingdom university officers	94
4.4.3 Administrative structure	95
4.4.4 University academic year	95
4.4.5 United Kingdom's university degrees	96
4.4.6 United Kingdom student admissions	96
4.4.7 United Kingdom universities' curricula programmes	98
4.4.8 Academic staff	100
4.4.9 Research commitment in universities	101
4.4.10 Current statistics	101

	<u>Page</u>
4.5 EXTERNAL ENVIRONMENT OF UNITED KINGDOM UNIVERSITIES	106
4.5.1 The Committee of Vice-Chancellors and Principals (CVCP)	109
4.6 HIGHER EDUCATION FUNDING AND EXPENDITURE IN THE UNITED KINGDOM	111
4.7 SUMMARY	116
X <u>CHAPTER FIVE</u> PUBLIC ACCOUNTING SYSTEMS IN THE UNITED KINGDOM	118
5.1 INTRODUCTION	119
5.2 GOVERNMENT ACCOUNTING SYSTEMS	119
5.2.1 The consolidated fund	122
5.2.2 National loans fund	123
5.2.3 Constitutional principles	123
5.2.4 Government financial procedures	124
5.2.5 Form of the estimated accounts	125
5.2.6 Government taxation	126
5.2.7 Accounting for departmental spending	127
5.2.8 Appropriation accounts	128
5.2.9 Role of the treasury	129
5.2.10 Trading accounts	130
5.2.11 Stores accounting, inventories	130
5.2.12 United Kingdom public sector accounting evaluation	130
5.3 LOCAL GOVERNMENT ACCOUNTING	<u>132</u>
5.3.1 Accounting in local authorities	133
5.3.2 Current developments in local government accounting and auditing	135
5.4 ACCOUNTING IN HIGHER EDUCATION	
5.4.1 Brief introduction to university grants system	137
5.4.2 The quinquennial system	139
5.4.3 The annual system	140
5.4.4 Value added tax	142
5.4.5 Academic and related staff	143
5.4.6 Conditions of service	144
5.4.7 Other university staff	145
5.5 UNIVERSITY ACCOUNTING PRACTICE	146
5.5.1 University accounts forms	150
5.5.2 University costing	152
5.5.3 University teaching and research forms	154
5.5.4 University statistical records	155
5.6 SUMMARY	
<u>CHAPTER SIX</u> EFFICIENCY IN UNITED KINGDOM UNIVERSITIES - A CASE STUDY	159
6.1 INTRODUCTION	160
6.2 THE EXTERNAL INFLUENCES ON THE EFFICIENCY OF UNIVERSITIES	161
6.2.1 United Kingdom university finance	163

	<u>Page</u>	
6.2.2	United Kingdom universities after 1981	167
6.2.3	The efficiency of universities	170
6.3	INTERNAL PROVINCES OF UNIVERSITIES IN THE UNITED KINGDOM	177
6.3.1	Objectives of the universities of the United Kingdom	179
6.3.2	Functions of UK universities	181
	6.3.2.1 Range of academic activity	185
	6.3.2.2 Professional loyalties	186
	6.3.2.3 Participation and the tenure issue	187
6.4	THE GOVERNANCE OF UNIVERSITIES AND THEIR EFFICIENCY IN THE USE OF THEIR RESOURCES	189
6.4.1	Councils and senates	189
6.4.2	Committee systems and informal processes	192
6.4.3	Vice Chancellors, Pro-Vice-Chancellors and Deans	196
6.4.4	Heads of departments and academic staff	199
6.5	SUMMARY	206
<u>CHAPTER SEVEN</u>	<u>ACCOUNTING, RESOURCE ALLOCATION AND PLANNING EFFICIENCY IN UK UNIVERSITIES</u>	210
7.1	INTRODUCTION	211
7.2	A BRIEF INTRODUCTION TO UNIVERSITY FINANCE AND INTERNAL EFFICIENCY	212
7.3	UNITED KINGDOM UNIVERSITIES' PLANNING, RESOURCE ALLOCATION AND ACCOUNTABILITY IN PRACTICE	223
7.3.1	Universities' strategic and long-term planning	223
7.3.2	Criteria for resource allocation	225
7.3.3	The resource allocation process	227
7.3.4	Management accounting information	229
7.3.5	Responsibility for the resource allocation process	231
7.3.6	The universities' budgetary control	233
7.3.7	The accountability process in resource allocation	235
7.4	THE ACADEMIC DEPARTMENTS AND HOW THEY MANAGE THEIR RESOURCES	237
7.4.1	Authority of departments	238
7.4.2	Accountability of academic departments	238
7.4.3	Management style	240
7.4.4	The problems of departments	241
7.5	UNIVERSITY MANAGEMENT CONSTRAINTS AND THE COST CENTRE APPROACH	241
7.5.1	Performance indicators in universities	244
7.5.2	University internal planning	249
7.5.3	The identification of university goals and objectives	254
7.6	THE SCHOOLS COST CENTRE APPROACH	256
7.6.1	Financial accounting at departmental and school levels - a viewpoint for discussion	258
7.6.2	Cost centres and academic departments	264

	<u>Page</u>	
7.6.3	Cost centres and the accounting system	271
7.6.4	The organisation of university schools	276
7.6.5	Improvement of school resource allocation and planning	278
7.7	SUMMARY	281

PART THREE: IRAQI UNIVERSITIES

CHAPTER EIGHT HIGHER EDUCATION IN IRAQ 288

8.1	INTRODUCTION	289
8.2	PROBLEMS AND TRENDS IN ARAB AND IRAQI HIGHER EDUCATION-HISTORICAL BACKGROUND	289
8.3	IRAQI HIGHER EDUCATION	294
8.3.1	Development of higher education	295
8.3.2	The current reforms of higher education	296
8.3.3	Higher education organisation	298
8.4	THE GENERAL EDUCATIONAL SYSTEM	303
8.5	STUDENT ADMISSION REQUIREMENTS AND DEVELOPMENT	305
8.6	ACADEMIC STAFF	307
8.7	UNIVERSITIES' DEGREES AND DIPLOMAS	309
8.8	IRAQI UNIVERSITIES' CURRICULA	310
8.9	IRAQI FINANCE AND HIGHER EDUCATION	312
8.9.1	Financial allocation and ordinary budgets	313
8.9.2	The Iraqi universities' funds and their expansion	316
8.10	SUMMARY	319

CHAPTER NINE IRAQI ACCOUNTING IN THE PUBLIC SECTOR - HIGHER EDUCATION 320

9.1	INTRODUCTION	321
9.2	THE PROBLEMS OF ACCOUNTING IN DEVELOPING COUNTRIES - A LITERATURE REVIEW	321
9.3	ACCOUNTING SYSTEMS IN IRAQI HIGHER EDUCATION	332
9.4	IRAQI GOVERNMENT ACCOUNTING AND ITS CONSTRAINTS	333
9.4.1	The classification of the government budget	336
9.4.2	The roles of the Ministry of Finance in the development of accounting systems	339
9.4.3	Government general treasury	340
9.4.4	Problems in government accounting	341
9.5	UNIFORM ACCOUNTING SYSTEMS	345
9.5.1	The uniform accounting system in Iraq	348
9.5.2	The uniform accounting system of universities	349

	<u>Page</u>	
9.5.3	The budget process in the universities	354
9.5.4	University journals and records	358
9.5.5	The reporting system in higher education	359
9.6	THE ACCOUNTING SYSTEM IN THE PRIVATE SECTOR AND ITS RELATION TO HIGHER EDUCATION	361
9.7	SUMMARY	362
<u>CHAPTER TEN</u>	IRAQI UNIVERSITY ADMINISTRATION AND EFFICIENCY IN THE USE OF RESOURCES	364
10.1	INTRODUCTION	365
10.2	THE EXTERNAL INFLUENCES ON THE EFFICIENCY OF UNIVERSITIES	366
10.2.1	The effect of Iraqi ministries on university finance after 1970	367
10.2.2	University accounting and financial efficiency	374
10.3	THE INTERNAL INFLUENCES ON UNIVERSITIES IN IRAQ	380
10.3.1	The objectives of Iraqi universities	382
10.3.2	The function of Iraqi universities	384
	10.3.2.1 Range of academic activities	386
	10.3.2.2 Professional loyalties	387
	10.3.2.3 Participation and the tenure issue	390
10.4	THE GOVERNANCE OF UNIVERSITIES AND THEIR EFFICIENCY IN THE USE OF THEIR RESOURCES	394
10.4.1	The council and the president of the university	394
10.4.2	Committee systems and informal processes	399
10.4.3	The councils of colleges	400
10.4.4	University administrative affairs	405
10.5	SUMMARY	409
<u>CHAPTER ELEVEN</u>	ACCOUNTING AND FINANCIAL EFFICIENCY OF IRAQI UNIVERSITIES	414
11.1	INTRODUCTION	415
11.2	THE BACKGROUND TO UNIVERSITY PLANNING AND INTERNAL EFFICIENCY	416
11.3	IRAQI UNIVERSITIES' PLANNING, RESOURCE ALLOCATION AND ACCOUNTABILITY IN PRACTICE	423
11.3.1	Strategic and long-term planning	424
11.3.2	Resource allocation criteria	426
11.3.3	Resource allocation	427
11.3.4	Management accounting information	430
11.3.5	Responsibility for the resource allocation process	433
11.3.6	Budgetary control	435
11.3.7	Resource allocation accountability process	438
11.4	THE ACADEMIC DEPARTMENT AND MANAGEMENT OF ITS RESOURCES	440
11.4.1	Authority of colleges	440
11.4.2	Accountability of colleges and departments	442
11.4.3	Colleges' management styles	442

	<u>Page</u>
11.5 PLANNING AND RESOURCE ALLOCATION IN IRAQI UNIVERSITIES AND PPBS	444
11.5.1 A consideration of deficiencies in the current planning, resource allocation and accounting system	444
11.5.2 Brief definition of planning programming budgeting system (PPBS)	447
11.5.3 Annual planning and PPBS	449
11.5.4 The uniform accounting system	451
11.5.5 Brief comparison between current auditing practices and the application of PPBS	452
11.5.6 Comparison between the universities' present system and PPBS	454
11.6 THE APPLICATION OF PPBS IN UNIVERSITIES	456
11.6.1 The application of PPBS in colleges and departments	459
11.6.2 Funding to academic departments	463
11.7 SUMMARY	466
<u>CHAPTER TWELVE</u> BROAD NORMATIVE ANALYSIS OF THE IRAQI UNIVERSITIES' CASE STUDY	
12.1 INTRODUCTION	473
12.2 THE SIGNIFICANCE OF THE LITERATURE REVIEW OF THIS STUDY	473
12.3 THE APPROACH TO CONDUCTING THE CURRENT RESEARCH	475
12.3.1 Institutional background	477
12.3.2 The governance of universities and efficiency in the use of their resources	479
12.3.3 Universities at work as a background to planning	483
12.3.4 Planning, resource allocations and accountability in individual universities	485
12.4 SUMMARY	491
<u>PART FOUR: COMPARISON BETWEEN THE CASE STUDIES OF THE UNITED KINGDOM AND IRAQ</u>	
<u>CHAPTER THIRTEEN</u> UNITED KINGDOM AND IRAQI UNIVERSITIES' ACCOUNTING RESOURCE ALLOCATION, PLANNING AND EFFICIENCY	496
13.1 INTRODUCTION	497
13.2 THE EXTERNAL INFLUENCES ON THE EFFICIENCY OF UNIVERSITIES' ADMINISTRATION	498
13.3 THE INTERNAL ADMINISTRATION OF UNIVERSITIES	502
13.4 THE GOVERNANCE OF UNIVERSITIES AND THEIR EFFICIENCY IN USING THEIR RESOURCES	505
13.5 A BRIEF INTRODUCTION TO UNIVERSITY FINANCE, METHODS OF COLLECTION OF FUNDS AND INTERNAL EFFICIENCY	512
13.5.1 Funds collection system, potential internal changes and cuts of the United Kingdom	515

	<u>Page</u>
13.6 UNIVERSITIES' PLANNING, RESOURCE ALLOCATION AND ACCOUNTABILITY IN PRACTICE	517
13.6.1 Strategic and long term planning	518
13.6.2 Resource allocation criteria	520
13.6.3 Resource allocation procedures	521
13.6.4 Management information system	523
13.6.5 Responsibility of the resource allocation process	525
13.6.6 The universities' budgetary control	525
13.6.7 Accountability in resource allocation	528
13.7 ACADEMIC DEPARTMENTS AND HOW THEY MANAGE THEIR RESOURCES	529
13.8 EVALUATION OF EFFICIENCY IN UNIVERSITIES' PLANNING	532
13.9 BRIEF FINDING OF THE CHAPTER	536
13.10 THE LESSONS TO BE LEARNED FROM UK AND IRAQI UNIVERSITIES	541
13.10.1 The brief lessons from UK universities	543
13.10.2 University cost and responsibility centres	547
13.10.3 University accounting and the school system	553
13.10.4 The brief lessons from Iraqi universities	556
13.10.5 Iraqi universities and the application of PPBS	563
13.10.6 Universities' inventories and stores	566
13.11 WHAT THE UK AND IRAQ LEARN FROM EACH OTHER	567
13.12 IMPLICATIONS AND SCOPE FOR FURTHER STUDY	571
APPENDICES	576
Appendix No. 1: Questions Guide	577
Appendix No. 2: The Exchequer and Audit Departments Acts	588
Appendix No. 3: Form 3	601
Appendix No. 4: Report of the Auditors to the Members of Court of the University of Hull	624
Appendix No. 5: Accounts Chart of the Uniform Accounting System in Iraqi universities	644
DEFINITIONS	659
BIBLIOGRAPHY	664

LIST OF FIGURES

- 2-1 The Potential Scope of a Government Audit.
- 2-2 Properties of Performance Indicators in the United Kingdom Higher Education.
- 3-1 The Key Statements of the Question Guide and Sub-Questions of the Current Research.
- 3-2 Pre-finding of Questions' Guide of the United Kingdom and Iraqi Case Studies.
- 4-1 United Kingdom Universities.
- 4-2 Structure of the Education System in the United Kingdom.
- 4-3 University Curricula.
- 4-4 Full-time Teaching and Research Staff at Universities.
- 4-5 Student Numbers: 1978-79 to 1983-84.
- 4-6 Student Development at Universities.
- 5-1 The University of Hull Annual Report 1985/86.
- 5-2 The University Form 3 Finance.
- 6-1 Ratio of Expenditure on Higher Education to Total Expenditure on Education in European Countries.
- 6-2 University Input-Output.
- 6-3 Number of Faculties and Expenses.
- 6-4 Recommendations for Increased Council and State Effectiveness and Efficiency.
- 6-5 Governance of Universities in the United Kingdom and its Effectiveness and Efficiency.
- 6-6 Value for Money in Universities in the United Kingdom.
- 7-1A UCL Income 1979/80 to 1983/84 (at 83/84 Prices).
- 7-1B UCL - General Recurrent Income Publicly Funded.

- 7-2 Rate of Collection of Fees.
- 7-3 Resource Allocation: Recurrent and Non-Recurrent.
- 7-4 Accountability in Edinburgh University.
- 7-5 The Main Problems Facing Departments.
- 7-6 Department Grants 1987/88 (For Example).
- 7-7 Cost Centre of Academic Department or School.
- 8-1 Organisation Chart - Ministry of Higher Education and Scientific Research.
- 8-2 The General Education System.
- 8-3 Growth of Students in the Universities, Colleges and Technical Institutes.
- 8-5 Number of Academic Staff and Students and Total Ratio of Academic Staff to Students in Iraqi Universities for the Academic Year 1987.
- 8-6 Allocations of National Development Plans 1965-1982.
- 8-7 Public Expenditure on Education.
- 9-1 Universities' Uniform Chart of Accounts.
- 10-1 The Relationship between Central Government and University Accounting and Financial Efficiency.
- 10-2 The Ministry of Higher Education's Views on Efficiency in Accounting and Financial Systems.
- 10-3 Annual Regulations Concerning Allocation of Resources.
- 10-4 The Activities of Iraqi Universities.
- 10-5 Governance of Universities in Iraqi Universities and its Effectiveness and Efficiency.
- 11-1 The Process of Estimating the Financial Plan and Suggested Improvements.
- 11-2 Items 21 and 24 of the Law 55 of 1983 Defining the Colleges and Deans of Universities.

- 12-1 The Key Statements of the Questions Guide, Percentages and Contributors to the Current Research.
- 12-2 External and Internal Influences and Accounting, Finance, Objectives and Goals and Their Efficiency.
- 12-3 The Governance of Universities and Efficiency in the Use of their Resources.
- 12-4 Universities at Work as Background to Planning.
- 12-5 Planning, Resource Allocations and Accountability in Individual Universities.
- 12-6 The Aggregate Figure.
- 13-1 The United Kingdom and Iraqi Universities' Accounting and Financial Management; Broad Similarities and Differences and Their Efficiency

ABBREVIATIONS

AAA	American Accounting Association
AUT	Association of University Teachers
BIS	British Information Services
CBA	Cost Benefit Analysis
CBI	Confederation of British Industries
CIPFA	Chartered Institute of Public Finance and Accountancy
CVCP	Council of Vice-Chancellors and Principals
DES	Department of Education and Science
EEC	European Economic Community
FYP	Five Year Plan
GAAP	Generally Accepted Accounting Principals
GAO	General Accounting Office (US)
GCE	General Certificate of Education
ICAEW	Institute of Chartered Accountants in England and Wales
MBO	Management by Objectives
NUS	National Union of Students
OECD	Organisation for Economic Co-operation and Development
PAC	Public Accounts Committee
PESC	Public Expenditure Survey Committee
PPBS	Planning Programming and Budgeting Systems
PRCS	The Premature Retirement Compensation Scheme
THES	Times Higher Education Supplement
TUC	Trade Union Committee
UAP	Universities Authorities Panel
UCCA	Universities Central Council on Admissions
UCNS	Universities Committee for Non Teaching Staff
UFC	Universities Funding Council

UGC	Universities Grant Committee
UK	United Kingdom
USR	University Statistical Records
VAT	Value Added Tax

PART ONE

THEORY AND METHODOLOGY

This part reviews the background to the research and contains three chapters. CHAPTER ONE: Introduction and purpose of the study. CHAPTER TWO: Review of literature on efficiency and the role of accounting. CHAPTER THREE: The research methodology.

CHAPTER ONEINTRODUCTION AND PURPOSE OF THE STUDYContents

- 1.1 INTRODUCTION
- 1.2 BRIEF INTRODUCTION TO THE GENERAL PLANNING, RESOURCE ALLOCATION AND FINANCING OF UNIVERSITIES IN THE UNITED KINGDOM
 - 1.2.1 The legal basis of the United Kingdom universities
 - 1.2.2 United Kingdom universities' administration
- 1.3 INTRODUCTION TO AND ESTABLISHMENT OF IRAQI AND ARAB UNIVERSITIES
 - 1.3.1 The university and government in the Middle East
 - 1.3.2 Nationalism and independence as factors in higher education
 - 1.3.3 The legal basis of universities
 - 1.3.4 Higher governance of the universities
 - 1.3.5 A brief survey of Iraq's higher educational development
- 1.4 BRIEF CHARACTERISTICS AND PROBLEMS OF NON-PROFIT MAKING ORGANIZATIONS
- 1.5 THE PURPOSE OF THE THESIS
- 1.6 THESIS STRUCTURE

CHAPTER ONEINTRODUCTION AND PURPOSE OF THE STUDY1.1 INTRODUCTION

This chapter will briefly review the introduction and establishment of the United Kingdom's universities and the need for this current study. It will also give an introduction to Iraqi and Arab universities and show evidence of the need for this study. The chapter will also define the purpose of the study and outline its structure.

1.2 BRIEF INTRODUCTION TO THE GENERAL PLANNING, RESOURCE ALLOCATION AND FINANCING OF UNIVERSITIES IN THE UNITED KINGDOM

The concept of higher education in the United Kingdom was traditionally applied to universities only until publication in 1963 of the influential Robbins Report which included the higher levels of technological and managerial education as well as some of the work undertaken in colleges of further education and teachers' training colleges (King, E. 1975, p.232).

Before 1914, universities were largely self-supporting. However, the United Kingdom's financial problems after the first World War led the government to establish in 1919 the UGC (or University Grants Committee) as a standing committee of funding resources, whose major function was to advise the government of the financial requirements of the universities and then to administer the block grant between the universities. Gradually, the UGC has extended its involvement with the development of higher education to national requirements so that the financial expenditure of the universities is subject to the UGC's annual and quinquennial plans.

The present relationship between the government and the universities dates back to 1944 and the creation, under the Education Act of a Minister with almost absolute power, subject to parliament (Smith, L. 1965, p.11).

In 1949 national salary scales for academic staff were established to strengthen the relationship between the universities and government and at the same time the Treasury began to fund growth as well as maintenance (Kogan, M. 1975, p.196). The relationship thus became more definite and prospective. In 1952, for the first time, the University Grants Committee (UGC) asked for institutional predictions and bids for growth and by 1957 discussion took place on the future role of the universities in keeping abreast of American and Soviet plans for science and engineering. All of this was accompanied by a significant financial allocation for building and salaries (Kogan, M. 1975, p.196).

A more important change in government style occurred between 1967 and 1972 when the Department of Education and Science (DES) took over the Treasury role in funding higher education. The number of students admitted became the basis of the universities' claims for funding, and increasingly, the UGC created staffing ratios and subject policies which became the basis of the national policy of the universities as well as the public sector of higher education.

Although there is a strong relationship between government and universities in the United Kingdom, the literature shows that there has been continuous controversy between them over such issues as funds, manpower, education systems, etc. Sizer, J. (1987, p.9) analysed the development of the university sector of higher education during the post-Robbins Report period of expansion to the General Election in May 1979. He lays particular emphasis on the universities' increasing dependence on government funding, the financial pressures faced during the 1970s, and their impact on the UGC, on universities' autonomy, planning and resource allocation. Shattock, M. and Berdahl, R. (1984, p.471) who have reviewed UGC since its creation in 1919, saw the UGC in Britain and many other countries as a model piece of machinery for channelling funds from government to universities. In the past 60 years

there have been many changes and fluctuations in its relationships both with government and universities, and its effectiveness has varied, depending on the circumstances of the period.

1.2.1 The legal basis of the United Kingdom universities: The oldest universities in the United Kingdom, Oxford and Cambridge, were established in the twelfth and thirteenth centuries and, in both cases, their government lies entirely in the hands of the university members with no representative of any outside authority on any of its statutory bodies. In this respect, they differ from other universities in Britain.

Both universities are organised on a collegiate basis, and the relationship between the university and the individual colleges is delicate and complex. Individual colleges retain a large measure of independence from the authority of the university, in particular in the appointment of teachers and in the admission of students. With increasing dependence for funding on central government, Oxford and Cambridge are now exposed to the same problems and subject to the same constraints as the other British universities, though they continue to enjoy a reputation for science and scholarship which is unrivalled (Commonwealth University Yearbook, 1985, p.223).

Most United Kingdom universities derive their legal rights from royal charters or private acts of parliament which broadly outline their constitution. On the initiative of the universities these charters and acts can be supplemented, with the agreement of the Privy Council, within the framework of the charters. The universities may promulgate necessary additions to the charters in the form of statutes or ordinances, degrees, graces and regulations, e.g. to lay down entrance or degree requirements (BIS, 1973, p.21).

1.2.2 United Kingdom universities' administration: A number of writers, among them Rice, A. (1970, p.88), Brooks, G. (1973, p.431), Livingston, H.

(1974, p.169), Pickford, M. (1974, p.349) and Taylor, W. (1986, p.13), have discussed a variety of constraints and dilemmas facing universities in the United Kingdom, some of which are as follows.

Rice, A. (1970, p.88) classified the major constraints on task performance and administration as, participation in decision-making; the dependant culture of the educational process; tenure; the university and its society; the explosion of knowledge; the sophisticated demands of society; a decline in religious belief and standards of scholarship. He approached university constraints through a very broad spectrum but he mentioned that the basic dilemma in universities was a conflict of value systems. The values that give the highest priority to the life and well being of a single human being might not be the values that accompany the exploration of scientific discoveries and technological innovations (Rice, A. 1970, p.88).

Brooks, G. (1973, p.431) discussed problems facing the universities at a time of rapid introduction of new techniques and organisational structures of management. He established three points in his article, the first being that modernisation of United Kingdom universities had proceeded indiscriminately in response to immediate problems and not necessarily with regard to a comprehensive overall plan. Secondly, the substance of decisions had been little changed, despite the modernising of administrations and thirdly, the future development of administration in United Kingdom universities did not have an established pattern to follow. He reviewed many problems facing university administrations and mentioned that there were conditions that created a readiness for modernisation such as, growth, rising costs, demands for efficiency and accountability of universities, increasingly complex functions, the availability of new technology and skilled administrations, the desire to survive and, if possible, to do a better job (Brooks, G. 1973, p.436).

Pickford, M. (1974) described how university resources might be costed and concluded that

In so far as the gap represents a shortfall in information, it may be narrowed by injecting improved information into the decision-making process of the university. In this way, decision-making may become aware of the social cost of the university activities, and thereby be made more responsive to government pressure for greater efficiency in the use of resources.

Undoubtedly there has been pressure for universities to show their efficiency and it might be better if the universities in the United Kingdom are seen to be cooperating voluntarily towards that end rather than to resist and thereby invite a more direct form of governance (Pickford, M. 1973, p.360).

It does, therefore, seem that efficiency in the universities of the United Kingdom needs improvement and attention and the Report of the Steering Committee for Efficiency Studies in Universities, March 1985, p.44, stressed this when it stated

The value of the special studies is in indicating good practice and identifying weaknesses which prevent or limit effective management.

Areas to be studied included financial management, purchasing, building and plant maintenance and works, allocation and use of space, national data study, departmental profiles and performance indicators.

In addition, the Report strongly recommended researchers and universities to read and encourage more special studies in this and neighbouring fields. Therefore, this academic study is a contribution towards meeting this need, particularly in the requirements of the accounting and financial management areas, with particular reference to the United Kingdom and to developing countries.

Any public educational institution, which does not have to sell its product in the market, faces a problem in operational efficiency, particularly in public institutions where there is not even any agreement over what the product is. In commercial firms, the necessity to produce goods of a set quality and acceptable price to the consumer whilst still maintaining high profit levels, is the incentive to encourage efficiency. Unfortunately, there is no similar mechanism affecting the management of non-profit organisations such as universities (Dunworth, J. and Cook, R. 1976, p.154). Nevertheless they discussed an alternative budgetary system which they believed would result in a more efficient use of university resources by relating provision more closely to needs, and by giving users greater virement and therefore a stronger incentive to improve their own efficiency.

The foregoing has briefly reviewed the problems and constraints of university administrations, however there has still not been enough empirical investigation in this subject and specifically in accounting and financial efficiency.

Within public institutions consideration must be given to the efficiency of the various departments in making decisions on resource allocations and whether efficient or not the departments are sometimes required to take decisions which may involve major cutbacks and re-allocation of resources. Sizer, J. (1981, p.1) having pointed out this trend, went on to discuss the need for appropriate techniques and information to aid the decision-making process.

Clearly managements need a sound basis upon which to arrive at and justify such decisions; in particular they need to develop and employ appropriate methods for allocating resources and for subsequently assessing the performance of the component parts of their institutions. Inevitably, there is a demand for performance indicators which will aid, and possibly over-simplify, this process; and for relevant financial information for planning, decision-making and control.

However, there are more than financial dilemmas of the United Kingdom universities. Taylor, W. (1986, p.13) defined the "crisis in the universities" in the United Kingdom. Yet universities in many Organization Economic Co-operative Developed (OECD) countries today confront similar problems. These include:

1. Increasing demands on the universities to contribute to the reconstruction and growth of increasingly knowledge-based national economics, whilst also coping with the pressures caused by government attempts to control public spending, actual or incipient demographic downturn, diminished perceived legitimacy, and the alternation of rapid growth and contraction.
2. Doubt about government's continued ability and willingness to fund all state-supported universities to fulfil a wide range of expensive research, teaching and service functions - and, in some countries, whether capacity and resources exist to maintain appropriate academic standards, in all the universities that now exist.
3. Identifying and legitimizing the distinctive tasks of universities as compared with polytechnics, colleges of advanced education and other higher education institutions within diversified post secondary systems - and, in some countries, assessing the implications of differences in status and success among universities themselves.
4. Dealing with pressures upon universities to adapt their activities to short-term occupational, technological and economic needs, and evaluating the effect of more utilitarian concepts on the humanities and social science.
5. Minimizing the consequences of possible conflict between academic and scholastic priorities and the interests of business and commerce, at a time when academic institutions are increasingly dependent on industrial funding and research links.

6. Adapting courses and structures to the needs of a clientele that in comparison with the past is older and contains a larger proportion of part-time and female students and those with job experience.

7. Devising new strategies to enhance educational opportunities, limit the length of courses and reduce wastage.

Yet little has been said about the precise nature of modernization in universities of the United Kingdom or its educational political effects (Brooks, G. 1973, p.43). Accounting budgets and financial decisions in central government administration have been largely ignored, and in consequence many areas of public sector activity, including universities. (Briston, R. 1981, p.477). Some papers have been published discussing the efficiency of universities in the UK, for example those by Bramley, G. (1986), Cowan, J. (1985) and Lefrance, R. (1982). Research has been insufficient, non-empirical, and not comprehensive. However, the belief has been expressed that university education is economically inefficient (Cootner, R. 1974, p.217) and in 1984, the UGC in Britain were asked by government to plan for a 15 per cent cut in resources over the next ten to twelve years (THES, April 13, 1984, p.7).

These, then are some of the constraints and problems surrounding accounting and financial management in United Kingdom universities. They will be discussed in more detail in the case study of the United Kingdom universities, Chapter 6 of this thesis.

1.3 INTRODUCTION TO AND ESTABLISHMENT OF IRAQI AND ARAB UNIVERSITIES

The education sector in Iraq and other Arab countries apart from its educational importance is one of the most important economic sectors. In Iraq, the increase of the total educational expenditure between 1976 and 1980 was quite marked, increasing by almost 45 per cent. Although expenditure

decreased after 1980, it is still higher than in 1976 (UNESCO, Statistical Year book, 1986, p. iv-12). Later chapters in this study will explain the development of education in Iraq in more detail; this part generally reviews the history and establishment of Iraqi and Arab universities.

1.3.1 The university and government in the Middle East: The last fifty years or so have brought about great modernisation in the Middle East, largely due to external forces: economic, technological, military, social and religious. Much took the form of gradual adaptation, but sometimes involved violent, radical revolution, which has resulted in considerable unrest and instability in the Middle East.

The universities of the Arab world were established and have grown in this climate, and have inevitably been influenced by the general social and cultural environment, and by the policies and attitudes of the governments. The interaction between governments and universities is of great importance to both. The fact that most modern universities in Arabian countries are new, in the sense that they have not yet succeeded in crystallising their academic traditions; that their role is not always fully understood by the public, and not even by the government; and that it is a time of repeated crisis, all create a fluid situation in the relationship between the government and universities.

1.3.2 Nationalism and independence as factors in higher education: At the end of the First World War the release of the Arab countries from the Ottoman Empire and their occupation by France and Britain stirred the people to desire higher education. In Egypt, the authorities proposed the formation of a university in 1921, before independence which was declared in 1922. A constitution was adopted in 1923, and a state university was founded in 1925 under the name of the Egyptian University, since when three other state

universities and around forty institutions for higher education have been founded. This pattern has been repeated in almost all Arab states.

In Syria, after the Arab government was established in 1918, schools of medicine and law opened in 1919 and in 1923 they were incorporated into the Syrian University. In 1943, the Syrian government opened colleges of arts and sciences, engineering and later a college of education and agriculture, all incorporated into the Syrian University. Later, during the Union of Syria and Egypt, the colleges in the north were incorporated as the independent University of Aleppo.

Similar developments occurred in Iraq. The Ottoman Law School was opened by the occupying British Authority in 1919, due to the need for more lawyers and government officials, but also due to popular pressure. An attempt to open Al-al-Bayt University was rejected by the Ministry of Education as the project was thought to be immature. Instead, twelve professional and liberal arts colleges were set up by the Iraqi government over the next 35 years. In 1956 a law chartering the University of Baghdad was passed and the work to establish the university began in 1957. Later, due to demand, colleges were opened in Mosul and Basra, training professional people. Enrolments in public institutions outnumber those in private institutions by a ratio of 10-1. Five other public universities were founded in Iraq, including Mosul and Basra which were raised to university status.

Universities were founded soon after independence in Sudan (1956) and Libya (1955). Tunisia and Morocco founded universities shortly after independence based on earlier research institutes. Lebanon began establishing its state university in 1943, ten years after independence. However, the main proportion of enrolments there are in private higher education institutions and Lebanon is the only Arab country where the numbers enrolled in private institutions are higher than public institutions.

1.3.3 The legal basis of universities: Almost all public Arab universities are governed by laws equivalent to those of English and American universities. The oldest decree was in 1923 when the Syrian university was established, after which came a rapid succession of laws, as explained above.

Studies and reports by committees or expert advisors convened by Ministries of Education brought about many of the laws. New laws and amendments are usually put forward by the university authorities and approved by the state. Usually a state law exists for each university. The four modern universities in the United Arab Republic, however, had a collective law in force since 1954, which applied to all the state universities. This law was changed in 1956 and 1958 and recently has undergone another revision.

Laws usually set out the general rules of university education, covering aims of the university, finances and recognition as corporate bodies with autonomous status. They set out the administrative framework of the university, the boards and councils, and the principal administrative officers, stipulating the type, rank and qualifications of the staff.

Legislative and executive decrees or regulations back up these laws to ensure that the evolving academic, administrative and financial requirements are met. These laws, put forward by the university heads but finally approved by the head of state, usually cover clauses for the passing of regulations and setting the curricula and examination regulations, and determining the type of degree to be granted.

The universities must meet the needs of the University Council, the Ministry and the government simultaneously. Other important factors of university life are also decided upon by the state, usually recommended by university bodies, which include setting the budget and grants of the university, recruiting the staff, and their promotion and dismissal.

The university controls expenditure, subject to state regulations. Basically, the government grants universities special powers to run the university at their discretion, intervening only at the university's request. Only on two points does the state make the final decisions, which are setting the budget and recruiting new staff. It is worth mentioning that these two points include the establishment of new departments and the designation of the appropriate curricula. Sudan is an exception in this respect, in that staff are recruited only by the University Council.

1.3.4 Higher governance of the universities: University control can take several forms. Usually public universities are under the jurisdiction of a Cabinet Minister, who is normally the Minister of Education, and in most cases heads the university.

Thus, the University of Baghdad was attached to the Council of Ministers and the university president was given the powers, salary and rank of a minister, and was able to attend the Council of Ministers when university topics were being discussed. The Academic Council and the University Council in a combined session nominates the president of the university, who is recruited by decree by the President of the Republic. The two councils decide on university matters including the curriculum, except in the case of personnel matters, which are subject to another authority. The Council of Ministers approves all senior and other staff of the university.

When Mosul and Basra Universities were created, a higher University Council was established to co-ordinate the policies, regulations and plans of each university and to supervise the private and foreign universities and higher institutions in the country.

A board of trustees manages the finances of the Jordan University and protects its autonomy, nominates its presidents, and with the University

Council, shares the decision to found new colleges. This University Council has overall jurisdiction on all internal matters of the university. The academic staff, together with the president and deans, are appointed by royal decree, which means that the Council of Ministers gives its approval, so that in Iraq and Jordan, recruitment of academic personnel is subject to government approval.

The University of Khartoum is governed by a Council, a Senate, a Chancellor and a Vice-Chancellor (President) similar to British constitutions. The Council is made up of 31 people and has a wide representation from the government and public bodies, and from the academic staff and professional people. It is a corporate body which administers the property and finances of the university, elects the Chancellor and with the Chancellor's consent, appoints the Vice-Chancellor. The Council also recruits and terminates employment of the academic staff upon recommendation from the University Senate. The Senate is made up of academic personnel only and deals with internal and academic matters of the university.

1.3.5 A brief survey of Iraq's higher educational development: Iraq is wealthy in natural resources, but is still considered to be an underdeveloped country and its natural and human resources are not fully utilised. The government's role in the past was confined mainly to keeping order inside the country and protecting its sovereignty. However, in the last two decades after the nationalisation of the oil industry the government has become more involved in the country's political, economic and social affairs. It has drastically increased investment in all sectors of the economy and has drawn up quinquennial plans as well as regular annual plans, such as the higher education plan and its affiliated universities' financial plan created early in the 1970s. Indeed, Iraq has drawn up long-term plans with three alternatives stretching to the year 2000. Notwithstanding the increased investment

political, social and other factors are still adversely affecting the development of Iraq and this is partly due to the lack of planning and control of human resources. Furthermore, higher education planning in Iraq is still very backward. However, the government is now fully aware of the dangers of this and major efforts are being made to remedy the situation. In addition, the traditional accounting and financial information systems in Iraq's higher education institutions are both primitive and archaic (Ghazoui, R. 1977). There has been little research directed towards solving the problems of higher education accounting and financial management.

Overall, it would seem that accounting and financial problems in Arab universities and higher education have been widespread. A UNESCO publication (1970, p.47) investigated this subject in more detail under the heading of "The Major Characteristics of Educational Financial Management". More recent writers who have touched on this subject include Al-Ebraheem, H. and Stevens, R. (1980) and UNESCO Publication (1984, p.23) The Future Development of Education in the Arab Countries. However, these are documentary publications and broad distribution. There is still a need for empirical and more specific investigation.

The legal basis of the educational system, including higher education, is regulated according to the Higher Education and Scientific Research Law No. 132 of 1970, which defines the activities of the Ministry of Higher Education and Scientific Research, the Council of Higher Education and Scientific Research and the universities, but higher education in Iraq still has problems which delay its potential to educate citizens and to train them in the modern sciences and technology.

There is much evidence indicating that university administration in Iraq and in specific accounting and financial management for example, needs to be improved in developing countries and these are clearly stated in general

studies by Seiler, R. (1966), Scott, G. (1970) and the American Accounting Association Committee on Accounting Education in the Third World (1978), and more specifically in studies by Mepham, M. (1967), Hilal, I.M. (1966) and Briston, R. (1978) and UNESCO (1970), while Al Kaissi (1977), Ala Saigh (1978), Saleem, M. (1981) argue that the accounting and financial fields in Iraq need improvement.

1.4 BRIEF CHARACTERISTICS AND PROBLEMS OF NON-PROFIT MAKING ORGANISATIONS

There is a general agreement that non-profit organisations, such as educational institutions, exist primarily to render a service to the people; and that top management decisions are intended to give the best possible service within a limited resources allocation. In this respect Anthony and Herzlinger (1975, p.39) stated that the non-profit organisation's objective was :

In general, their objective is to render as much service as possible with a given amount of resources, or to use as few resources as possible to render a given amount of service.

This definition clearly shows a difference from those organisations whose dominant purpose is to increase profits and whose measurement of success depends entirely on this alone.

However, non-profit organisations have certain other characteristics which also affect their performance and control processes. These are mentioned in depth by Anthony and Herzlinger (1975, p.35) to be :

1. The absence of the profit measure.
2. Their tendency to be service organisations.
3. The lesser role of market place.
4. The dominance of professionals.
5. Differences in ownership.
6. Their tendency to be political organisations.
7. A tradition of inadequate management controls.

Institutional administration in higher education has unique characteristics, defined by Lindsay, A. (1981, p.703) as being:

1. Goal diversity and uncertainty.
2. An archaic production technology.
3. A non-competitive market.
4. Inadequate measures and monetary valuations for the inputs and outputs.
5. Diffuse decision-making and severely limited managerial discretion over the acquisition and organisation of inputs.

Nevertheless, a number of institutions are expending considerable efforts in attempts to assess institutional performance and to use the results to improve performance. There are many constraints to the achievement of these goals and these include conceptual problems with the idea of institutional performance, and inadequate measurement techniques and judgement procedures, and the results produced do not match with the management's information requirements (Lindsay, A. 1981, p.687).

In operation the problems in measuring the effectiveness and efficiency of non-profit organisations are complex simply because of the difficulty of measuring in monetary terms output, such as the quality of disseminating knowledge to students, etc. In many non-profit organisations output cannot be measured because of the multiplicity and complexity of the objectives, the non-monetary measure, and there being no operational way of combining the variety of output.

There has been much research on techniques of quantitative measurement and less on the method of public sector efficiency and specific universities' administrations. Most non-profit organisations are rarely faced by the forces of a competitive market because they do not sell products but provide services

to the public, so that the measurement of efficiency required to produce a high profit margin is not a valid measurement in the public sector. There is a shortage of research to find a measurement of efficiency in services produced, but researchers need to be acutely aware of non-profit organisations, especially when they are serving the public or the welfare of the country.

As far as non-profit organisation performance is concerned, however, literature, textbooks and articles such as Briston, R. (1981), Anthony, R. and Herzlinger, R. (1974) have discussed historically and theoretically traditional budgeting and control in the public sector; including (1) performance budgeting, (2) zero based budgeting and (3) planning programming budgeting systems and the related problems of designing accounting systems and auditing techniques to provide the data for implementing the control process for these new budgetary systems. Anthony, R. and Herzlinger, R. (1974, p.117) mentioned that:

Inputs are measured by cost. Cost is a monetary measure of the amount of resources used for some purpose. This is as true in a non-profit organisation as in a profit-orientated company

1.5 THE PURPOSE OF THE THESIS

In this chapter the originality and importance of the need to study accounting and financial management efficiency as case studies between United Kingdom and Iraqi universities was reviewed and defined, and it shows a shortage of empirical investigation of universities' efficiency in the United Kingdom and Iraq as well as a lack in the accounting and financial management in both countries. However, the "Report of the Steering Committee for Efficiency Studies in Universities" in the United Kingdom, March 1985, defined in depth the variables requiring investigation to alleviate such problems.

This thesis has selected university administration of the United Kingdom and Iraq and will investigate and compare the accounting and financial efficiency in both countries.

One does not know how significant the features of environment, universities' organisation, planning and financial allocation are without comparing and defining their efficiency and - to an extent - how well they match with their organisational characteristics.

In order to understand accounting and financial management, planning and financial allocation efficiency in and between universities in the United Kingdom and Iraq use is first made of the literature review - Chapter Two. This reviews the relevant literature on the concepts of efficiency within the variables related to economic, auditing, accounting and financial management and with special emphasis on higher education efficiency in the UK and developing countries.

1.6 THESIS STRUCTURE

The thesis is structured in the following way:

Part One contains the theory and methodology and contains three chapters. Chapter One outlines the introduction and purpose of the thesis; Chapter Two provides a literature review for the thesis and Chapter Three explains the research methodology.

Part Two contains four chapters. Chapter Four discusses the general background of United Kingdom higher education and Chapter Five discusses public accounting systems practised in the United Kingdom. Chapter Six is a case study which discusses accounting and financial management efficiency in United Kingdom universities. Chapter Seven discusses accounting, resource allocation and planning efficiency in UK universities.

Part Three contains four chapters. Chapter Eight outlines the general background of Iraqi higher education. Chapter Nine discusses Iraqi accounting in the public sector with particular reference to higher education. Chapter Ten is a case study which discusses the administrative efficiency of Iraqi universities. Chapter Eleven is concerned with their accounting and financial efficiency. Chapter Twelve contains a broad normative analysis of the case study findings.

Part Four consists of a single chapter, Chapter 13, which compares the universities in the two countries. After discussing their accounting, resource allocation, planning and efficiency, it goes on to make recommendations for both countries and assesses the implications of these findings for further study.

The Appendices to the thesis are as follows:

Appendix No. 1 Questions Guide

Appendix No. 2 The Exchequer and Audit Department Acts

Appendix No. 3 Form 3

Appendix No. 4 Report of the Auditors to the Members of the Court
of the University of Hull

Appendix No. 5 Accounts Chart of the Uniform Accounting System
in Iraqi universities.

Definitions of terms used in this thesis are explained, in a further appendix.

Finally, the bibliography is given with details of author, title and year of publication.

CHAPTER TWOREVIEW OF LITERATURE ON EFFICIENCY AND THE ROLE OF ACCOUNTINGContents

- 2.1 INTRODUCTION
- 2.2 ECONOMIC EFFICIENCY AND ITS DEFINITION
- 2.3 EFFICIENCY AND AUDITING IN THE PUBLIC SECTOR
- 2.4 EFFICIENCY AND ACCOUNTING SYSTEMS
- 2.5 UNITED KINGDOM HIGHER EDUCATION EFFICIENCY
- 2.6 DEVELOPING COUNTRIES' ACCOUNTING AND FINANCIAL MANAGEMENT EFFICIENCY
- 2.7 ECONOMY, EFFICIENCY AND EFFECTIVENESS AND THEIR IMPORTANCE TO ORGANIZATIONS
 - 2.7.1 Effectiveness and the Public Sector
 - 2.7.2 'X' Inefficiency and the Public Sector

CHAPTER TWOREVIEW OF LITERATURE ON EFFICIENCY AND THE ROLE OF ACCOUNTING2.1 INTRODUCTION

This chapter broadly reviews western literature on the "efficiency concept" and its relation to economic effectiveness and auditing and accounting systems. It will also review the available literature on United Kingdom higher education efficiency and its relation to accounting and financial management in the public sector.

2.2 ECONOMIC EFFICIENCY AND ITS DEFINITION

An attempt to study a wide subject such as economic efficiency might begin with a definition of the word "efficiency" from a standard dictionary:

efficiency - power to produce the result intended. The ratio of the energy output of a machine, etc. -, to the energy input: capability, competence.

Chambers (1949)

The term "efficiency" was defined by McKean, R. 1958, Baldamus, W. 1961, Williams, A. and Anderson, R. (1975), Hirshleifer, J. (1980), and Leibenstein, H. (1966, p.291) and it was soon realized that it is a very loose term. To an engineer, "efficiency" may mean the ratio output to input, while the cost accountant uses the ratio standard cost to actual cost to measure the productive efficiency of an enterprise, department, etc. The economist generally means, for an enterprise, success in producing as large as possible an output from a given set of inputs, which is called productivity efficiency.

It is more convenient to summarise the major requirements of efficiency into three aspects; the first, generally is to be able to achieve

what is planned. Secondly is to be able technically to relate input with output in a defined and measurable way and lastly, to be able to carry out activities successfully. (Briston, R. and Russell, P. 1983, p.3).

However, this research interest lies in the application of the concept of efficiency to a particular organisation. The efficiency concept has been discussed in relation to the effectiveness of an organisation by many writers, Pfeffer, J. and Salancik, G. (1978, p.11-12), Geist, B. ed (1981, p.8-9), and Briston, R. and Russell, P. (1983). The first attempt to distinguish between the two concepts was by Pfeffer, J. and Salancik, G. (1978). However, it seems that organisational efficiency is an internal measurement of performance where the foremost concern is to find out how well something is being done, rather than questioning whether it should be done, while organisational effectiveness is seen as an external measurement of performance where the first concern is to find out how well an organisation meets its responsibilities to various outside groups and organisations. (Briston, R. and Russell, P. 1983, p.3).

As mentioned earlier the economic efficiency concept has been widely and broadly applied. Amey, L. (1970, p.5) mentioned that economic theory sets out the conditions of efficiency governing the allocation of extant resources (i.e. resources being used in current production) and future resources (the conditions for determining when existing resources engaged in production should be augmented and what such additional resources should be used to produce, i.e. investment). In addition, economic efficiency is a technical term in economics which has welfare connotations for the community as a whole; it is the subject of welfare economics. Economists say that the correct application of economic principles will automatically result in optimal efficiency in the allocation and utilization of resources in relation to, and in competition with, all the other desires of the community. A particular distribution of resources through-

out the economy is said to be "efficient" if and only if it is not possible to make someone "better off", without making anyone else in the community "worse-off". Underlying this analysis are a number of assumptions.

Amey, L. (1970, p.6) stated that:-

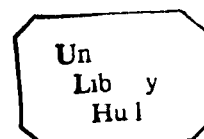
- i. The price consumers pay for a good measures the value they collectively place upon the last unit purchased;
- ii. The cost of a good, the value that must be given up in order to use it, is the price consumers would pay to have that good put to its next-best use.
- iii. In general we want the preferences of individuals and consumers, backed by money demand, to guide the allocation of resources, and
- iv. We approve of accomplishing this objective by means of buying and selling in perfectly competitive markets.

Allocative efficiency is derived as a by-product of analysis of flawlessly competitive markets where equipose can be defined in terms of marginal conditions, (Briston, R. and Russell, P. (1983, p.4). A full analysis of "efficiency concepts" can be found in Amey, L. (1970) and in more detail in Hirshleifer (1980).

A critical influence in the challenging of traditional economists' view of efficiency was the designation of X-efficiency by Leibensten, H. (1966). He pointed out the need to distinguish between allocative efficiency and X-efficiency, saying that:-

our primary concern is with the broader issue of allocative efficiency versus an initially undefined type of efficiency that we shall refer to as "X-efficiency" ...
Although a major element of "X-efficiency" is motivation, it is not the only element, and hence the terms "motivation efficiency" or "inventive efficiency" have not been employed.

He argued that many enterprises do not operate at or near their output possibility boundary, but at some lower level of output. He ascribed this to the absence of pressures to be efficient, and asserted that 'X'-inefficiency exists, and that improvement in X-efficiency is a



significant source of increased output. He specified three elements as significant in determining "X-efficiency":

1. Intra-plant motivational efficiency
2. external motivational efficiency, and
3. non market input efficiency.

These three reasons for the "X" in efficiency are connected with the possibility of variable performance for given units of the inputs. These as he stated are: "(a) contracts for labour are incomplete, (b) the production function is not completely specified or known, and (c) not all inputs are marketed, or if marketed, are not available on equal terms to all buyers". (Ibid, p.412).

However, organisations are likely to be inefficient for a variety of reasons, for example inadequate information and poor control and Leibenstein coined the phrase "X-inefficiency" to cover all sources of internal inefficiency. A number of studies; Lapsley, I. (1984); Briston, R. and Russell, P. (1983) have argued and investigated the "X-efficiency" in the public sector but did not include the higher education efficiency which this research is trying to investigate.

The Leibenstein, H. (1966) study of "allocative efficiency vs. X-efficiency" has much of relevance to the present thesis. X-efficiency relates to the internal problems of organisations. For example, managers within organisations determine not only their own productivity but the productivity of all units in the organisation. It is therefore possible that the actual loss due to such misallocation might be great.

Nevertheless, economic theory does not allow the economist to examine internal problems because enterprises are presumed to be organisations that make optimal input decisions apart from the decisions of its managers. (Leibenstein, H. 1966, p.397).

2.3 EFFICIENCY AND AUDITING IN THE PUBLIC SECTOR

Economists, such as Jackson (1982, p.176) claim that accountants, organisation theorists and business administration specialists hold different meanings for the word 'efficiency' (Briston, R. and Russell, P. 1983, p.4).

For example, Anthony, R. and Dearden, J. (1980, p.7) mentioned two types of process that are found in organisations, management control and operation control. Both these terms are defined and connected to the word "efficiency" as shown in the following:

Management control is the process by which management assures that the organisation carries out its strategies effectively and efficiently, and
Operational control is the process of assuring that specific tasks are carried out effectively and efficiently.

These two types of process include "effectiveness" which is (Ibid, p.8) how well an organisation unit does its job, that is, the extent to which it produces the intended or expected results. Nevertheless, the word efficiency is used in its engineering sense; that is, the amount of output per unit of input.

In the field of public sector auditing, a more precise analysis has been published by the US General Accounting Office (1972). Tomkins, C. (1980, p.11) mentioned that GAO identifies three distinct levels of audit:

LEVEL I Financial and compliance - determines (a) whether financial operations are properly conducted, (b) whether the financial aspects of an audited entity are prescribed fairly, and (c) whether the entity has complied with applicable laws and regulations.

LEVEL II Economy and efficiency - determines whether the utility is managing or utilising its resources (personnel, property, space, and so forth) in an economical and efficient manner and the causes of any influences or uneconomical practices, including inadequacies in management information systems, administrative procedures, or organisational structure.

LEVEL III Program results - determines whether the demand results or benefits are being achieved, whether the objectives established by the legislative or other authorizing body are being met, and whether the agency has considered alternatives which might yield desired results at lower cost.

GAO (1972) see Tomkins, C. 1980, p.11 .

Conceptually, therefore, three individual levels of audit could be identified, the traditional financial and compliance audit; the efficiency audit which is concerned with the achievement of best resource input/output ratios, and finally, the programme results. Nevertheless, the word "effectiveness" in audit relates to whether the objectives of enterprises have been met by the output actually produced. The words "efficiency" and "effectiveness" in actual practice often cannot be entirely divided from each other as it is unlikely that an effective enterprise can be inefficient. Nevertheless, efficient enterprises are not necessarily effective. (Ibid, p.11).

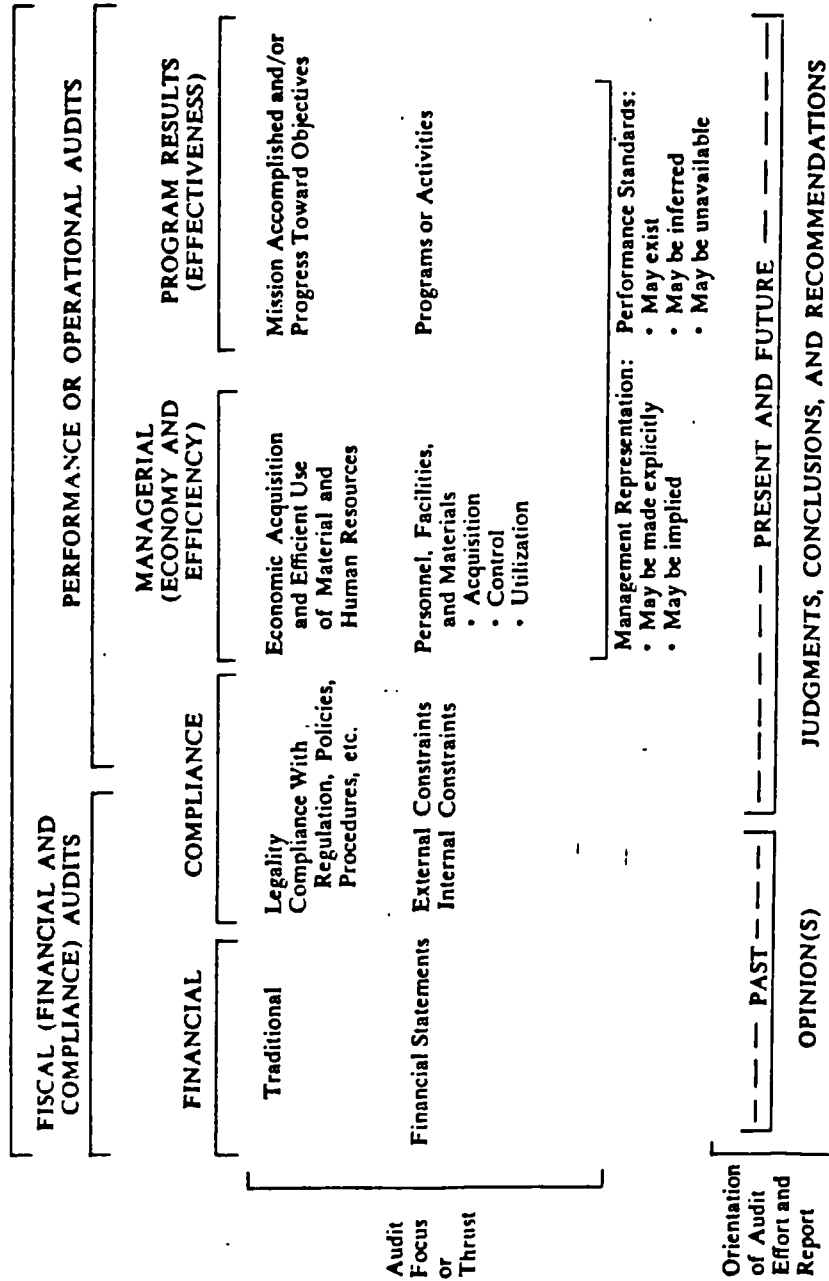
In the previous part, it has been found that there is a connection between economics and the concept of "efficiency", through the literature review: Leibenstein, H. (1966), Hirshleifer, J. (1980), Briston, R. and Russell, P. (1983). However, a number of books and articles: Tomkins, C. (1980), Amey, L. and Egginton, D. (1970 , p.380) and Pomeranz, F. et al (1976) show more strongly the connection of the two concepts of the words "economy" and "efficiency". Pomeranz, F. et al (1976, p.8) stated that:

Economy and efficiency, determines whether the entity is managing or utilizing its resources (personnel, property, space, and so forth) in an economical and efficient manner and the causes of any inefficiencies or uneconomical practices including inadequacies in management information systems, administrative procedures, or organisational structure.

A good example of the interrelationship between the three concepts is shown in Figure No. (2-1) which shows the potential scope of a governmental audit.

FIGURE NO. 2-1

THE POTENTIAL SCOPE OF A GOVERNMENTAL AUDIT



SOURCE: Lynn & Freeman, *Fund Accounting—Theory and Practice* 773 (Prentice-Hall, Inc. 1974).

2.4 EFFICIENCY AND ACCOUNTING SYSTEMS

A comprehensive definition of the accounting system is stated by Pyle, W.W. et al (1978):

Accounting system consists of the business papers, records and reports plus the procedures that are used in recording transactions and reporting their effects. Operation of an accounting system begins with the preparation of business paper, such as an invoice or check, and includes the capture of the data entered on this paper and its flow through the recording, classifying, summarising and reporting steps of the system. Actually, an accounting system is a data processing system, and it is now time to introduce more efficient ways of processing data.

One might argue that the value of an accounting system is to supply management with the appropriate accounting information required for running the enterprises efficiently and planning for the future strategically.

An inadequate accounting information system is a common problem for both private and public enterprises. The dilemma is not one of scarcity of accounting information in general, rather that the available accounting information may not be relevant to the enterprises' demands. Ackoff, R. (1967, p.147) states that:

Most MIS's are designed on the assumption that the critical deficiency under which most managers operate is the lack of relevant information.

However, enterprises are overwhelmed with an abundance of information when only a small fraction of it is useful for solving the problems facing enterprises. A good manager in an enterprise recognises that his decisions will improve if he can get the pertinent facts and he knows that he can ignore most of the information that swamps him. Indeed "They suffer more from an over abundance of irrelevant information" (Ackoff, R. 1967, p.147).

Evance, M. and Hague, L. (1962, p.92) connected the efficiency concept with the accounting system and the budget for long-range and short-

range decisions, outlining five basic steps:

1. Establish the long-range objective and then work out a basic design for an information system that will enable the business to operate more efficiently and at a lower cost.
2. Analyse and define the current information system.
3. Make short-range improvements in the existing system which complement the long-term plans.
4. Develop a time schedule with assigned responsibilities for the attainment of long-term objectives.
5. Accomplish plan.

Outlining the system performance is difficult to assess, but Bingham, J. and Davies, G. (1972) identify the list of factors determining a systems' analysis and the factors emphasised were "technical efficiency of the systems; running times, core usages, etc." In addition they observed the dilemma of management systems and major causes of system difficulties. The purpose of system analysis as seen by Conger, J. and Knapp, R. 1974, is as follows:

System Analysis consists of collecting, organising and evaluating facts about a system and the environment in which it operates. The objective of system analysis is to examine all aspects of the system - equipment, personnel, operating conditions and its internal and external demands - to establish a basis of designing and implementing a better system.

Also, they analysed the steps of enterprise system development in which they distinguish seven phases as well as mentioning the relationship of system analysis and enterprise management for evaluation and development of the organisation. Nevertheless, system analysis tends to study the technical operation of the enterprise and evaluate it with a view to implementing a better system.

An accounting system is a part of a total management system. For example, a profit and loss statement or balance is an internally oriented information system, which is part of the total management information, that provides the managers of an enterprise with adequate data for internal planning and control, as well as serving the information needs of outside bodies, such as shareholders or government.

The Effectiveness concept in literature on planning and control: The terms 'effectiveness and efficiency' in economics and management have been mentioned earlier and they will be discussed as related to the university case studies later in the thesis. However, the effectiveness concept will be briefly reviewed here in relation to literature on planning and management control. There are many researchers in western literature who have theoretically defined the word 'effectiveness' such as Murdick, R. (1970); Keyel, C. (1963); Dew, R. and Gee, K. (1969) and Honck, L. (1980), but to the knowledge of the researcher there is a deficiency of empirical research literature on accounting and financial effectiveness notwithstanding Simon, H. (1978) and Sath, V. (1978).

Many writers view control in terms of motivation behaviour and authority. Murdick, R.G. (1970) states three means of controlling the behaviour of groups and individuals within the Organisation:-

1. Symbolic or normative or normative-social. Such means involve prestige and esteem as normative symbols and acceptance and love as social symbols.
2. Material or utilisation, such control is achieved by granting or withholding goods or services such as salaries, fringe benefits and working conditions.
3. Physical. Physical control while applied primarily in correctional institutions, such as guards and security police.

Organisational performance is the purpose of control, which may be considered to be achieved through two processes. First, a successful

co-ordination of results from the effective carrying out of the other management aspects of planning, organising, directing and controlling. Murdick, R. (1970) points out that successful co-ordination rests upon six basic conditions - acceptance by most individuals of the plans; careful planning; communication downwards of plans; goals; free interchange of information among people at all levels; feedback up the line of professional problems and punctual documentation of work.

Secondly, performance appraisal and correction after the fact of deviations from the goals. Heyel, C. (1963) states that:

It is the process of evaluating the performance and qualifications of the employee in terms of the requirements of the job for which he is employed for the purposes of administration, including placement, selection for promotion, providing financial rewards, and other actions which require differential treatment among the members of a group, or distinguished from actions affecting all members equally.

Planning and control functions are related and Wixon, R. and Kell, G. (1970) stated the five steps as:

- phase 1: planning and control, recognising and defining problems,
- phase 2: planning the search for alternative solutions,
- phase 3: planning evolutionary alternatives,
- phase 4: planning selection among the evolutionary alternatives and
- phase 5: control reporting on actions taken and results achieved in relation to objectives and goals.

The American Accounting Association (A Statement of Basic Accounting Theory) illustrates the connection between planning and control decisions. Characteristically, planning decisions are those made in connection with a future course of action in a non-crisis atmosphere and dealing with long-term objectives of the organisation. Control decisions are those made under crisis conditions when it is necessary to take corrective

action to rectify a relatively short-term situation.

In general, planning is concerned with goal-setting and the adequate co-ordination of information in business activities, while control is carried out by collecting and processing information about the true activities that take place. However, as Dermir (1977) states:

Planning and control must be considered to be completely intermeshed, and not a separate and distinct process.

There is a definite relationship in classifying decisions between the planning and control functions. The A.A.A (A Statement of Basic Accounting Theory) suggests a framework that can be used in examining the information requirements of management and which classified decisions as to whether they affect the planning or the control function. However, the American Accounting Association Committee on Accounting Education Benefit and Usefulness in the Third World (1978, p.6) stated that:

Although an understanding and competence in bookkeeping and basic accounting is of course necessary in developing countries, a great need exists for cost accounting and the presentation of analysis and various statements for planning purposes and decision-making. The economy development process is in need also of effective cost-benefit measurements for project and programme evaluations, and of information for operating measurement, internal organisation, pricing and other management and economic policies.

2.5 UNITED KINGDOM HIGHER EDUCATION EFFICIENCY

The current Report of the Steering Committee for Efficiency Studies in Universities (1985) has mentioned that there has been very little study dealing with universities' efficiency and effectiveness in the United Kingdom. This is particularly true in the fields of accounting and financial management, purchasing including purchasing and maintenance and use of scientific equipment, buildings plant, etc.

Many writers in higher education, among them Cowan, J. (1985), Sizer, J. (1981) and Layard, R. and Jackman, R. (1973), have defined the word "efficiency" in higher education and the following is a brief outline of their work. Cowan, J. (1985, p.235) began from the basic concept of efficiency and effectiveness in higher education. His argument was that efficiency and effectiveness are both ratios, each expressing different aspects of a given process. "Efficiency is the ratio of output to input; effectiveness is the ratio of actual outcome to the possible or ideal outcome", and he demonstrated their potential use, through a range of simple examples on non-financial and accounting affairs in higher education. He concluded that the concepts of 'efficiency and effectiveness' in higher education mean:

The efficiency of teaching could be regarded as the ratio of (the learning which takes place as a result of the teaching) to (the effort devoted to that teaching). The effectiveness of a lecture could be regarded as the ratio of (the summarisation of all the learning within the class group) to (the summation of the instructional aims for that class group, in that particular period of instruction).

However, he developed an argument to suggest that it is important to distinguish between the two concepts "efficiency" and "effectiveness" and the measures for components of non-accounting and financial educational processes rather than attempting to identify global values which are descriptive of courses or educational departments.

Sizer, J. (1981) concentrates upon management accounting aspects, arguing that academic accountants should take a greater interest in performance assessment within their institutions. At the outset it must be recognised that effectiveness and efficiency are elusive concepts in higher education. Sizer, J. (1981, p.146) defines the word efficiency thus:-

What do we understand by the term "effectiveness", and should a distinction be drawn between effectiveness and efficiency? Is an organisation effective if it achieves the objectives it has set itself, and should these objectives be appropriate to the

needs of society? Is it efficient if it achieves those objectives with optimal use of the resources available to it in the long run? What is the relationship between effectiveness, efficiency and performance assessment? Is institutional performance assessment concerned with the measurement or observation of the effective and efficient accomplishment of the expectations of the institution's constituencies? Is it an examination of the objective achievement process, which consists of at least four distinct stages in which objections are set; resources are committed for the purpose of achieving these objectives; committed resources are expended to achieve the objective; and outcomes result? If it is, should indicators of performance be viewed in this context?

The quotation distinguishes between efficiency and effectiveness and says that the process of assessment of institutional performance carries with it certain dangers. Where there is a complaint of university inefficiency, it may mean that the techniques used are inappropriate, e.g. too high a staff/capital ratio or it may mean that the wrong outputs are being produced, e.g. too much research. Although these issues are interrelated it is important to distinguish between them. Jackman, R. and Layard, R. (1973, p.170) said that if they knew the university production function, efficient allocation would generally require them to secure three sets of equalities:

the marginal rates of substitution between factors should equal their relative marginal social costs; the marginal rates of transformation between products should equal their relative marginal social benefits; and the social value of the marginal products of each factor should equal its marginal social cost.

Unfortunately, little is known so far about the university production function (Ibid, 1973, p.170). However, it can be concluded that: (1) the word "efficiency" has a different use and meaning in higher education; (2) nevertheless it has been used to mean a ratio or percentage; (3) whenever literature discusses the concept of efficiency, it also deals with the concept of effectiveness, for it would seem that they complement each other.

Figure No. (2.2) summarises various service performance indicators: availability, awareness, accessibility, extensiveness, appropriateness, efficiency, effectiveness, outcomes/benefits/impacts and acceptability. From the figure Sizer, J. (1981) has developed partial performance indicators for institutions of higher education. Many of these indicators are traditional process measures of universities' performance, such as staff-student ratios and cost per FTE, rather than outcome measures or ones that substantiate progress towards achieving objectives (Ibid, 1981).

However, United Kingdom universities have been influenced by many external bodies, mainly the central government; the University Grants Committee (UGC), and the Council of Vice-Chancellors and Principals (CVCP) throughout their lives. Furthermore, universities are shaped by their natural industry, for example, Custetter, W. (1976); Carlisle, H. (1973); the student numbers involved have caused serious education problems to society and the university system, while other influences have been government funding, economics, social factors, etc. All of these shape universities' existence, development and efficiency. The universities' environment is defined by Custetter, W. (1976, p.25):

Environment is generally defined as the aggregate of surrounding things, conditions or influences which affect the existence or development of someone or something.

On the other hand Carlisle, H. (1973, p.9) has studied the internal environment of universities, arguing that there are five primary factors or dimensions of which university internal environment consists, namely purpose, tasks, technology, people and structure.

Some theoretical studies defined and discussed goals and objectives of United Kingdom universities, namely: Livingstone, H. (1974); Rice, A. (1970).

FIGURE NO. 2-2

Properties of Performance Indicators in United
Kingdom Higher Education

Focus of measure	Conceptual content	Tells	Examples
Availability	Amount and type of course, research facility, or central service provided.	What can be obtained	List of services available in Careers Advisory Service, list of research facilities and opportunities available in academic department; number, capacities, and locations of lecture and seminar rooms.
Awareness	Knowledge of user population of existence; range and conditions for entry or use of courses, research facilities, or central services	Who knows about what is available	Knowledge of prospective students of courses offered by an academic department. Knowledge by prospective users of services provided by central computer centre.
Accessibility	Indicates if services can be obtained by appropriate groups.	Ease of reaching and using facility	Availability of photocopying facilities; location of car parks; average waiting time for literature search by library information service; opening hours of medical centre.
Extensiveness	Compares quantity of services rendered with capacity available and/or potential demand.	'How much' but not 'how well'	Students enrolled on courses compared with course quotas; number of users of library; clients in medical centre; percentage of final year students using careers advisory service; percentage utilisation of lecture and seminar rooms.
Appropriateness	Correct type and amount of service rendered, course offered, or research undertaken.	Is quantity and/or quality of facility offered that required?	Demand for courses: number and quality of applicants, mismatch between computing facilities required and available; comparison of class sizes to lecture and seminar room capacities.
Efficiency	Compares resource inputs with outputs.	How much resource was used, such as: How much did it cost per unit? How much did it cost in total? How much time did it take? What grade of employee was used?	Cost per client service in medical centre Cost per FTE student by course Cost per literature search Cost per meal served
Effectiveness	Compares accomplishment with objectives (or what was intended): Qualitative Comparative	Characteristics Duration Content Effect Proportions served Variances from budgets, standards	Comparison of planned with actual: percentage utilisation of lecture and seminar rooms, number of students graduating; number of graduates employed, ratio of actual utilisation to planned utilisation of computer; comparison of budgeted cost of central service with actual cost; comparison of actual cost per FTE for course with planned; comparison of planned course content with actual course content; actual wastage rate compared with planned wastage rate.
Outcomes/ Benefits/ Impacts	Identifies social or economic benefit	Monetary effects Non-monetary effects	Increase in earnings arising from attendance at/ graduating from course; benefits to society of successful research into previously incurable disease; benefits to local community of cultural programme. Patents and copyrights registered.
Acceptability	Assess match of service/course/research outcomes with user/participant preferences.	User satisfaction with services; student satisfaction with courses; client satisfaction with outcome of sponsored research.	Demand for courses; number of complaints to librarian; course evaluation at end of lecture programme; repeat sponsoring of research.

Sources: Sizer, J. (1981)

Livingstone, H. (1974, p.25) quoted a classical statement about university goals from C.J. Searl, "The Campus War" Penguin (1972, p.170):

The university is an institution designed for the advancement and dissemination of knowledge. The purpose of the university is to benefit the community which created and maintains it, and mankind in general through the advancement and dissemination of knowledge.

Universities' goals and objectives are complex concepts. Livingstone, H. (1974), Rice, A. (1970) and others define and discuss universities' goals and objectives in a broad sense, simply because goals are not easy to define. There are, for instance, different kinds of university goals and the way in which they operate at different levels varies.

The study of Condar, C. (1974, p.508) shows the impact of a variety of factors on university goals. These constraints (in the USA) are given as state governments, local government, technological interests, student/clients' interests, university clients, competing organisations, public interests and institutional beliefs. Internal impacts on the university goals are also discussed, as the internal environment also affects university decision-making.

- a) Many decisions that affect the character and major structure of the university are directly influenced by a number of constraints, both inside and outside the organisation, which are more important than any a priori goal scheme, and which force upon the university a continual process of adaptations to the environment producing these constraints.
- b) Control and authority in the university are diffuse and indirect.
- c) There is, generally, no single central body of individuals that makes decisions on resource allocation, course and curriculum programme and university personnel.
- d) The various individuals and groups participating in the numerous university decisions often use quite different criteria for judgements on important policy decisions.

University administrators carry out their tasks by delegation within the university hierarchy. A successful formal university must have

acceptable goals and objectives (Steering Committee Report 1985). Moreover, from within the organisation itself, goals emerge that are important to its continued successful functioning (Livingstone, H. 1974, p.40). One main constraint in a university administration is a result of unclear and complex goals and objectives.

There is a gap in the United Kingdom literature describing institutional processes and their production function (Jackman, R. and Layard, R. 1973, p.170). In the literature there is most emphasis on institutional planning: Sission, R. (1975), Lockwood, G. (1978), Butler, R. (1982), Ashworth, J. (1983), Sizer, J. (1981), Bourn, M. and Essamel, M. (1987) and less on accounting and financial efficiency.

Sisson, R. (1975, p.275) differentiates between planning for decision-making and as it concerns the planning analyst. For the decision-maker, the planning function is to improve the institution through its future development:

.... making decisions which commit the institution far into the future. Decisions about facilities (particularly special-purpose facilities), the hiring of tenured faculty, and the implementation of a major new educational programme, for example, are planning decisions.

While the planning function is a systematic method for the planning analyst: planning is the collection, organisation and analysis of information in support of planning decisions. (Ibid, 1975, p.275).

Lockwood, G. (1978, p.121) was concerned with the nature and purpose of planning higher education. He argues for a planning process strategy and for operational and budgetary planning, asserting that effective and efficient planning depends on information:

Similarly the need for information for planning purposes and the related desirability of evaluating the effectiveness of planning require little justification. The quality of planning

depends, to a significant extent, on the information fed into the process, and planning cannot remain efficient unless feed-back is received on the effectiveness of performance.

United Kingdom external and internal planning has been tackled by many writers; Butler, R. (1982) and Ashworth, J. (1983) have described the UGC and CVCP as ineffective. Butler, R. (1982, p.266) claimed that the UGC, before July 1981, was widely regarded as ineffective in the one area which had become crucial; namely, the management of a fixed, or even, conceivably, a reduced budget for universities. Ashworth, J. (1983, p.59) examined the implementation of general government policy by the University Grants Committee. Stress is often very revealing, for institutions as well as for individuals, and he believes that certain aspects of the UGC and its activities account in large measure for this loss of the universities' constituency.

Sizer, J. (1981) made a comprehensive theoretical review of performance assessment in institutions of higher education. He argued that western institutions are facing or entering a crisis of financial stagnation, lack of real income per student, decline in student number, etc., in which institutions are required to justify their performance. Sizer, J. (1981) stated that

The "managers of change" have to create an environment which will lead to positive responses. The provision of relevant financial and quantitative information for planning, decision-making and control purposes is an essential prerequisite to creating such an environment under conditions of financial stringency, possible contraction and changing needs.

Bourn, M. and Ezzamel, M. (1987, p.29) addressed the question of university budgets in the United Kingdom but theirs is not a comprehensive study aimed at a thorough evaluation of the universities' position, but rather a comparison between universities and hospitals. However, they

sought to compare both types of institution and to establish the desirability in principle of suitable schemes of budgetary devolution for universities and hospitals. They concluded that budgetary devolution can clearly work in the university context, matching organisation structure and the decision-making process in a consistent and coherent way. It is neither just a game for accountants nor a tool for bureaucratic centralized control.

Reviewing previous literature it can be seen that the writers criticised actual planning activities throughout the University Grants Committee, or concentrated on the question of comprehensive performance assessment in the institutions. Accounting and financial management and efficiency in universities have been the subject of little study, nor has there been empirical investigation on a comprehensive scale.

Yet the management accounting and finance of universities has become increasingly difficult as they have grown in size and their accounting systems and financial budgets have become more complex. Sims, M.A. (1975, p.200) has suggested that the management accounting needed for a college to function can be split into three categories - management decision and planning, control and operation.

It would seem that universities, although they follow traditional textbook accounting and financial management systems, still need specialised accounting systems to serve their management efficiency. The methods used and the quality of the accounting system will govern and improve the effectiveness and efficiency of the whole university system, though financial management should run parallel to the internal accounting system which serves the central government, UGC, CVCP, etc. of the university. Without exception, today's university management encounters obstacles in planning and implementation because accounting and financial

management has not been effective or efficient enough to satisfy the university's internal needs. Universities are often inefficient and Layard and Jackman (1973, p:170) quote some examples of this, especially their failure to exploit the new media of communications. But it is necessary to consider why this inefficiency occurs and how it can be reduced. It seems mainly caused by the difficulty of measuring the output of individual teachers of institutions, and thus of paying them appropriately. They, therefore, explore the efficiency effects of different ways of paying teachers and of financing institutions (Ibid, 1973, p.170).

2.6 DEVELOPING COUNTRIES' ACCOUNTING AND FINANCIAL MANAGEMENT EFFICIENCY

There are very few studies relating to accounting, management and financial efficiency in developing countries in general and this is more specifically true of Iraq.

Briston and Russell (1983, p.1) investigated the problems involved in the evaluation of performance, with particular reference to the role that accountants and auditors might play in the assessment of efficiency in developing countries. Enthoven, A. (1981) tackled accounting and auditing in developing countries, appraising the significance and function of accounting education, training and research in the context of socioeconomic development management, with particular reference to the economies of developing countries.

Briston, R. (1978, p.120) has argued that in the matter of the evolution of accounting, each country has its own political, social, economic and cultural characteristics, and it is highly probable that the goals and thus the accounting information requirements of the managers of the economy will differ between countries.

Scott, G. (1970, p.9) asserted that:

with respect to the accounting information generated for both external financial reporting and with in-firm management needs, accounting in the firms of developing nations is deficient.

For some time it has been argued that the major cause of problems in accounting systems in developing countries has been the low level of management, accounting practice and usage. For instance, Seiler, R. (1966) claims that:

One of the most pressing problems facing the underdeveloped nation is the creation of information gathering systems for fiscal planning purposes. Parallel with the construction of such a system is the problem of instilling a reasonable degree of confidence in the system and its output.

Another problem of developing countries' accounting is the poor quality of auditing. In developing countries staff are constantly on the move from the public sector into the private sector, and as a result the state auditor finds it difficult to perform his traditional duties on time and in an efficient manner, notwithstanding any additional responsibilities which he may assume in respect of efficiency audit. (Briston, R. and Russell, P. 1983)

Narrowing the review of developing countries' accounting and financial management to the institution there are many outside influences on the universities' affairs; for instance, specifically in Iraq, social and political environment, besides other factors, affect the universities and resolving accounting and financial issues is very complex and very different. Moreover, the complexity is greater with the student expansion in the period of the last twenty years. But the greatest influence is the government, because the universities depend greatly on government funds, and accounting systems. (The accounting systems in higher education of Iraq will be discussed in a later chapter.)

The formal planning of higher education did not exist in Iraq until the early 1970s and only recently has higher education in Iraq received its appropriate recognition as a vital element of the public sector (Higher Education in Iraq, 1979). In the 1970s, higher education made remarkable strides forward complying with the Iraqi government policy stated in Article No. (4) which recognised the necessity to modernize and expand science, technology and research programmes to meet the political, military, economic and social needs of the state and to educate citizens who would become knowledgeable about their nation's history and traditions whilst at the same time being trained in the modern science and technology (M.H.E. Law No. 132 for 1970).

Since the Iraqi government funds higher education universities have strived to improve the efficiency of the financial management system and every effort is made to improve their accounting system. However, Ghazoui, R. (1977) who studied the planning of higher education in Iraq claimed that

Even today, the planning of higher education in Iraq is lagging critically. However, there is now at least an official awareness of the insidious dangers of such a deficiency and serious efforts are being made to rectify the situation. Research on educational needs and manpower requirements in Iraq is being endorsed and financially supported with unprecedented vigour by the Ministry of Planning and by the Ministry of Higher Education and Scientific Research. Already a few preliminary studies on the planning, development and reform of higher education have been completed, and many more are in the process of being commissioned to local and international agencies and universities and though much has still to be done the initial thrust has already begun.

Despite the fact that there are accounting systems and private and public auditing systems which may be well-equipped to assist in developing accounting and financial management systems, these existing systems have not been used to rectify the prevailing accounting and financial systems of higher education. However, accounting practices may require more

specialised empirical studies to cover all economic sectors and in particular higher education efficiency. Ghazoui, R. (1977) concluded in his study of Iraqi universities that:-

The traditional accounting and financial information systems in all the universities in Iraq are both primitive and archaic. Its primary function is financial control during implementation; it is of precious little value for educational planning purpose. Though implementation as such is not a part of planning information on whether (and the degree to which) objectives are being met in a vitally important feedback in the planning process. From a practical point of view, therefore, improving the existing accounting and financial system, if not overhauling it altogether, must be treated as a top priority.

Also Al-Ebraheem, H. and Stevens, R. (1980) in their article on Organisation, Management and Institutional Problems in Arab Universities; The Kuwait University Experience, have touched upon the same theme, arguing that, like most other Arab universities Kuwait University faces a number of problems, and in particular, (p.218)

Administrative procedures, accounting and budgetary control, purchasing and inventory control and personnel procedures present special problems. Specifically, administrative procedures are inadequate to cope with the present and expanding scale of operations; accounting and budgetary controls do not provide for periodic feedback of actual performance during the year with the result that satisfactory controls cannot be maintained; in the absence of current and historical financial data proper budget preparation is impaired

Safi, Q. (1986, p.421) stated also that Kuwait University has now fully realized the importance of educational reform. Some of the issues he identified can be outlined as follows: the need for an admission policy; the need to design a research-oriented curriculum, the need for an instructional programme, the need to improve instructional and research facilities, the need to reappraise employment conditions for non-Kuwaiti academic staff and

the need for an administratively and financially independent Kuwait University, and long-range plan for campus to accommodate the increasing numbers of students, faculty and support staff.

He did not investigate the administration and finance of Kuwait University, but he concluded by emphasizing the Minister of Education's proposal for an administratively and financially independent Kuwait University. In the twenty years since it was established, the university has not only expanded but has also become a complex system in its programmes and in its relation with society as a whole. The rules and regulations which governed the university during its early years are not appropriate because of changed demands placed on it by society (Ibid, p.445).

Saleh, M. (1986, p.17) traced the development of higher education in the Kingdom of Saudi Arabia from its origins to the present. From 1957 to 1982, he pointed out, higher education had grown to seven institutions with 63,563 students and a teaching staff of 6,906. He did not discuss the administration and finance of the university except to say that

The financing of higher education in Saudi Arabia is almost entirely by the government. Therefore, the resources available to the government determine the funding of higher education to a large extent. According to the education policy of the Kingdom of Saudi Arabia (1970) the "educational budget is increased by the state in accordance with the growing needs of the country. This growth is proportionate with the growth of the general budget".

However, Saleh did not consider the question of administrative and financial efficiency, nor did he discuss the annual and long-term planning processes of Arab universities.

There are many problems related to accounting, planning and resource allocation in higher education in Iraq and other Arab countries, but there have been no comprehensive empirical studies on the individual problems, which as time goes on, are exacerbated and made more difficult to solve by the increased demands on, and rapid expansion of, these institutions.

The auditing function, both internal and supreme auditing, assumes the dual function of controller in Iraqi universities, and acts to control

accounting and financial management in higher education. The various sub-budgets in the public sector are required from the various departments, administered by the accounting department (Aboona, 1975). In addition, the role of the accounting function is even bigger in some organisations in that the accountant assumes the role of head of the accounting department and proposes the initial budget himself, using the previous budget as a guideline (Ibid, 1975). If planning and the financial allocation of resources need to be organised successfully in universities, accounting and auditing need to be interchangeable and can provide greater efficiency for university accounting and financial management.

2.7 ECONOMY, EFFICIENCY AND EFFECTIVENESS AND THEIR IMPORTANCE TO DIFFERENT ORGANISATIONS

Value for money audit includes both economy and efficiency in looking at inputs and effectiveness in looking at outputs and their impact on the environment, the economy, society, etc. Economy and efficiency involves traditional management consultancy, such as organisation and method studies, thus looking at ways of getting greater economy in the operations of an organisation through the reduction of costs or the improvement of the physical output. On the other hand, the effectiveness audit looks at the impact upon the economy, society, etc.

In the private sector, economy and efficiency audit is all that an enterprise is concerned with, because they are not concerned with social costs or social benefits.

The state enterprises are very similar to private sector enterprises in their activities and in many cases they are required by the Treasury to maximise profit and maximise cash flows, so that economy and efficiency audit is very important to state enterprises. However, their operating

policies are often influenced by decisions of ministers who wish to use them to enhance government policies, and these will often be of a non-monetary or non-cash flow nature. So for state enterprises, economy and efficiency audit is important, but also effectiveness audit is much more important than it is for private sector enterprises.

At the other extreme are government departments and a whole series of government activities where the output is non-monetary. For those organisations, like hospitals, universities, defence, while there is some scope to apply economy and efficiency audit by reducing the cost of inputs, effectiveness audit is far more important because their output is non-monetary. In other words, if the salaries of university lecturers were reduced by ten per cent, they could still teach the same number of students, but whilst that is physically possible, it might have a very strong impact upon quality. That is why in the university sector not only is effectiveness audit probably more important than economy and efficiency audit, but also any economy and efficiency audit must take account of the impact of its recommendations upon effectiveness.

Looking at the Jarratt Report (1985) within the above framework, it can be seen that it is very much an economy and efficiency audit and very little concerned with the effectiveness of universities. It can be criticised very strongly within that framework because, not only is it looking at the less important aspect of universities' work, but also it is ignoring the effect of its recommendations upon the more important area of effectiveness.

2.7.1 Effectiveness and the Public Sector: This section attempts to develop the concept of effectiveness mentioned elsewhere in this chapter; we shall concern ourselves with what is meant by the term, and what effectiveness audit tries to do.

In a previous section the researcher reviewed a number of interpretations of the efficiency concept. However effectiveness is usually included with efficiency in the literature. Anthony, R. and Herzlinger, R. (1975), Anthony, R. and Dearden, J. (1980), Leibenstein, H. (1976) have all discussed these concepts.

In general, the concepts of efficiency and effectiveness can be used as criteria for judging the performance of a responsibility centre. They are almost always used in a comparative, rather than in an absolute, sense. As Anthony, R. and Herzlinger, R. (1975, p.19) said:

We do not ordinarily say that organization unit A is 80 per cent efficient, but rather that it is more (or less) efficient than organization unit B, or more (or less) efficient currently than it was in the past.

However, they define effectiveness in relation to objectives thus:

Effectiveness is the relation between a responsibility centre's outputs and its objectives; the more these outputs contribute to the objectives, the more effective the unit is. Since both objectives and outputs are often difficult to quantify, measures of effectiveness are difficult to come by. Effectiveness, therefore, is often expressed in non-quantitative judgemental terms such as, "College A is doing a first-rate job"; "College B has slipped somewhat in recent years".

Although an objective is a specific result to be achieved within a specified time, usually one year or ten years (Ibid, p.136) it is usually expressed largely in non-quantitative terms, so that achievement can not be measured, although it can be judged, evaluated, appraised, or weighed. Moreover, if the objective is not such that it can be measured, this will itself create difficulty in attainment. Objectives are most easily achieved if they are analysed and broken down into specific, measurable items.

However, Anthony, R. and Herzlinger, R. (1975) offer many types of output measure for public organizations, namely, subjective or objective, quantitative or non-quantitative, discrete or scalar, quantity or quality, results, process or social indicators and output vectors.

A distinction is made between efficiency and effectiveness in economic and auditing practice and literature. The economists have also reviewed several aspects of efficiency and x-efficiency in macro-economics, e.g. allocative efficiency and 'managerial efficiency' or 'x-efficiency' (Leibenstein, H. 1976).

Shepherd, W. (1965, Chapter 3) suggested that there are essentially three main approaches to the question of guidelines for public corporations, each based on a different view of what the corporations should be doing. First, there are the 'commercial' guidelines and yardsticks which are limited to the internal efficiency and profit motivation of the public corporation. Secondly, there are the ideal policy rules for public corporations. The 'marginal cost pricing' rule is a well-known example. Thirdly, there is the 'social orientation' approach. This views public corporations as tools of public policy as a whole, so that they are required to act in the public interest.

Yorke; D (1987) reviewed the concept of organizational effectiveness in other literature, approaching it from two main perspectives: first from the point of view of the relationship between the organization and its external environment:

- the achievement of the organization's stated goals (Etzioni, 1964) or official policy objectives;
- the achievement of "operative" (or actual) goals, as revealed by an analysis of organizational practice rather than of stated goals (Perrow, 1961);
- the acquisition of resources from the achievement (Yuchtman and Seashore, 1967) and;
- the return from the organization to its environment, or "social justice" (Keeley, 1978, 1984).

Yorke's second viewpoint was that of the internal functioning of the organization and internal perception of it. He mentioned (p.4):

- the internal process (i.e. structures and operations) of the organization (Pfeffer, 1977) and;
- the satisfaction of the organization's members (Georgious, 1973).

Although Yorke collected and reviewed much literature on organizational effectiveness, he did not himself define the concept. Briston, R. (1986, p.3) has interpreted and distinguished between organizational efficiency and organizational effectiveness as they appear in Pfeffer, J. and Salancik, G. (1978, pp.11-12):

Organizational efficiency is seen as an internal standard of performance where the main concern is to find out how well something is being done, rather than questioning whether it should be done.

On the other hand, organizational effectiveness is seen as an external standard of performance where the main concern is to find out how well an organization meets its obligations to various outside groups and organizations.

Not only is the distinction between the efficiency and effectiveness of an organization made in the literature, but it also occurs in auditing practice, which will be discussed later in this section.

Organization theory has discussed the concept of effectiveness and there is broad agreement that the concept of effectiveness has a meaning which is related to output, goals and objectives.

Cameron, K. (1983, p.20) offered four major approaches to the evaluation of effectiveness, briefly summarized here. The first defines effectiveness in terms of how well an organization accomplishes its goals. The second approach to effectiveness is the system resource approach, by which it is judged on the extent to which it acquires needed resources. The third approach focuses on the internal processes and operations of the organization. Effective organizations are those with an absence of internal strain; members are highly integrated into the system, etc. Fourthly,

there is the strategic constituencies approach or the participant satisfaction model, by which effectiveness requires that all the strategic constituencies of the organization are at least minimally satisfied.

Cameron's article identified six critical questions to be posed in order to improve the evaluation of organizational effectiveness: 1. What domain of activity is being focused on? 2. Whose perspective is being considered? 3. What level of analysis is being used? 4. What time frame is being employed? 5. What type of data are to be used? and 6. What reference is being employed?

Schneier, C. and Beatty, R. (1983, p.235) discussed organizational effectiveness in relation to performance appraisal and management by objectives. Evaluation focussed on behaviour, performance and effectiveness. Effectiveness in their analysis referred to the outcomes or results of various degrees of performance at the individual, unit, or organizational level. Organizational effectiveness derives from job performance. Schneier and Beatty defined performance appraisal as:

the process of identifying, measuring and developing human performance in organization.

At the same time they pointed out that:

Appraisal systems, designed to measure outcomes or effectiveness, are deficient if they are unable to identify and measure the effectiveness of the behaviours which produced (or failed to produce) the outcomes.

(Ibid, p.237)

Although literature on organization theory and management science has developed the effectiveness concept and also investigated methods of application, the concept has been little used in the accounting field, perhaps because of the difficulties of measurement, which will be discussed further, later in this section.

Among writers on the subject of auditing who have mentioned effectiveness, are Briston, R. (1986), Tomkins, C. (1986) and Henley, D. (1978).

Briston, R. (1986) has discussed the efficiency audit of state enterprises in the UK, with particular reference to British Gas. His paper examined the different concepts of efficiency and drew tentative conclusions from examining efficiency studies in UK national industry. He argued that in practice, the interpretation of efficiency is related to the concept of efficiency held by the government according to the current political and economic climate. Briston pointed out that:

Indeed almost the whole of value for money auditing which is now so popular in the UK is based upon efficiency rather than effectiveness.

While Briston admits that the definition of value for money audit includes the concept of effectiveness, he is aware, as are other writers, that the more measurable efficiency tends to predominate, and audit has often focussed primarily on cost reduction, rather than enhanced output.

This problem might be related to Tomkins' contention that:

The whole field of public sector accounting and financial control is still in an embryo state compared to other areas of academic research related to accountancy and, at such a state of development, there is a need for descriptive material to map the field, throw up developments worthy of attention, working hypotheses, etc.
(Tomkins, C. 1986, p.36)

He pointed out that effectiveness audit is usually neglected and he suggested that:

At the value for money level, there is a need for research into issues such as where improvement output measures are feasible and where they are not, and the role of the accountant in encouraging improvement in effectiveness; in the latter regard the notion of the 'costs of democracy' may open up a very challenging field of research for co-operation between political scientists and accountants.
(Ibid, p.50)

Henley, D. (1978) discussing the roles of the comptroller and auditor general drew attention to the strong emphasis on efficiency audit, and

pointed out the difficulties of measurement of effectiveness in the public, as opposed to the private sector, and the intractability of definitions and measurement of output, and hence their relation to inputs of manpower and other resources.

However, Henley did not discuss effectiveness in depth, or suggest how the difficulty might be resolved in the government context.

Briston, R. (1986) commented that although effectiveness has been much discussed in literature, little has been done in practice. Effectiveness audit is not carried out in the public sector in Britain and in specific by the auditor general because of shortage of staff and difficulty of measurement.

A limited amount of literature has focussed on effectiveness in relation to higher education, but it has not been related to accounting or financial management. Some of the main contributions are reviewed below.

Yorke, D. (1987) outlined a number of general approaches to organizational effectiveness, and three approaches to effectiveness, in the more specific field of higher education, comparing three articles. He also discussed some aspects of institutional management, and outlined some differences between UK and American universities regarding the acquisition of funds.

Ball, R. and Halwachi, J. (1987) discussed performance indicators (PIS) in higher education in the UK, arguing that these cannot be used in a meaningful way without a clear view of institutional goals. The objectives of higher education have generally been formulated in very broad and philosophical terms, for example in the Robbins Reports (1963), UGC and NAB reports and government Green Papers (Ibid, pp.394-5). Whilst mentioning that "the actual effectiveness of a specific organization is determined

by the degree to which it realises its goals", they pointed out the number of methodological, philosophical and practical difficulties involved.

It is difficult to establish a series of goals and derive a set of associated PIS by which to judge institutions. They argued that with certain PIS currently proposed it was not always clear to which goals they related, while others focussed on measuring input rather than performance. They admitted that subjective indicators can provide considerable information on goal achievement. Their conclusion was that PIS should not be presented as a specious array of quantitative data.

Instead the use of such indicators should be accompanied by a clear statement of goals, the relative importance of each goal and an indication of how each indicator measures the goal in question. The legitimacy of different institutions pursuing different goals should also be recognised at this point.

(pp.403-4)

Thus, the use of PIS is one quantitative method by which to measure the effectiveness of higher education, but it would appear to be not the best method because of the complexity, changeability and broad definition of goals in the public sector.

The Jarratt Report of 1985 does not indulge in theoretical argument on effectiveness; indeed perhaps its weakest feature is that it ignores effectiveness. As Bourn, H. and M. Ezzamel (1987, p.32) have asserted:

Jarratt suggests that 'it is in the planning and use of resources that universities have the greatest opportunity (sic) to improve their efficiency and effectiveness'. No evidence could be found 'of a thorough consideration of options and of means to arrive at objectives'.

It is apparent that organizational effectiveness is difficult to measure, due to the many characteristics involved. The organization is surrounded by external boundaries or influences. Increased complexity leads to increased difficulty. The same is true of the fluctuations to which circumstances and goals are subject.

Cameron, K. (1983, pp.24-25) discussed the important characteristics of organisational effectiveness, the difficulties of tackling it and the limitations of the effectiveness concept:

1. Goals are generally ill-defined, complex, changing and contradictory.
2. Means - ends connections are not clear, e.g. in government sectors like education, health, etc., it appears difficult even to identify a successful outcome.
3. More than one technology or strategy produces the same outcome.
4. There is little or no feedback from the output to the input and little feed forward from inputs to outputs so the causal connections between the two are not testable.
5. Because sub-units are not tightly connected, influences from the external environment are partitioned among them, and all but a small sub-set of factors can be ignored.
6. Widely differing criteria of success may be operating simultaneously in various parts of the organisation.
7. There is often an ambiguous connection between the organisational structure and the activities of it.

Summarized from Cameron, K. (1983, pp.24-25).

The effectiveness of organisations is also difficult to measure by performance appraisal (PA) or management by objectives. However, Schneier, C. and R. Beatty (1983, p.247) admitted that the view of performance appraisal systems presented in their article is problematic and many organisations find their appraisal system to be the source of continual problems. However, they pointed out that a few things can be done to enhance a system's effectiveness.

1. To improve appraisal systems is to recognize that the appraisal process entails far more than measurement and the use of form. It also includes observation and identification of performance, as well as development performance.

2. For improved appraisal it is necessary to integrate the best of the various formats. Effectiveness-based systems, such as management by objectives (MBO), are very popular due to their ability to measure and quantify results, redirect effort to important tasks and to allow for ratee participation in goal setting (Ibid, p.248).

2.7.2 'X' inefficiency and the public sector: Although previous sections of this chapter have mentioned 'x'-inefficiency only briefly, this section will consider it in more detail. The concept of 'x'-efficiency was first developed by Leibenstein in 1966, but in his first article he did not give a systematic definition of the concept, nor did he try to give it a secure foundation in microeconomics. He stated (1979, p.14) that:

I have in mind all instances of non-allocative inefficiencies - usually, but not exclusively, inefficiencies that arise out of activities internal to the firm. It is an open-ended concept.

At the time of writing the original paper, no adequate brief term that covered all possibilities occurred to him, hence the substitution of the unknown x for 'non-allocative' and the coining of the term x-efficiency. His contention was that microeconomic theory had given undue attention to allocative inefficiency at the expense of non-allocative factors. X-inefficiency, he argued, was a problem of management, because:

managers determine not only their own productivity but also the productivity of all cooperating units in the organisation. (Leibenstein, 1966, p.397)

In a series of further articles and books (1969, 1973, 1975, 1976) Leibenstein attempted to demonstrate that the 'x'-efficiency concept could be derived from microeconomic assumptions. Some categories of inefficiency of a non-allocative nature may give added meaning to the concept. The following are examples given by Leibenstein, H. (1979, p.14):

There may be inefficiency in (1) labour utilization, (2) capital utilization, (3) time sequence, (4) extent of employee cooperation, (5) information flow, (6) bargaining effectiveness, (7) credit availability utilization, and (8) heuristic procedures.

Since the introduction of the x-efficiency concept the idea has been developed by a number of writers: Parish, R. and Y, Ng (1972), Blois, K.

(1974), Peel, D. (1974), Stigher, G. (1976) and DiLorenzo, T. (1982). Parish, R. and Y, Ng (1972) argue: a. the assumption that monopoly gives rise to what Leibenstein has called 'x'-inefficiency. b. Examine the welfare implications of a type of managerial inefficiency not considered by Comanor and Leibenstein, viz the selection of the 'wrong' level of output. c. Some qualifications to their analysis are also mentioned and d. a general conclusion regarding the welfare effects of x-inefficiency is stated.

Blois, K. (1974) and Peel, D. (1974) both raised questions about the theory as set out by Leibenstein, though these were intended to strengthen the theory and to extend it rather than to be negatively critical.

Blois accepted that Leibenstein's notion of Inert Areas is a useful concept that enables the problems of achieving changes within firms to be incorporated into a theoretical model, though he developed and showed the potential complexity of Leibenstein's notion of inert areas. The basic distinction is between an inert area as a set of effort positions within which a person does not move from one position to another, as against the idea of an inert area as a set of positions within or out of which one does not move.

Peel questioned the implication in Leibenstein's work that increases in x-efficiency occur because of increases in the effort and effectiveness of manpower, suggesting that in practice it is more convenient to allow explicitly for the effort and efficiency dimensions of inputs. Thus actual output could be regarded as maximum output.

Both these articles reveal that the concept of x-efficiency is still subject to much confusion and requires clarification.

Stigher, G. (1976) proposed that the existence of x-efficiency could usefully be assimilated into the traditional theory of allocative inefficiency. However, DiLorenzo, T. (1982) extended Stigher's critique of

x-inefficiency by incorporating into this debate a number of considerations drawn from the economics of property rights as well as some of the recent literature on agency costs. A brief review of these sample articles shows that they are written from the economics point of view and generally quantitative in their approach, so that the concept has not been widely applied in public sectors.

The framework for x-efficiency theory is far from complete, but it may usefully be applied quantitatively and qualitatively to a wide range of human behaviour. However, there have as yet been few attempts to apply the concept to the management and accounting field as far as the researcher is aware.

The concept of x-efficiency has been applied in developing countries. Bergsman, J. (1974) has developed an economic model for estimating the effects of protection on inefficiency, allocative and otherwise, and presented estimates for six developing countries. The model permits estimates of both allocative and other inefficiency for the entire economy. Bergsman's work also establishes a better conceptual framework on which the misallocation effects of production may be estimated, at least for developing countries, while on the practical side, the results demonstrate the important welfare effects of trade and commercial policies, though the numerical results are comparable with those summarized by Leibenstein.

Another paper by Gillis, M. (1982) discusses 'efficiency' in relation to state-owned enterprises, mining minerals in Indonesia and Bolivia. In the enterprises concerned, there were significant welfare losses from allocation inefficiency. However, although instances of behaviour consistent with x-inefficiency theory were presented, no attempt was made to assess the relative quantitative importance of allocative and x-inefficiencies.

Again, these studies applied x-efficiency theory on a broad mathematical level in the economics context.

Leibenstein's articles showed that economists had refined so many problems that the internal efficiency of the organization was not considered carefully. The organization is assumed to make decisions but little consideration is given to how they do so, and problems and obstacles to internal efficiency are left to other fields of study: accounting, management, organization theory, etc. However, organizations are likely to be inefficient for a variety of reasons; including inadequate information, or organization structure - see above - so that Leibenstein used the term, x-inefficiency, to cover all sources of internal inefficiency. Managerial efficiency in production as broadly stated/defined in his articles could only occur when the organization had eliminated its x-inefficiency and become x-efficient.

It appears to the researcher that there has been little theoretical or empirical work relating x-efficiency to accounting and financial research and specifically to higher education, though Jackson, P. (1982), Briston, R. (1986) and Lapsley, I. (1984) have written on the subject of public sector accounting in the UK.

Jackson, P. (1982) has discussed the bureaucracy of the public sector in relation to x-efficiency and x-inefficiency, defining bureaucracy as:

described in terms of a number of agents; the chief or 'sovereign'; the peers, courtiers and barons; the followers, subordinates and inferiors.

(Jackson, P. 1982, p.174)

In addition, he discussed the efficiency of public sector bureaucracy as a part of an older and broader based debate, namely the comparison of the relative efficiencies of market or centrally administered provision of goods in an economy, i.e. the debate between socialist and capitalist

forms of economic organization and between centralised versus decentralised planning (Ibid, p.174).

Moreover, Jackson, P. (1982, p.182) shows that the concept of x-efficiency represents a common meeting ground for:

the organization theorists and the economists' perspective which were set out in the earlier chapters. The structure of financial incentives set out by the scientific management school and the manipulation of socio-psychological variables as proposed by the human relations school were all representative of attempts to influence the behaviour of organization members, to improve productivity and thus to increase efficiency, i.e. reduce x-inefficiency. Likewise, the earlier classical administrative theorists and the more recent students of organization structure are interested in seeking out efficient forms of organizational design. Again 'efficient' organization structures are efficient in terms of reduced x-inefficiency.

Briston, R. (1986) discussed the concepts of efficiency and effectiveness, briefly reviewing the economic concept of x-efficiency as background to a paper concerned with the practical application and relevance of efficiency, showing its influence on government policy and many of the requirements laid down for state enterprises. He discussed the efficiency audit of state enterprises in the UK, taking British Gas as his example.

Lapsley, I. (1984) used the x-efficiency concept to distinguish between the economic and financial objectives in a state monopoly. His paper examined methods of improving the present system of subsidy payments at British Rail (BR). He asserted that the construction of an operational overall index of production efficiency, to which BR's subsidy payments might be related, was intractable. However, a possible solution lay in the identification of sets of partial indicators of productive efficiency, which might be useful regulatory devices (Ibid, pp.226-7).

Henley, D. (1978, p.508) commented on the increasing urgency of the pursuit of efficiency in government, but pointed out that although the object is incontestable, it is also elusive. He was therefore concerned

with exploring the many uses of the term 'efficiency' as applied to government, and of the skills, techniques and attitudes necessary to its pursuit.

In this section, an attempt has been made to link the concepts of efficiency and x-efficiency with accounting, resource allocation and planning. Such literature as exists has not discussed these concepts comprehensively in relation to the public sector in general, still less to university activities. The present review serves as background to our examination of higher education in the UK and Iraq, and it is hoped that in the future further initiatives will be taken to develop and apply these concepts in relation to public sector activities.

CHAPTER THREETHE RESEARCH METHODOLOGYContents

- 3.1 INTRODUCTION
- 3.2 A BRIEF COMPARISON BETWEEN UNITED KINGDOM AND IRAQI UNIVERSITIES
 - 3.2.1 Iraqi Universities
 - 3.2.2 The Governance of Universities and their Efficiency in the Use of their Resources
 - 3.2.3 The Background to Strategic Planning and the Decision-Making Process
 - 3.2.4 Planning, Resource Allocation and the Monitoring Process
- 3.3 THE CASE STUDY METHOD
- 3.4 METHODOLOGICAL APPROACHES AND DATA COLLECTION
 - 3.4.1 Pre-collection, New Literature and Interview Outline
 - 3.4.2 The United Kingdom Case Studies Information Collection
 - 3.4.3 Iraqi Case Study Information, Interview and Collection of Available Information
 - 3.4.3.1 The Population of Interviewees and the Outline of Research
- 3.5 THE LIMITATIONS OF CURRENT RESEARCH
- 3.6 PRE-FINDINGS OF THE QUESTION GUIDE OF THE UNITED KINGDOM AND IRAQI CASE STUDIES

CHAPTER THREE

THE RESEARCH METHODOLOGY

3.1 INTRODUCTION

The first chapter of this research discussed its broad purpose. Chapter two provided a review of the theory of efficiency related to administration, accounting and finance, etc. It discussed the concept of efficiency related to economy auditing in the public sector accounting system in UK higher education and in developing countries. It is now necessary to describe the methodology used to achieve the current research purpose.

Developing countries' research is limited in the fields of accounting and finance generally, and especially in the education and higher education sector and, even more specifically, Iraqi higher education. There is limited empirical research in the accounting field in Iraq, a few being Ahmad, A. (1977), Saleem, M. (1981), Alrawi, H. (1985), although they are tackling different aspects of Iraq accounting and empirical investigation. These empirical studies, which are written in the English language, demonstrate the shortage of studies on Iraq. For that reason, the current research will attempt to develop case studies to facilitate comparison between UK and Iraqi higher education.

3.2 A BRIEF CASE STUDY BETWEEN THE UNITED KINGDOM AND IRAQI UNIVERSITIES

As mentioned earlier, the purpose of this study is to study accounting and the efficiency of the allocation of resources in universities. Case studies between United Kingdom and Iraqi universities are investigated, beginning with a review of the "Report of the Steering Committee for Efficiency Studies in Universities", United Kingdom, March 1985.

Additionally, the study will explain the actual processes used in university administration, accounting and allocation of resources.

The Steering Committee for Efficiency Studies in Universities was set up by the Committee of Vice-Chancellors and Principals in April 1984 with the following terms of reference:

To promote and co-ordinate in consultation with the individual institutions which it will select, a series of efficiency studies of the management of the Universities concerned and to consider and report to the Committee of Vice Chancellors and Principals and the University Grants Committee on the results with such comments and recommendations as it considers appropriate; provided that the commissioned studies will not extend to issues of academic judgement nor be concerned with the academic and educational policies, practices or methods of the universities.

The committee met for the first time on 8th May 1984; its task was to investigate whether management structures and systems were effective in ensuring that decisions are fully informed, that optimum value is obtained from use of resources, that policy objectives are clear, and that accountability is clear and monitored.

The research work carried out by the committee was mainly on the basis of a case study approach, and the results of these are considered in later chapters. The object of this section is to consider whether it is feasible to adopt a similar approach in the case of Iraqi universities in order to permit a reasoned comparison to be made between the two university systems.

To this end, the following notes are drawn from the experience of the researcher and his previous research in the field of accountancy and financial control of Iraqi universities, and also from a review of literature which is available at the current time.

3.2.1 A Brief Case Study of Iraqi Universities: Since 1970, the Ministry of Higher Education and Scientific Research has taken responsibility for preparing the higher education curriculum. The academic year, which lasts nine months, is divided into two sections, theoretical and practical (laboratory). The student studies for a period of four to six years leading to a B.Sc. in Humanities, Religion, Education, Business and Economics, Law, Medical Sciences, etc.

Before 1970 each university was responsible to the Iraqi Council of Ministers, but in 1970 the Ministry of Higher Education and Scientific Research was founded and each university became part of the Ministry of Higher Education. Every university is autonomous and is responsible only to the Ministry of Higher Education and Scientific Research. Each university is governed by the University Council and Academic Council. The University Council is headed by the President of the University and includes the Deans of Colleges and four faculty representatives of the Ministry of Higher Education. Laws 132 for 1970 and 55, 1985, defined the powers and responsibilities of the Council, President and Deans of Universities. Civil service laws govern the salaries of employees and academic staff. Estimated budget plans for universities are set yearly and are approved by central government by decree.

The degree of autonomy gives the top administrators freedom in the way in which they organise their affairs, but there is a variation of "management style" between the universities; this arises from history, tradition, size and location, just as in some universities in England.

The laws of higher education define university powers and responsibilities and co-ordinate meetings between each Minister and university presidents regularly throughout the year to discuss budgets, curriculum, academic staff, etc. Besides discussing the budget with the Ministry

itself they will also discuss it with the Ministry of Finance for final agreement before it is approved by central government and final approval given by decree.

As far as UK universities are concerned, page 8 of the Steering Committee Report states that:

Universities in the United Kingdom are independent, self-governing bodies with a large degree of constitutional autonomy.

On the other hand they have specific accountability and financial funding and are:

Subjected to parliamentary accountability as far as public money is concerned and operate within the planning limit imposed by UGC and government.

Thus, both British and Iraqi universities are influenced externally by whoever provides the funds, namely the UGC and the government in the United Kingdom, and the Ministry of Finance in Iraq.

A university in Iraq is a complex organisation with multiple objectives and functions as defined in Article 4 of the law for 1970: to modernise and expand science, technology and research programmes to meet the political, military, economic and social needs of the state and educate citizens to become knowledgeable about their nation's history and traditions whilst at the same time being trained in modern science and technology. This broad definition formulates the duties and responsibilities for each level of the hierarchy from the Minister to the Dean of the University.

All Iraqi universities have much the same managerial and administration process. They have the same main administration departments; Finance, Personnel, Registration, Legal Office, etc. However, they differ in the number of academic departments (colleges) but would not

reach 120 departments as in Edinburgh University. Even a decentralized university - such as Baghdad for example - would not have as many departments. The colleges in Iraq have the same functional departments as the central university administration, i.e. Finance, Personnel, Registration sections.

There is a shortage of academic staff in most subjects and there is a law providing staff with overtime payments to ensure that there is no "professional" work outside the university. Fixed laws concerning academic staff are issued to support them, but if there is a staff redundancy there will be a choice of transferring to alternative administration work. Part of the Academic Civil Service Law, issued in 1970, treats all the academic staff in every university the same and salaries are paid according to the number of years worked outside and in government sectors. Thus there is a job and salary for every academic. This is the opposite to the United Kingdom's tenure issue which does not guarantee every academic job as explained in the report concerning this point.

Between 1968 and 1980 the funds to universities in Iraq gradually increased but in 1980 both Iraq and the United Kingdom suffered cuts in university funding. This will be discussed at greater length in the case studies.

In addition, the past twenty years show the following points:

- a. Annual salary settlements rose more quickly than before.
- b. There is a need for more academic staff in universities due to the increase in the number of students and the opening of new academic departments.
- c. Government buildings, such as universities, do not face tax charges as in England, simply because there is no law concerning tax on

government properties and secondly because universities serve the public sector.

The financial budget process is set up annually depending on the general fixed budget, which is the "Uniform Coding System of Accounts" for universities. The biggest account is Salaries and Wages (academic staff and employees). A decentralized university like Baghdad uses the same system of accounts as a sub system (college budgets).

In the United Kingdom, funds are provided by the UGC depending on student admissions. The case in Iraq is different in that there is a central admission for all Iraqi students who finish high school, and this central admission allocates students to the universities each year.

3.2.2 The Governance of Universities and their Efficiency in the Use of their Resources: The United Kingdom and Iraq have similarities and differences broadly related to the administrative hierarchy, decision-making and accounting and allocation of resources. In the United Kingdom, councils and senates are extremely large bodies with as many as 233 members in total. There are also many committees and sub-committees linked to the council, which shows the long chain of command in the process of accounting and allocation of resources.

In the case of Iraq there is just the president of the university, two assistants, heads of colleges and a few members from outside as representatives on council - which is the equivalent to both the council and senate of the United Kingdom - which is linked to a relatively small number of committees.

Although the Vice Chancellor and Pro-Vice Chancellor and Deans in the United Kingdom are similar to the Iraqi universities' positions of President, Vice President and Deans, the heads of universities in both

countries have the biggest responsibility in the allocation of resources and their effectiveness.

Although the Deans of the United Kingdom are similar to those in Iraq, their resources are different. Deans in the UK influence the allocation of resources and the internal efficiency of universities. They have dual jobs as budget holders with executive responsibility and as authorities on finance and allocation of resources. However, how they use their resources at this level and what the differences are between the United Kingdom and Iraq will be one of the matters to be investigated in this research.

The following part discusses the background to the strategic planning and decision-making processes and then examines the planning, resource allocation and monitoring processes.

3.2.3 The Background to Strategic Planning and the Decision-Making Process:

Iraqi universities are influenced by many ministries, namely Finance, Higher Education, Supreme Auditing, etc. The rules and principles of the Government Accounting System are contained in the Ministry of Finance Law 28 of 1940, which regulates the ordinary budgets. The law contains rules regarding the ministry budget period, which is one year (1/1/- to 31/12/-) and rules the conditions under which allocations may be disbursed.

Although a few universities in Iraq, before 1973, depended financially on student fees and government funds, they are now totally funded by the government budget and are not affected by the number of students accepted. University reports showing the university capacity in each subject are given to the admission centre in the Ministry of Higher Education. Therefore, the number of students does not affect universities'

government support, unlike the situation with United Kingdom universities. In this way it is up to the Higher Education Ministry in Iraq to organise the correct admission to each university.

Research plays a minor role as concentration is given to teaching. Where there is research, it is still limited compared to the expansion of research in the United Kingdom.

A source of United Kingdom universities' funds is from its overseas students, whose fees, for science overseas students, can reach five thousand pounds a year. Iraqi universities, by comparison, offer free education to overseas students, while most Iraqi students have grants from Iraqi Higher Education.

3.2.4 Planning, Resource Allocation and the Monitoring Process: Emphasis is placed on this area because it represents the greatest opportunity to improve United Kingdom universities' efficiency and effectiveness. In examining the evidence, the researcher has therefore asked the following seven questions:

- (I) How much strategic and long term planning takes place in universities?
- (II) On what criteria are resources allocated?
- (III) By what mechanisms are resources allocated?
- (IV) What is the quality and extent of management information?
- (V) Who, below Council, is responsible for the allocation process?
- (VI) What is the budgetary control mechanism?
- (VII) What is the process of accountability?

These same questions applied to Iraqi universities give the following answers in brief:

(I) How much strategic and long term planning takes place in universities?

- a. Iraqi universities' objectives and aims are still very broadly defined, especially in the quality of teaching and research, curriculum, etc.
- b. Most universities have long term (five years) planning for finance and for other matters such as academic staff and students.
- c. Central government asked all universities to set up five year plans and some universities have done so, but the problem is that they have not followed them.

(II) On what criteria are resources allocated?

- a. There is little relationship between universities' long term objectives and their allocation of resources. Thus, many deficiencies arise in their internal financial management.
- b. Resource allocation is estimated on a historical basis in Iraqi universities, as are manpower; academic, administrative staff and labour.
- c. From experience it would appear that committees composed only of financial and administrative staff estimate the university's budget, so there is no academic input. Academic staff are segregated from financial planning and resource allocation.
- d. There is a long procedure in the allocation of universities' academic staff salaries, employees wages, etc., according to regulations of the Civil Services Law and Ministry of Finance annual regulations.

(III) By what mechanisms are resources allocated?

- a. Committees are formed by university presidents each year in order to estimate the financial plan. These committees, in most universities, take full responsibility to set up the budget on time. Most

of them do not ask for help unless from lower accountants, because committee members are well-experienced and most of them have more than fifteen years in their positions; besides which the committees usually have accountants or record managers.

- b. The plan is discussed by the university's council before it is taken to the Ministry of Higher Education for approval.
- c. The designated budget of the university can be re-allocated throughout the year - between the accounts figure - without reference to, but informing, the Ministry of Finance, as long as it does not exceed the total budget approved by central government.

(IV) What is the quality and extent of management information?

- a. A great deal of information is collected by the Administration Development Department in every university, including "the yearly statistics of the Ministry of Planning".
- b. Accounting information, whether internal or external, is generally inadequate. Thus, rules and regulations are usually difficult to interpret and inflexible. Although a great deal of financial information is received from outside the universities, it is not sufficiently precise to be of any real value in application.
- c. Academic departments do not have a copy of the financial plan because of the centralization of university planning.

(V) Who, below Council, is responsible for the allocation process?

- a. In every university there are many committees each responsible for a specific matter, e.g. budget, purchasing, selling surplus commodities, etc., but in general committees differ; some are formed for the purpose of administrative affairs and others for academic affairs.

- b. Some officers are involved concurrently in many committees besides their job and it is difficult for them to meet all of their responsibilities.

(VI) What is the budgetary control mechanism?

- a. In Iraq academic departments do not contribute to estimating the financial plan, because the budget is allocated according to the uniform accounting system which does not primarily show the academic department financial allowance, though it shows university accounts. A later chapter will explain this matter in detail.
- b. In a decentralized university, like that of Baghdad University, the budget is divided according to colleges (sub-units). Each college estimates its budget yearly and academics contribute in preparing their budgets.
- c. In most universities internal control does not consist of more than checking transactions.

(VII) What is the process of accountability?

- a. This subject is very difficult to measure in Iraqi universities. However, there is information regarding communication between employees, the use of academic staff time, the use of equipment, space and other matters.
- b. Comparing the administration department's plan with achievement, and reviewing the employees' tasks with their ability and experience.

Much research can be done to compare UK and Iraqi universities in the above respects.

The heads of departments and academic staff of the United Kingdom and Iraqi universities will be investigated by this research from the point of view of the academic department and its role in the allocation

of resources. It seems that in the United Kingdom academic departments have a vital role in the allocation of resources, in equipment expenses and basic budget preparation. Briefly, this is not the case in Iraqi departments in the sense that they are not budget holders and do not direct resource allocation, etc. In addition, whether they are efficient in allocating their resources will be investigated further.

3.3 THE CASE STUDY METHOD

The case study approach has been adopted here to permit greater depth of investigation and comparison between accounting and the allocation of resources in UK and Iraqi universities.

As in all research methodologies the case study approach is subject to advantages and disadvantages and one of the main disadvantages is that since they are narrative the time taken in compilation and space needed for the reported findings can become too great to be easily managed. The set of circumstances researched can be unpredictable and speculative in their recurrence therefore the findings are often restricted particularly to them. (See House, T. 1970).

Case studies are not usually accompanied by experimental design or control and are generally carried out in situations where the variables are largely undefined and the significance of the findings rests with the goals, experience and imagination of the researcher. Another problem might arise when the researcher wishes to study a total system requiring a continually expanding boundary whilst wanting a thoroughly detailed study of the most important variables. According to Diesing, P. (1971) the researcher:-

Cannot satisfy both of these contrary requirements fully; no matter which way he turns, his work will lack something - incomprehensiveness or incompleteness or both.

Another limitation is that, since the analysis of the study is usually meant to be from the specific, the degree of its generality is unknown. However, where a new field of organisation is under investigation it could be of value to use a single or limited number of case studies as Lupton, T. (1966) stated:

In trying to identify significant variables it is useful to get close to data, to know one organisation well. Then if it appears possible to isolate and measure particular variables and to prepare hypotheses about the relations between them, it might be worth embarking upon wider comparative studies.

It therefore becomes the burden of the researcher to ensure that representativeness is taken into account and this could be expressed in several different ways.

Despite all these pitfalls the case study approach has many advantages and as Gibson, J. and Donnelly, J. (1973) said:

This method is extremely valuable in answering questions concerning development and for exploration purposes.

Moreover, the main advantage of this approach in the management and accounting field studies has been well observed by research, textbooks and journals in that it is an inductive rather than a deductive method.

3.4 METHODOLOGICAL APPROACHES AND DATA COLLECTION

In order to generate the case studies between the United Kingdom and Iraq as mentioned in Chapters one and two, methodological approaches and data collection are needed. The purpose of this part of the chapter is to discuss and determine the methods and approaches used for information collection from two main viewpoints:

1. Literature review, collecting documents, textbooks, articles, etc.
2. The question guide (Appendix No. 1)

3.4.1 Pre-Collection, Review of Literature and Interview Outline: At this level of written investigation it is critical to comprehend what the case study is trying to do, and to hypothesise questions regarding United Kingdom and Iraqi universities' accounting and allocation of resources.

3.4.2 The United Kingdom's Case Studies Information Collection: After reviewing the literature, the researcher set up the main significant areas requiring investigation, as outlined in Chapter Two. Accordingly, he devised the question guide to be answered in order to fulfil the purpose of the study.

Furthermore, the researcher corresponded with and visited the University Grants Committee and the Committee of Vice Chancellors in order to collect up-to-date available information and publications concerning the study.

It was also of great benefit to obtain the Steering Committee studies concerning the Universities of Edinburgh and University College, London.

In addition the researcher has investigated the cost centres concepts and the move to reform university organisation by division into schools, whereby academic departments become cost centres. Therefore, an open-ended interview schedule was compiled in order to ascertain the responses of a number of academics and accountants in this respect. The current reform of UK universities into schools as cost centres is related to the budgetary process and the definition of goals and objectives. What is the extent of the authority and accountability of cost centres? How able are they to obtain funds from outside the university? Will cost centres be impelled to use their facilities to improve their funds?

General questions were also put to accountants concerned with the current development of university accounting, and their responses toward the changing of the accounts system sought. The aim was to discover whether the application of cost centres will result in more efficient control of departments; to look at pre-planning and what is spent; and to find out the implications of the change for staffing levels, communication, qualifications of staff and the level of accounting information. Who is going to monitor cost centres and what other changes will the new cost centre system bring? Will the new accounting system require greater classification and improve the allocation of funds to the school or cost centre?

Academic staff who are involved in planning and resources committees contributed to the discussion, while accountants who are involved in the changes answered these open ended questions. In addition, documents and other current available information concerning the current research question and changes in university finance were examined and UGC official documents were collected in order to write the UK case study.

3.4.3 Iraqi Case Study Information, Interviews and Collection of

Available Information: Two methods were used to collect the information for the Iraqi universities' case study concerning accounting and allocation of resources. These approaches were by interview and reviewing literature; articles, documents, etc., available on Iraq written in Arabic.

The stages of the question guide schedule are fairly divided into main, general and subsequent sets of questions:

- I. The institutional, administrative, accounting and financial situation - divided into two main sets of questions.

- A. External influences on the efficiency of administration, accounting and finance.
 - B. The universities' internal administrative, accounting and finance objectives and goals. The main number of questions and their percentage are shown in Figure (No. 3-1).
- II. The governance of universities and efficiency in the use of their resources: this contains nineteen questions related to the purpose of this study.
- III. Universities' operation and the background to planning, which contains twelve questions.
- IV. Planning, resources allocation and accountability in universities, which contains twenty-eight questions.
- V. The department and how it manages its resources, which contains eight questions.

The total number of questions and sub-questions are calculated to be eighty-four. Figure No. 3-1 elaborates the key statements of the questions guide, main number of questions, percentage and the empirical chapters to be written. The questions are translated into Arabic, so the interviewee can be asked in either language, according to his own preference.

3.4.3.1 The Population of Interviewees and the Outline of Research:

Since the researcher is limited to two years in time and by financial constraints two universities only were selected to be investigated; Technology and Al Mustansiriya Universities.

Accordingly, it was necessary to collect a representative sample of the universities' administrative and academic staff. Thirty administra-

FIGURE NO. 3-1

The Key Statement of the Question Guide and Sub-Questions of the Current Research

No.	Key Statements of the Questions' Guide	Main No. of Questions	%	
I	External influences on the efficiency of administration, accounting and finance	6	7%	Iraqi empirical chapter
	The universities' internal administration, accounting and finance objectives and goals	11	13%	
II	The governance of universities and efficiency in the use of their resources	19	23%	
III	Universities' operation and background to planning	12	14%	Iraqi empirical chapter
			33%	
IV	Planning resources allocation and accountability in universities	28	10%	
V	The department and how it manages its resources	8	100%	
	Total number of questions and sub-questions	84		

tive and academic staff were selected in total, fifteen interviewees from each university.

The interviewees were made aware that their answers would be taken by the researcher in a confidential manner, so the question guide was given to them one day and collected the next day.

The participants were taken from assistant presidents of the universities, heads of accountants and finance, heads of section of finance and administration and deans of universities.

When the question guides were supplied to administrative and academic staff participants, the researcher asked for documents and general information, if possible, to support their answers. These documents include financial plans, laws and regulations, etc.

Although the researcher has undertaken many library surveys of Iraqi and Arabian accounting, finance and management data relating to higher education, the situation was found to be very disappointing with a shortage of studies, research and articles, and specifically up-to-date information.

3.5 THE CURRENT RESEARCH LIMITATIONS

The research investigates the accounting and allocation of resources within universities of the United Kingdom and Iraq. This comparative area has never before been investigated as a comprehensive academic study. Moreover, case studies enabling comparison to be made between developed and developing countries are non-existent in this field. Accordingly, given the original limitations and the vital importance of concentrating on specific areas exclusively, a decision was made in favour of accounting and allocation of resources in practice. Therefore:

1. The research mainly concentrates on university administration related to accounting and the allocation of resources; including external influences, goals and objectives and the hierarchical governance of universities.

2. The research also focuses on university accounting and finance at work and their relation to planning, the allocation of resources and efficiency.

3.6 PRE-FINDINGS OF THE QUESTION GUIDE OF THE UNITED KINGDOM AND IRAQ CASE STUDIES

One of the main significant questions to be investigated in this research is whether there are similarities and differences between the two case studies. After reviewing the question guide answers it was found that broad similarities and differences between the United Kingdom and Iraq do exist. The two case studies show very strong similarities in the following:

1. The universities' internal administration, accounting and financial objectives and goals.
2. Universities in operation and background to planning.
3. Planning, resource allocation and accountability in universities.

Chapter twelve will discuss in more detail the similarities and differences between the case studies of the United Kingdom and Iraqi accounting and resources allocation efficiency. However, the comparison was made according to an interview schedule of open-ended questions (Appendix No. 1). The following chapter will analyse the results in more detail and make some suggestions and recommendations. All of this will be shown in the final chapter of this research of this main significant assumption.

PART TWO

THE UNITED KINGDOM'S UNIVERSITIES

This part will discuss a variety of literature including textbooks, journals and research on accounting and financial management of universities in the United Kingdom. It consists of four chapters. CHAPTER FOUR: Higher education in the United Kingdom. CHAPTER FIVE: The practice and evaluation of public accounting systems' practice in the United Kingdom. CHAPTER SIX: Administrative efficiency of United Kingdom universities, a case study. CHAPTER SEVEN: Accounting and financial efficiency of United Kingdom universities.

CHAPTER FOURTHE UNITED KINGDOM'S HIGHER EDUCATION

- 4.1 INTRODUCTION
- 4.2 DEVELOPMENT OF HIGHER EDUCATION
- 4.3 THE GENERAL EDUCATION SYSTEM AND ITS FUNDING
- 4.4 THE UNIVERSITIES OF THE UNITED KINGDOM
 - 4.4.1 Universities' Internal Government
 - 4.4.2 The Tasks of United Kingdom University Officers
 - 4.4.3 Administrative Structure
 - 4.4.4 University Academic Year
 - 4.4.5 United Kingdom's University Degrees
 - 4.4.6 United Kingdom Student Admissions
 - 4.4.7 United Kingdom Universities' Curricula Programmes
 - 4.4.8 Academic Staff
 - 4.4.9 Research Commitment in Universities
 - 4.4.10 Current Statistics
- 4.5 EXTERNAL ENVIRONMENT OF UNITED KINGDOM UNIVERSITIES
 - 4.5.1 The Committee of Vice-Chancellors and Principals (CVCP)
- 4.6 HIGHER EDUCATION FUNDING AND EXPENDITURE IN THE UNITED KINGDOM
- 4.7 SUMMARY

CHAPTER FOUR

THE UNITED KINGDOM'S HIGHER EDUCATION

4.1 INTRODUCTION

This Chapter discusses the United Kingdom's Higher Education; it contains a brief history of Higher Education and then deals with the organization and administrative development of Higher Education and universities. It then describes universities' administration activities, educational systems, admissions and curricula, while the final part describes the financial aspects of United Kingdom higher education.

4.2 DEVELOPMENT OF HIGHER EDUCATION

The United Kingdom has an area of 94.217 square miles (244.8 thousand sq. km), and lies between 50°N and 60°N latitude. In 1986 the estimated indigenous population of the United Kingdom was 56.486 million (OECD Observer, No. 139 March, 1986, p.6).

In the twelfth and thirteenth centuries the Universities of Oxford and Cambridge were founded and these were the only universities until the early nineteenth century. They were organized as individual colleges which retained a large measure of independence from the university authority, in, for instance, the appointment of teachers and student admissions. Both of these universities have become gradually dependent for their funding on central government, like other UK universities.

Scotland has its own ancient universities founded mainly in the fifteenth century, namely St. Andrews (1411), Glasgow (1451), Aberdeen (1494) and Edinburgh (1583). In the sixteenth century they offered a broader curriculum than English universities to meet the needs of the church and the legal system's emphasis on professional training in Scotland.

In the nineteenth century, London University and Durham University were founded and universities were also founded in Wales and in Ireland. University College, London was established in 1826 and granted its charter in 1936 and, because it excluded the teaching of theology, a further college, Kings, was established by the Anglican church in 1829. The University of Durham, which has a collegiate system in some respects similar to that of Oxford and Cambridge, was granted its charter in 1837. The University of Wales was established by Royal Charter in 1893, incorporating three university colleges: University College, Aberystwyth (1872), University College, Cardiff (1883) and University College, Bangor (1884).

A major development of the nineteenth century was the establishment of a number of universities after the industrial revolution, in the big industrial cities. These were Manchester (1880), Birmingham (1900), Liverpool (1903), Leeds (1904), Sheffield (1905), Bristol (1909) and Reading (1926), founded originally to accommodate the local needs of industry and commerce.

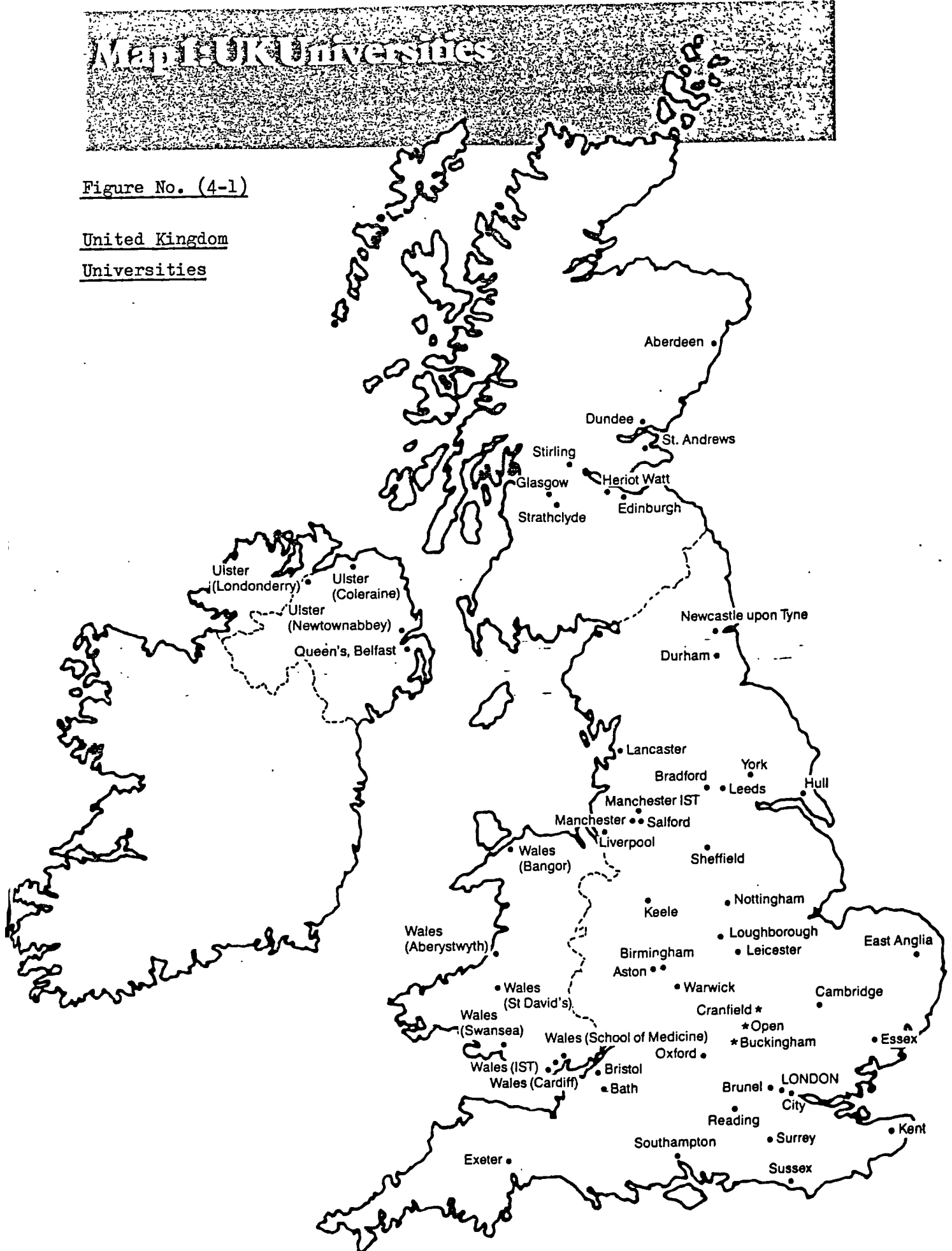
Further universities were established after the Second World War, i.e. Nottingham (1948), Southampton (1952), Hull (1952), Exeter (1955) and Leicester (1957). There are now forty-three universities which are funded by the British government through a national committee, the University Grants Committee (UGC). In addition, a number of other institutions, e.g. the Open University, Cranfield Institute of Technology are funded directly by the Department of Education and Science (DES).

Currently, the forty-seven universities in England, Scotland, Wales and Northern Ireland have their own identity defined by Royal Charter or Statute. Except for the University of Buckingham they are funded by

Map 1: UK Universities

Figure No. (4-1)

United Kingdom
Universities



*Not funded via the UGC

Source: HMSO "Higher Education Meeting the Challenge" by command of Her Majesty, April, 1987 (p.46).

central government; and the Open University apart, they receive the greater part of their public funding effectively by decision of the UGC (HMSO, 1987, p.36). See Figure No. 4-1.

4.3 THE GENERAL EDUCATION SYSTEM AND ITS FUNDING

The education system comprises nursery, primary, and secondary schools and is briefly described in this section and Figure No. (4-2).

The system operates on the basis of the distribution of power between central government, local education authorities and the teaching profession. The 1944 Education Act states that it is a national system administered locally. The Secretary of State for Education at the Department of Education and Science (DES) is responsible for education in England, whilst the Secretary of State for Wales is responsible for Wales. The DES is responsible for maintaining national standards of education, forming national policies for education, controlling the building, nature and distribution of schools and for training teachers. Another duty is to commission research related to policy requirements. National education planning is the responsibility of the Departmental Planning Organisation formed by a range of advisory units.

The day to day running of schools and colleges is left to local education authorities, who are responsible for the supply of buildings, materials, equipment and some advisory services. They also have authority to recruit and pay personnel. There are two categories of publicly maintained schools; they are the county schools established and run by local education authorities and voluntary controlled schools established by other bodies, mainly churches, but maintained financially by the local authority.

Funds are obtained from local property taxes (rates) and from the central budget. The government reviews public expenditure annually and this includes that spent on education. The DES must act within the government's education estimates and is therefore subject to the Treasury's influence.

Approximately 15 per cent of public spending on education is disbursed directly by the DES and the remainder is spent by local education authorities. About 61 per cent of the approved expenditure is provided through the rate support grant which is a block grant annually paid to local authorities by the government as a contribution to the costs of local services.

Compulsory education starts at the age of 5 years, although a child can attend pre-school nursery classes if the parents wish. Children must be educated - at school or privately - until the age of 16 years. Local education authorities operate either a two-tier or a three-tier system. The two-tier system has primary schools for children from 5 - 11 years, and secondary schools for 11 - 16 years. In the three tier system, a transfer is made to middle school at around 8 years, and to secondary school at around 12 years. Secondary schools are usually comprehensive in intake and cover studies for the appropriate public examinations.

Legally the curriculum is the responsibility of the local education authority, school governors or school managers, but in practice head teachers and their staff take decisions on content and teaching methods, timetabling and selection of textbooks. The Schools Council for Curriculum and Examinations is a national agency that undertakes research work on curriculum development and advises on matters of examination policy. Teachers centres have been established and form a focus for discussion and implementation of local curriculum development.

Teachers in publicly maintained schools must be qualified and are trained at universities, Departments of Education in polytechnics, Institutes of Higher Education and specialized Teacher Training Colleges. Students may take a three or four year vocational course leading to the Certificate in Education or the degree of Bachelor of Education, depending on the institution concerned. Graduates are required to complete a one year post graduate course in teacher training at a recognized institution, after which they are awarded the Post-Graduate Certificate in Education. Teachers are employed by local authorities but their salaries are determined at national level.

4.4. THE UNIVERSITIES OF THE UNITED KINGDOM

4.4.1 Universities' Internal Government: Universities are autonomous institutions established by Royal Charter or an Act of Parliament, each with its own system of internal government (Commonwealth Universities Yearbook, (1985, p.224)). Nevertheless, the majority have adopted similar but modified forms of government, and the main instruments of university internal government are the Court, the Council and the Senate.

The Court is usually the supreme university governing body. In practice, its authority is limited to formalities and academic matters. It meets once or twice a year to review the financial accounts and other reports. Usually the Court is the body which elects the Chancellor and in a few cases appoints the Vice-Chancellor. The members of the Court consist of representatives of the academic staff, graduates of the university, heads of local schools and nominees of other universities, local authorities and educational organizations, religious denominations, learned societies and professional bodies. Elected members serve for a period of two to three years and can be re-elected.

The Council undertakes the administration of the finance of the university and all policy decisions and usually its formal approval is necessary for academic decisions proposed by the Senate. The Council is the ultimate authority in authorising and approving academic activities and consists of representatives of the academic staff, nominees of local authorities and members appointed by the Court. The Chancellor and Vice-Chancellor are ex-officio members, and there are student members in most universities. The total Council usually consists of between 25 - 60 members and is responsible to the University Grants Committee. Academic members have more seats than non-academic members in Council and the reason is that academic members of Council are elected from the Senate.

The Senate, sometimes called the Academic Board, is the head of the academic body and the Vice-Chancellor is its Chairman. Senate approves and co-ordinates the work of the faculties or schools and is responsible for the teaching and discipline of students. Besides the Vice-Chancellor, as Chairman of the Senate, other members are professors and a number of non-professorial staff. Usually non-professorial heads of departments are ex-officio members of the Senate. In addition to these there are Deans of Faculties and Directors of Departments within the university.

Faculties regulate the teaching and study of their respective groups of subjects and report to the Senate upon ordinances and regulations, answer enquiries referred to them, and recommend staff for appointment. The Head Dean of Faculty is a member of the Senate.

The number of committees depends upon the complexity and size of the university. Usually expenditure estimation and the allocation of the government grant are delegated to financial committees. Staff appointments are also made by committee.

4.4.2 The Tasks of United Kingdom University Officers: The top post of the university is held by the Chancellor. His role is, however, largely honorary and ceremonial, usually limited to conferring degrees and taking the chair at the meetings of the Court. He sometimes fulfills a significant public relations role on behalf of the university.

Chairman of the Council is the most important position in the University Council, and is held by a prominent local business man or industrialist. Next is the Vice-Chancellor who shares with him many university tasks, and they confer to deal with difficult issues which arise in running the university.

In practice, the Council appoints key committees to deal with university affairs, such as finance and building. The Chairman of the Finance Committee is often the Treasurer of the university. The chairmen of these committees play a major role; they present university accounts and financial reports to the annual meeting, administer the university's finances and advise on financial matters, deal with insurance, investments and building contracts, and, perhaps most significantly, are involved in fund raising and in maintaining contacts with local authorities and other outsiders.

The Vice-Chancellor is the head academic and administrative officer of the university and holds a key position to influence the operation and development of the university. He is appointed by the Council and university Senate and is responsible to the Senate. As Chairman, he normally has the power to act on urgent matters between meetings and has power and influence on appointments and promotions. He is involved, also, in the allocation of funds between different parts of the university through formal and informal decision-making. He is often instrumental in helping to attract private funds and grants to the university and has

influence in spending those funds. He is the central university administrator and is the main link with the University Grants Committee and other outside bodies. In addition, he contributes as arbitrator in academic disputes between university members and also has influence over academic affairs.

4.4.3 Administrative Structure: Universities vary in their organizational structures. Within the administrative hierarchy, there are broad horizontal divisions into specialized departments, for example, academic, registry and finance. A common system in United Kingdom universities has been to have two senior officers, a registrar responsible primarily for academic activities and a bursar for financial and building matters. In a growing number of universities, however, these officers are joined by a third, namely the finance officer. A good deal depends upon the personalities and operating methods of the senior officers.

The secretary's office and the bursar's office stand in the same relationship to the Council as the registrar's does to the Senate. The Registry, which keeps all central records concerning academics and students may be divided among the faculties of the university or may be centralized.

Student representatives sit on the universities' Senate, Council and other important committees, in particular those dealing with catering, residential accommodation and other university social affairs.

4.4.4 University Academic Year: Most university academic years run from the beginning of October to late June or early July. The academic year is divided into three terms of eight to ten weeks each. The first term usually starts from the beginning of October to the middle of December; the second from the middle of January to about the end of March; and the

third from towards the end of April to late June or early July. There are special arrangements for 'sandwich courses', which continue academic study with training in industry or in an appropriate professional organization. (See Figure No. 4-3).

Two universities, Stirling University and The City University, follow the American system of dividing the academic year into two semesters, September to February and February to June/July.

4.4.5 United Kingdom's University Degrees: Titles vary according to the practice of each university. The most common titles for a first degree are Bachelor of Arts (BA), or Bachelor of Science (B.Sc), for a second degree Master of Arts (MA), Master of Science (M.Sc) or Master of Philosophy (M.Phil), and thirdly, Doctor of Philosophy (Ph.D). In Scotland, the title "Master" is occasionally used for a first degree in Arts subjects.

4.4.6 United Kingdom Student Admissions: Student applications for admission to universities are processed through the Universities Central Council on Admissions (UCCA), a coordinating body which receives applications, forwards them to the universities, and passes on their decisions. The procedure, which is designed to control the number of applicants and ensure compliance with course requirements, is as follows:

Having decided which courses and institutions best meet their interests, applicants complete the UCCA form naming up to five courses. The completed form is forwarded to UCCA not later than mid-December in the year preceding entry.

UCCA sends a copy of the form to each of the universities chosen and, when informed by each university of its decision, passes this on to the applicant. Universities take account of advanced-level results in

the General Certificate of Education (GCE) and of the confidential reports of the head teacher on the student's work. Many applicants are invited for an interview for two purposes; one is for the candidate to see the university and the other is for the university to see the candidate.

The offer of a university place may be made unconditionally, or it may be conditional upon the candidate obtaining specified grades in the GCE advanced level examination. Because a candidate may hold only two offers at any one time, candidates offered places on more than one course will have to make an early decision as to which to accept. This rule aids university planning, indicating the number of students for whom places must be held open. However, the exact position will not be clear until publication of the GCE 'A' level results. At this stage UCCA acts as a 'clearing house', receiving details of unfilled places on various courses which may become available to students who were unsuccessful in their first application, or whose 'A' level results were lower than expected.

Universities do not discriminate on account of sex, religion, race or politics. Most universities admit to their undergraduate studies students from abroad who wish to attend courses following a similar procedure.

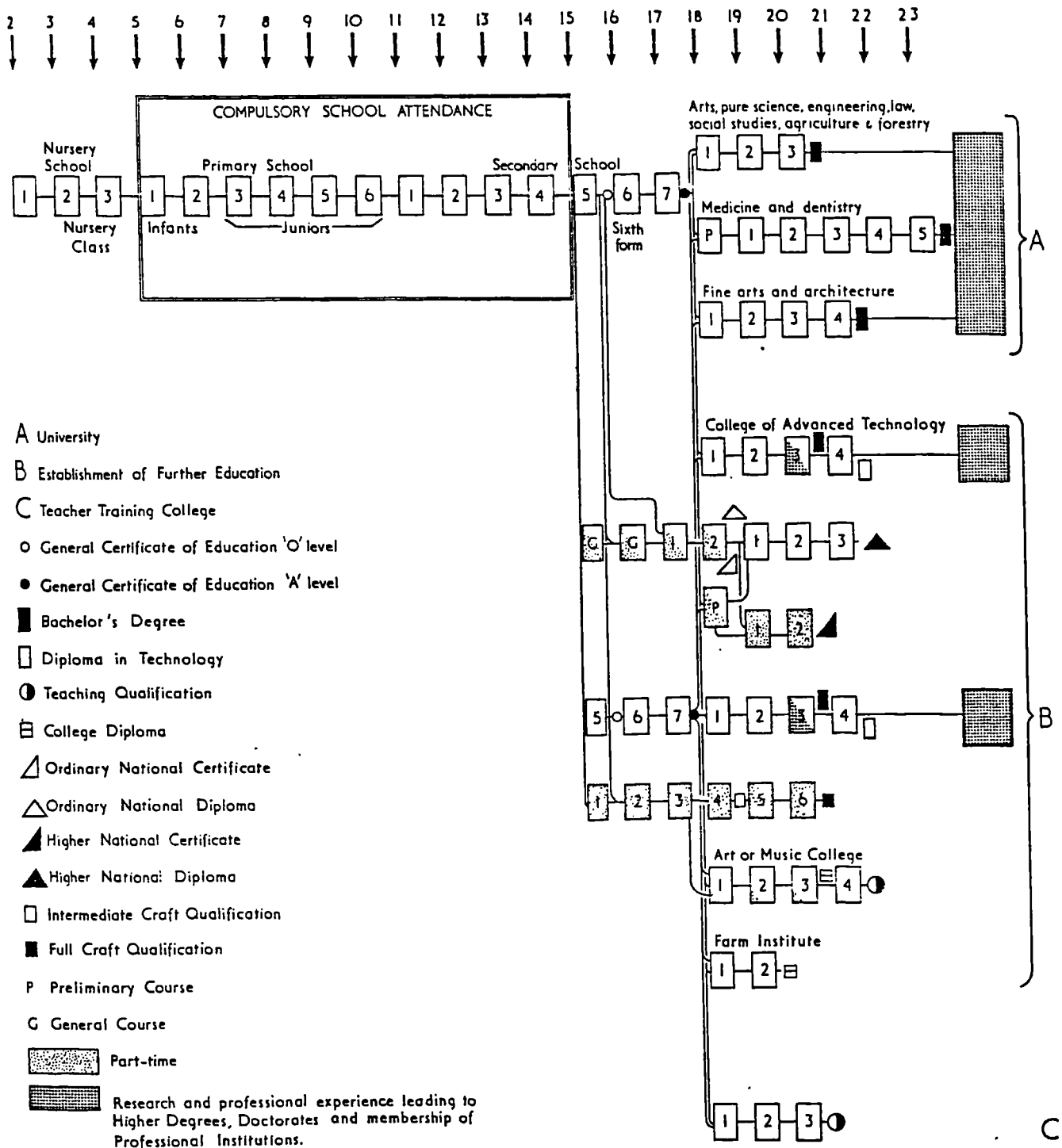
Postgraduate admission normally requires a good degree granted by approved institutions or by the Council for National Academic Awards, in a subject relevant to the proposed study or research. Universities' academic departments consider each application on its individual merit. Sometimes students take examinations or are interviewed by the academic staff before they start on their study.

4.4.7 United Kingdom Universities' Curricula Programmes: The undergraduate programmes of British universities are shorter than those of many other countries. Courses for most subjects and in most universities last for three years, though training for professions such as medicine, dentistry and veterinary science takes five years or longer. Exceptions to this pattern are in Scotland where the normal honours course takes four years and in the University of Keele which offers a preliminary foundation year. An extensive range of courses is offered (the most recent edition of the Compendium of University Entrance Requirements lists over 8,500) and universities are free to decide not only which courses to offer, but also the manner in which these are taught. Students are recruited nationally. Thus, an individual institution need not provide a comprehensive range of courses but may complement what other institutions provide. The range of courses available changes as universities respond individually to the advance of knowledge, to changes in student interest and requirements, or to the need of society for personnel qualified in particular fields. Some courses require in-depth study of a single subject from the outset, while others are more general, the student selecting a combination of several subjects. Universities vary tremendously in the types of courses offered, and in the flexibility allowed the student to change from one subject to another or to postpone his choice of specialization. Foreign language courses enable a student to spend a year in a country where the language is spoken, and sandwich courses combine study at university with training in industry and commerce (Commonwealth University Yearbook, 1985, pp.228-229).

In view of the variety of subjects and subject treatment, and in the absence of a national scheme of credit transfer, students must stay for their entire period of study in the same university until awarded their degree. A small number of students may need to repeat their first academic

Figure No. (4-3) Universities' Curricula Programmes

UNITED KINGDOM: ENGLAND AND WALES



year or withdraw from the university. Some courses require an examination in the second or third year and sometimes course work. Undergraduate degrees can be awarded with either first, second or third class honours.

Most universities provide postgraduate studies, academic or science. Broadly the postgraduate studies are of two kinds: research training and taught courses. Research students pursue independent research under the supervision of a member of the faculty staff of the university. The study period is not less than three years unless the researcher has a Master's degree.

4.4.8 Academic Staff: Each university in the United Kingdom appoints its own faculty staff by its own regulations and procedures. Universities follow a common scale of salaries. There are three academic grades, namely professor, senior lecturer/reader and lecturer. Professors and senior lecturers/readers constitute the senior staff and universities are required to restrict their numbers to 40 per cent of all full-time academic staff. Professors themselves account for only 12 - 13 per cent of all staff and usually well over 90 per cent of academic staff have tenure (Commonwealth Universities, 1985). They are only removed from their positions for 'good cause' such as inability to perform their duties of office. Academic staff perform full time duties and they may undertake paid outside work only with permission of their Vice-Chancellor.

Figure No. (4-4) shows the full-time teaching and research staff at UK universities. The number of academic staff has decreased gradually because of financial cuts. The tenure issue regarding lower academic staff will be discussed in detail in Chapter Six.

Academic staff retirement age is usually 65. Salaries are negotiated nationally within financial limitations agreed by the Committee of Vice

Chancellors.

Figure No. (4-4) Full-time Teaching and Research Staff at Universities⁽¹⁾

Year	Professors	Readers and Senior Lecturers	Lecturers and Assistant Lecturers	Other	Total	Percentage Annual Change
1979/80	4337	8734	20518	661	34250	1.6
1980/81	4382	8809	20460	648	34297	-0.1
1981/82	4351	8772	20045	562	33735	-1.6
1982/83	4017	8284	18885	456	31642	-6.2
1983/84	3893	8145	18595	463	31096	-1.7
1984/85	3807	7942	18737	557	31043	-0.2

1. Full-time and research staff in post wholly financed from general university funds.

2. Source: HMSO "Annual Abstract of Statistics" No. 123, 1987.

4.4.9 Research Commitment in Universities: United Kingdom universities are different from other institutions through their commitment to research. The appointment of academic staff as members in the university depends on their competence not only as teachers but also as researchers as attested by their publications. Fifteen per cent of all full-time university students and the majority of part-time students are postgraduates by research, and some 17 per cent of all university income comes from research students and service research for outsiders (Commonwealth Universities, 1985).

Alternatively, research is funded by a support system of funds made available through the UGC (Ibid, 1985).

4.4.10 Current Statistics: The current details of student numbers are given in the following summaries. In December 1982 there were 295,394 full-time students attending United Kingdom universities, a decrease of

4,801 (1.6 per cent) over 1981. The following is a breakdown of these students (HMSO, 1984):

	<u>charged home fees</u>	<u>charged other fees</u>	<u>Total</u>
Undergraduates	237,029	12,995	250,024
Postgraduates	31,139	14,231	45,370
	<hr/>	<hr/>	<hr/>
Total	268,168	27,226	295,394

Overseas students from the European Community Countries (EEC) were charged home fees. Of students shown above as having been charged other fees 24,045, who entered universities after 1980-81, were charged the relevant minimum rate for the course recommended by the committee. The students who started before September 1980 continued to pay at the subsidised rate (Ibid, 1984).

The countries which provided the largest number of students to the United Kingdom in 1982-83 were: Malaysia (4,338), Hong Kong (3,923), USA (2,394), Nigeria (2,148), Greece (1,945), Iraq (1,430). (Commonwealth Universities, 1985).

In 1982-83, the number of students in universities was 328,905, excluding those in continuing education studies. Of these, undergraduate student numbers were 255,190 with 250,024 (98 per cent) studying full-time. Postgraduate numbers were 73,715, of whom 45,370 (62 per cent) were full-time. Overall, these students constituted a full-time equivalent load of about 308,500 on teaching departments. In recent years, the number of full-time postgraduate students has declined, whilst part-time students continued to increase. However, 1982-83 was the first year in which the contraction of

the universities of the United Kingdom was reflected in the number of undergraduate full-time students.

In 1983-84, 326,348 students (excluding those on continuing education courses) attended UK universities. 249,898 of these were undergraduates of whom 244,249 (98 per cent) were studying full-time. There were 76,450 postgraduates, of whom 47,473 (63 per cent) were studying full time. The full-time equivalent on teaching departments was about 304,800. In recent years, the numbers of students have changed as in Figure No. (4-5).

Full-time undergraduate numbers fell in 1983-84, though there were more postgraduates than there had been since 1978-79. The number of part-time students at both undergraduate and postgraduate levels continued to rise.

Although the student numbers fluctuated through the years 1980/81 to 1984/85, they appear to be increasing through these years (Figure No. (4-6)).

Qualifications obtained: Of the 76,290 students who successfully completed undergraduate courses in 1983, 73,089 (96 per cent) gained first degrees, 3 per cent more than the previous year. Indeed, there was a steady increase in the number of successful undergraduates between 1978 and 1983, totalling 18 per cent overall.

The number of students successfully completing postgraduate courses in 1983 showed a small decrease (0.4 per cent) over the total for the previous year. 20,822 (68 per cent) obtained higher degrees, 5,431 (18 per cent) were awarded higher diplomas, and 4,411 (14 per cent) obtained a professional teaching qualification. Since 1978 there has been a 15 per cent increase in the number of higher degrees awarded though the number of higher diplomas obtained has shown a 7 per cent decrease (UGC, "Universities Statistics 1983-84", 1985, p.7).

Figure No. (4-5) Student Numbers: 1978/79 to 1983/84

	1978-79 (000s)	1982-83 (000s)	1983-84 (000s)	Percentage change since	
				1978-79	1982-83
Full-time undergraduates	239.2	250.0	244.2	2	-2
Part-time undergraduates	3.8	5.2	5.6	50	9
Full-time postgraduates	49.2	45.4	47.5	-4	5
Part-time postgraduates	24.3	28.3	29.0	19	2
Full-time equivalent (FTE) load	302.2	308.5	304.8	1	-1

Sources: UGC "Universities Statistics 1983-84", Vol.3, Finance
Published by Universities' Statistical Record, 1985, p.5.

Figure No. (4-6) Student Development at Universities

Year	New Students admitted full-time	Students taking courses full and part time	Total
1980/81	86827	339925	426752
1981/82	84525	343007	427532
1982/83	81839	338907	420746
1983/84	79540	336912	416452
1984/85	86458	345760	432218

Source: HMSO "Annual Abstract of Statistics" Central Statistical
Office, No. 123, 1987, Table No. 5.15 (p.102)

Recent trends in student numbers on courses of higher education in universities and the public sector in Great Britain have been analysed in depth in a series of DES Statistical Bulletins. Only a brief summary of past trends is therefore given here. Between 1970 and 1985, the number of home full-time students in higher education increased by 106,000 to 528,000. Nearly three-quarters of this increase took place after 1979, university numbers increasing until 1981, after which they decreased slightly, while public sector numbers rose steadily from 196,000 in 1979 to 273,000 in 1985. The pattern for overseas students was somewhat different, with a decrease from 61,000 in 1978 to 48,000 in 1983 followed by slight increases in 1984 and 1985. Part-time study is on the increase. By 1985 the number of part-time students in higher education was estimated at 328,000, an increase of 60,000 since 1979 (Department of Education and Science, 1986, p.2).

In 1986 the Department of Education and Science published "Projections of Demand for Higher Education in Great Britain 1986-2000" which gave two projections of future student numbers. Projection P, the lower of the two, was based on the assumption that the numbers of young people entering full-time higher education will remain a constant proportion of those gaining the traditional qualifications for entry (two or more GCE A levels or three or more Scottish Highers), and that the entry rates for mature students will also remain constant. For the higher projection Q, it was assumed that those proportions will increase - particularly amongst young women - in part to reflect the success of the government's policies for schools and non-advanced further education (HMSO, Higher Education Meeting the Challenge, April 1987, p.5).

In Projection P total numbers increase to 700,000 full-time equivalents by 1989, followed by a decrease of 84,000 to 616,000 by 1996 and then a

small increase to 633,000 by the end of the century. In projection Q numbers increase to 726,000 in 1990, followed by a much smaller decrease of 35,000 to 691,000 by 1996, and a subsequent increase of 32,000 by the year 2000 (Department of Education and Science, 1986, p.15).

4.5 EXTERNAL ENVIRONMENT OF UNITED KINGDOM UNIVERSITIES

United Kingdom universities are autonomous but, financially, are supported indirectly by the government through the University Grants Committee (UGC), which is interposed between the government and the universities. It was established in 1919 that there was a need for a new mechanism for channelling funds to universities, which had suffered severely through neglect and lack of government funding during World War One. It was not so much a planning body as a mechanism for resource allocation for a given sum amongst a group of university claimants (Shattock, M. and Berdahl, R., 1984).

From its establishment in 1919 it advised the Treasury on the sums to be allocated to universities. Its original terms of reference were: 'to enquire into the financial needs of university education in the United Kingdom and to advise the government as to the application of any grants that may be made by parliament towards meeting them'. These were extended in 1946 to:

enquire into the financial needs of university education in Great Britain, to advise the government as to the application of any grants made by Parliament towards meeting them; to collect, examine and make available information related to university education through the United Kingdom, and to assist, in consultation with the universities and other bodies concerned, the preparation and execution of such plans for the development of the universities as may from time to time be required in order to ensure that they are fully adequate to national needs.

(Commonwealth Universities, 1985)

The UGC consists of some twenty members of whom only the Chairman of the Committee is full-time, and is appointed normally for a period of five years. Other members are part-time, being senior academics, and are appointed by the Secretary of State for Education and Science after consultation with the Secretaries of State for Scotland and Wales. They are drawn from different types of universities and they are not representatives of their own universities (Commonwealth Universities, 1985, and Shattock, M. and Berdahl, R. 1984).

The UGC has two roles: 'the first is advisory, to make clear to government the objectives of universities and the resources necessary to ensure that their objectives are attained. The second is executive, to allocate the funds which have been provided by government to individual institutions'.

In assessing the requirement of universities, the UGC takes account of the plans of every individual university after ensuring that collectively the universities match the country's demand for training men and women, the requirements for particular skills (the succession of allocation resources), etc. After government approval of the overall allocation of funds, the UGC's task is to distribute that allocation of funds amongst the universities.

Until recently grants were made on a five-year basis. Each university would submit its own quinquennial plan to the UGC, which appraised the plan and submitted its advice to central government. In turn, the government approved the quinquennial allocation to the UGC and the latter distributed the fund individually to universities. In recent years, the grants have been made on a year-to-year basis. In addition the UGC has increased its demands on the universities by requiring that the funds are meeting the country's demands, requiring information about target numbers of students in the broad areas of arts, science and medicine and about phasing out of

old and introduction of new activities.

In 1985, the Croham Committee was established to review the role and structure of the UGC, as a result of a recommendation by the Steering Committee for Efficiency Studies in Universities. Its report, published on 10 February 1987, concluded that the UGC should be reconstituted as an independent University Grants Council, sponsored by the Secretary of State for Education and Science. Its terms of reference would be revised, it would have a chairman with broad non-academic experience, broadly equal numbers of academic and non-academic members, and a reserve power for the Secretary of State to issue directions to the Council. The new Council, it was suggested, should be formally incorporated, preferably by legislation.

These recommendations were broadly accepted by the government, which proposed to replace the institutional grant by a contract system. The UGC, it was proposed, would be replaced by a Universities Funding Council (UFC). It was stressed that the UFC's role would be in relation to the allocation of funding between universities rather than to its overall amount, which would be a government decision.

Progress was to be made in some areas even before the constitution of the new body. Recommendations included:

- i) The provision of government guidelines for the planning process.
- ii) The government should play no part in the distribution of general funding between individual universities in Great Britain.
- iii) The UFC should be able to require that funding is or is not spent for a particular purpose.
- iv) The use of financial memoranda to govern financial relations between the government and the UFC, and between the UFC and universities.

- v) Improved arrangements for the flow of management information and for accountability from the universities to the UFC and onwards to government.

A further recommendation of the Croham report was that provided the general rate of inflation is expected to be below 5%, the funds available from the government to the universities via the Council should be set in cash terms for three years, and reduced only in a national emergency. The government recognised the importance of giving higher education institutions advance information about the resources likely to be available, but suggested that a rolling programme would be preferable to a fixed triennium. The new UFC would give universities planning parameters for the medium and long terms.

Other recommendations of the Report are still under government consideration. These concern the structure of the new Council; its information requirements, the resource allocations procedure; and certain specific responsibilities. The government wishes the UFC's funding arrangements to reward co-operation with industry and commerce. (HMSO, 'Higher Education Meeting the Challenge', April, 1987, pp.36-38),

4.5.1 The Committee of Vice-Chancellors and Principals (CVCP): The Committee of Vice-Chancellors and Principals is another external influence upon universities. It does not have formal relations with the government, but is increasingly affecting universities' roles and activities. The Committee began regular meetings in 1918, but became more involved in universities' activities in 1960 because of the increasing number of universities and colleges. It was authorized in 1967 to act as the collective voice of the universities to make statements on their behalf.

Today the committee comprises some sixty members: the Vice-Chancellors and Principals of the forty-two universities which are in receipt of a

grant from the UGC, the Vice-Chancellors of the two universities of Northern Ireland, the principal and six other persons nominated by the University of London, the five principals of the constituent colleges of the University of Wales, the principal of the University of Manchester, Institute of Science and Technology, the Vice-Chancellor of the Open University, the Vice-Chancellor of Cranfield Institute of Technology. The registrar of Oxford, the registrar of Cambridge and the secretary general of the Association of Commonwealth Universities attend its meetings. The chairman of the committee is elected annually from amongst its members and is usually re-elected for a second year. There are two vice-chairmen and a treasurer. The committee is funded solely by annual contributions from the individual universities.

The head of the secretariat is the Secretary General, who is supported by four assistant secretaries, some fifteen other officers and a total staff, including those of associated bodies, of around fifty. The full committee meets seven or eight times each year beginning with a two-day residential meeting. It has an executive committee, called the general purposes committee, consisting of some fifteen members, which co-ordinates the business of the committee and discharges a number of matters on its behalf; and four standing committees: a) dealing with finance and development; b) with academic affairs; c) with staff and student matters and; d) with international university affairs (Commonwealth University, 1985, p.226).

However, the committee's major function is to bring Vice-Chancellors of universities together to discuss affairs of common interest and it provides advice to assist them in managing their universities.

The committee also provides its members with information concerning United Kingdom universities in areas such as changing curriculum and examinations, the statistical record of universities, training of university teachers, the determination of salaries and wages of staff, etc. Lately, the committee has come to the fore as a group especially after the cuts in universities' expenditure and it has provided a collective view on behalf of universities' Chancellors.

There is close communication between the chairman of the committee and the chairman of the UGC as well as regular meetings of the two committees with the Secretary of State for Education and Science and other government ministers. The committee representatives have contact with a wide range of national bodies in the United Kingdom; CBI, TUC, AUT and NUS.

4.6 HIGHER EDUCATION FUNDING AND EXPENDITURE IN THE UNITED KINGDOM

The central government of Britain is a body of ministers charged with the administration of national affairs. The Prime Minister is elected from and by the ruling party and is confirmed in that position by the Crown. All other ministers are chosen by the Prime Minister and confirmed in office by the Crown. Government departments are used by the government to carry out their wishes. Some departments such as the Ministry of Defence cover the whole of the United Kingdom. Others, for instance the Department of Employment, cover Great Britain and some such as the Department of Education and Science and the Department of the Environment are concerned with affairs of England with separate departments for Scotland, Northern Ireland and Wales.

The Department of Education and Science is responsible for the promotion of education generally in England and Wales. It is also responsible for the government's relations with universities in Great Britain and fosters

the progress of civil science both in Britain and collaboration with other countries. The department is also responsible for the library service, supporting the British Library and the administration of the Victoria and Albert and the Science Museum in London.

The Secretary of State for Education and Science is assisted by a Minister of State and a Parliamentary Under-Secretary of State.

Some of the matters relating to the development of school and post-school education are the broad allocation of resources, capital programmes for the building of new schools and institutions and the supply and training of teachers to give basic standards of education. Locally, the education authorities provide and run the schools and colleges within their areas but they co-operate with the Department. The Department's relations with universities are through the University Grants Committee.

The United Kingdom universities derive their funds from three main sources: government grants (around 64 per cent); tuition fees (around 13 per cent); and research grants, contracts and other services (around 17 per cent). (Commonwealth Universities, 1984).

The main funds are the government grants of which settlement is for one year and it depends on many factors:

1. the grant is based on a specified number and subject mix of home students.
2. On the income which universities can expect to receive from home student fees and
3. On assumed increases in salaries and in the rate of inflation.

The recommended minimum tuition fee for 1984-85 was £3,150 for arts students, £4,150 for science students and £7,650 for students following clinical

courses in medicine.

Cmnd. 7746 directed that overseas students starting universities from September 1980 onwards or their sponsors would be expected to pay the full cost of their fees. Assistance, including provision for meeting fees, would continue to be given under a number of schemes within the FCO and ODA programmes, mainly under the ODA's technical co-operation training programme. Additionally a scheme was introduced in September 1980 to provide bursaries to overseas postgraduate research students of outstanding merit. (HMSO, 1980, p.97). European Community students are an exception, paying the same fees as United Kingdom students. United Kingdom home student tuition fees for undergraduate and postgraduate students are £500 and £1,569 respectively.

In 1983-84, the income of universities in Great Britain was more than £2,000 million, most of which was recurrent income. £1,597 million was for general purposes and £385 million was in respect of research grants and contracts and for other services rendered.

If we exclude additions resulting from net-to-gross changes, the 1982-83 figures for the "other sources" category of "general recurrent income" would be reduced from £98 million to £83 million and those for 1983-84 from £111 million to £95 million, giving a rise of 105 per cent between 1978-79 and 1983-84. The 1982-83 and 1983-84 figures for "specific recurrent income" - both from research grants and contracts and from other sources - also have a slightly expanded coverage compared with earlier years. Of the relatively small amount included, some would previously have been netted off, and some shown under "general recurrent income - other sources".

The Exchequer grants line also includes an allowance for payments to student unions. Prior to 1981-82 this would not have been included in the

main account. The allowance for capital expenditure from recurrent income, which in 1978-79 would have been subsumed within large capital grants. The Exchequer grants total for 1982-83 and 1983-84 (£1205 million and £1225 million respectively) also include £51 million and £36 million respectively to cover compensatory payments to staff taking early retirement.

The 1983-84 capital grants figure (£17 million) continues the downward trend of previous years (UGC, "Universities Statistics 1983/84", 1985, p.5).

For 1983-84, the home postgraduate fee was increased by 6 per cent, from £1,413 to £1,494, but the home undergraduate fee remained unchanged at £480.

There was a 4 per cent increase in the number of students charged other fees, most of these fees being charged at the recommended minimum levels for non-subsidised students. For the year in question, these were £2,900 (for arts subjects), £3,800 (science) and £7,000 (clinical), compared with £2,700, £3,600 and £6,600 in 1982-83. The subsidised rates, which increased by about 6 per cent, were applicable only to students who started courses before 1980/81. The overall result of these changes was a 13 per cent increase in income from full-time students charged other fees.

Expenditure: In 1983-84 universities in Great Britain incurred recurrent expenditure of £1,564 million on general teaching and research, and on normal running activities (i.e. excluding capital expenditure from recurrent income and transfers to equipment and furniture accounts). £842 million (54 per cent) of this was spent in respect of academic departments, £310 million (20 per cent) on maintenance and £139 million (9 per cent) on academic services.

If additions arising from net-to-gross changes were excluded, the 1982-83 and 1983-84 figures from 'general education' would be reduced from £44 million and £48 million to £33 million and £42 million respectively, a real percentage change since 1978-79 of 68 per cent. The 1982-83 and 1983-84 totals for 'amenities and facilities' (£44 million and £46 million) both include £4 million resulting from the net-to-gross changes, £15 million and £16 million respectively represent payments to student unions, which in 1981-82 were made direct from recurrent grants for the first time; the exclusion of these sums would bring the real rise between 1978-79 and 1983-84 to 56 per cent. Pensions payable from recurrent income (£75 million and £54 million) includes payments made under the premature retirement compensation schemes, and some other payments in respect of premature retirement. This figure, a considerable item in 1981-82 and 1983-84 is now declining.

In 1983-84 universities spent £1,041 million (65 per cent) of their general funds on salaries and wages. The overall expenditure on salaries and wages increased by 77 per cent between 1978-79 and 1983-84. The largest rise (93 per cent) occurred in the salary bill for academic-related staff, i.e. administrators, librarians, computer personnel, etc. During this time, the number of such staff fell by 1 per cent, while the number of teaching and research staff fell by 8 per cent.

Academic departmental expenditure: Recently, unit recurrent costs of arts departments have risen in relation to those of science departments. In 1978-79 the arts departments' unit recurrent costs was 49 per cent of that for science (including clinical) departments, rising to 52 per cent by 1983-84. If clinical departments are excluded from the comparison, the rise is slightly greater, from 53 per cent in 1978-79 to 57 per cent in 1983-84. In 1983-84 equipment costs for science (including clinical) departments were eight times those of art departments. Since 1978-79,

student/academic staff ratios have increased, particularly in science and clinical departments. A particularly sharp increase occurred in 1982-83, when full-time staff numbers were reduced substantially more than the student load. In 1983-84, the arts and science student/academic ratios were about the same.

Staff: In 1983-84, there were 51,208 full-time and 3,301 part-time academic and related staff in universities in Great Britain. The number of full-time staff paid wholly from general university funds had fallen, but that of part-time staff and of full-time staff not paid wholly from general funds had risen. The 21 per cent increase over the previous year in the part-time total largely reflected the staff engaged to help fill gaps left by the relatively large outflow of full-time staff (UGC, "Universities Statistics 1983/84", 1985).

4.7 SUMMARY

This chapter has briefly outlined the United Kingdom's education system, with particular reference to higher education and the role of the universities. The university academic year, degrees, student admission procedures and the range of study programmes were all explained.

The chapter has reviewed statistics concerning numbers of academic staff and British and overseas students in recent years, in addition to projected student development to the end of the decade.

Since universities are both academically and financially influenced by the external environments, this chapter highlights the roles of the University Grants Committee (UGC) and the Committee of Vice-Chancellors and Principals (CVCP), both of which have changed in recent years with the economic situation of the country and consequent financial pressures on universities.

Higher education funding sources and procedures are discussed, and recent statistics are quoted illustrating the patterns of expenditure on universities in recent years.

Having obtained an overview of educational provision in the UK and examined the role of the universities in particular, it is necessary to discuss the financial situation within which these institutions operate. The following chapter will therefore outline the financial and accounting roles of central and local government, and of the universities themselves.

CHAPTER FIVEPUBLIC ACCOUNTING SYSTEMS IN THE UNITED KINGDOM

5.1 INTRODUCTION

5.2 GOVERNMENT ACCOUNTING SYSTEMS

- 5.2.1 The Consolidated Fund
- 5.2.2 National Loans Fund
- 5.2.3 Constitutional Principles
- 5.2.4 Government Financial Procedures
- 5.2.5 Form of the Estimated Accounts
- 5.2.6 Government Taxation
- 5.2.7 Accounting for Departmental Spending
- 5.2.8 Appropriation Accounts
- 5.2.9 Role of the Treasury
- 5.2.10 Trading Accounts
- 5.2.11 Stores Accounting, Inventories
- 5.2.12 United Kingdom Public Sector Accounting Evaluation

5.3 LOCAL GOVERNMENT ACCOUNTING

- 5.3.1 Accounting in Local Authorities
- 5.3.2 Current Developments in Local Government Accounting and Auditing

5.4 ACCOUNTING IN HIGHER EDUCATION

- 5.4.1 Brief Introduction to University Grants System
- 5.4.2 The Quinquennial System
- 5.4.3 The Annual System
- 5.4.4 Value Added Tax
- 5.4.5 Academic and Related Staff
- 5.4.6 Conditions of Service
- 5.4.7 Other University Staff

5.5 UNIVERSITIES ACCOUNTING PRACTICE

- 5.5.1 University Accounts Forms
- 5.5.2 University Costing
- 5.5.3 University Teaching and Research Forms
- 5.5.4 University Statistical Records

5.6 SUMMARY

CHAPTER FIVEPUBLIC ACCOUNTING SYSTEMS IN THE UNITED KINGDOM5.1 INTRODUCTION

This chapter concentrates on the main accounting practices in universities, but it dwells briefly on other public sector accounting systems in the UK such as government and local government.

There are many different accounting systems in the United Kingdom government and public sector. This chapter will describe the main systems practised and their effect on universities and higher education in the United Kingdom.

5.2 GOVERNMENT ACCOUNTING SYSTEMS

Although government accounting has a long history there is still a shortage of literature and research on this subject. Briston, R. (1981) referred to this when he said:

Despite its long and continuous history government accounting remains academically and professionally a neglected area.

This part of the chapter will place emphasis on government accounting in the United Kingdom, reviewing the documents of the government and available literature in the United Kingdom.

Literature and research studies on government accounting are important for many reasons. First, the government sector in developed countries has continued to increase in size over the years. Second, the public sector has adopted new managerial policies toward nationalised industries, public corporations, councils and government agencies. These organisations have different links with government and different economic and organisational functions, and accordingly, have caused an increase in the variety of

government accounting systems. Third, to achieve government objectives - specifically those relating to efficiency, cost effectiveness, financial control, and more effective accounting - more accounting information and better ways of interpreting this information are needed. Fourth, accounting and financial reports form an essential means of accountability to taxpayers. Thus more attention must be paid by the public sector to show how public money is spent, and improvement in government accounting is badly needed.

The government, at the beginning of the first world war, had a relatively limited involvement, its main role being restricted to diplomatic relations and the maintenance of law and order. Gradually, the government entered the field of social legislation, involving housing, health and education and it is now also widely engaged in civil and military research schemes. Furthermore, government has set itself the task of maintaining high levels of employment and economic performance.

The organizational structure of the government consists of four major areas:

(i) Central government - the civil service - is the vehicle by which national policies are implemented. In addition, it is concerned with the raising, allocating, controlling and spending of public funds.

(ii) Local government authorities, which serve the needs of local citizens.

(iii) The central government is involved directly in nationalised industries.

(iv) The government has set up various autonomous agencies and councils, whose function is to advise, consult, represent, arbitrate, finance or co-ordinate.

The size of the government sector is growing, and the number of people employed therein has increased. Furthermore, government activities have become more complex and, finally, government expenditure has increased and this has increased the need to control public expenditure.

There are two ways in which the term "public" is used. Public administration is concerned with the purposes of society as a whole, and operates in the name of the land and its people. The government, however, provides policies for society and institutes the goals of the country, whilst public administration is concerned with achieving them (MacRae, S. and Pitt, D., 1980).

Thus, it may be possible to say that the objectives of government are broader and more varied on the basis that government service renders much broader economic, social and political objectives, as mentioned in the first chapter on non-profit organization. Consequently the accounting systems of governments serve the government's purposes as will be discussed later.

Public sector decision processes in the UK are carried out through four branches - as briefly mentioned by Briston, R. (1981) - of the government political system:

- the executive, manned by ministers, responsible for making decisions and seeing that policies are implemented;
- the administration, manned by permanent officials, whose job it is to advise ministers and to implement their policies;
- the legislature, manned by elected members, responsible for law making, and for debating and criticising the executive's choice of policies and the administration's manner of implementing them;
- the judiciary, manned by judges, responsible for the interpretation of the law and the administration of justice.

In addition, there is a clear separation of powers between Parliament and the executive, and there is no chain of command except that within the organization itself. The current government accounting system is discussed

in the Guide on Accounting and Financial Procedures for the Use of Government Departments, HMSO, 1985 and its supplements.

5.2.1 The Consolidated Fund: The Consolidated Fund is the most important factor of government accounting. The fund represents the major part of central government revenue and most expenditure is made from it. The method of operation of the Fund was established by the Exchequer and Audit Department Act 1866, and it was amended in 1968 by the National Loan Act. The Act of 1866 set up the basic model of system of Parliamentary control, including accounting and audit, and expenditure out of voted moneys (Appendix No. 2).

The Treasury is a central government department and is headed by the Prime Minister, the Chancellor of the Exchequer and five junior lords. In practice, the Treasury's responsibilities are carried out by the Chancellor of the Exchequer, assisted by the Chief Secretary to the Treasury, the Financial Secretary and two Ministers of State. The role of the Treasury is defined by HMSO (1979) as:

The Treasury is the government department primarily responsible for the development of Britain's overall economic strategy. Its Public Services sector is responsible for expenditure programmes; the Domestic Economy Sector is concerned with fiscal, monetary and counter-inflation policies, and with the Treasury's contribution to industrial policies, including control of public expenditure on industry and agriculture; the Overseas Finance Sector is responsible for balance of payments policies, the management of Britain's foreign currency reserves, international monetary questions, financial relations with other countries and the aid programme; and the chief Economic Adviser's Sector is responsible for the preparation of short-term and medium-term economic forecasts and for specialist advice on broad economic policies.

The Treasury is the only central government department which operates the Consolidated and National Loans Funds, which are operated within an amount authorised by Parliament. The type of transactions from the Consolidated Fund may be divided into:

1. Supply Services; sums voted by Parliament annually, authorised by recurrent legislation;
2. Consolidated Fund Standing Services; sums authorised by permanent legislation;
3. Payment to the Contingencies Funds, more detail and discussion are in Briston, R. 1981, HMSO, 1985 and its supplements.

5.2.2 National Loans Fund: Another main development happened with the National Loans Act 1968, which states that the Treasury shall have an account at the Bank of England, to be called the National Loans Fund (HMSO, 1974). The National Loans Act 1968 provides that all money raised by the creation of debt is payable into the National Loans Fund together with receipts representing repayment of loans made by the state from the fund and interest on those loans. Types of transaction, mostly concerned with borrowing and lending, which had previously been passed through the Consolidated Fund accordingly had to pass through the new fund. The main transactions of the fund are:

<u>Receipts Transactions</u>	<u>Payments Transactions</u>
- Proceeds of government borrowing	+ Repayment of government borrowing at or before maturity.
- Redemption of loans by nationalized industries, local authorities, etc.	- Loans to nationalised industries, local authorities, etc.
- Interest received on loans made to nationalised industries, local authorities, etc.	- Interest paid on government borrowing.

5.2.3 Constitutional Principles: The constitution is a set of codes or rules which govern the distribution of power and duties between its various government administration parts and also define the relationships between the central government and the public. MacRae, S. and Pitt, D. (1980) stated that:

...Britain does not have a written Constitution. No one document lays down the basic powers and obligations of the Government or outlines the right and duties of individual citizens. However, neither is Britain's Constitution completely unwritten. Identifiable codified constitutional rules are contained in various statutes.

There are many such sources of the Constitution: Statutes are Acts of Parliament which are an important source of constitutional practices; Conventions are rules which do not have the force of law, but nevertheless are considered binding. Judicial precedent is represented by the Courts of Law and has an important part to play in interpreting Parliamentary statutes. In addition, certain books on the constitution have become "authorities" on constitutional practice and are widely consulted, for example A.V. Dicey's Law of the Constitution (MacRae, S. and Pitt, D. 1980).

5.2.4 Government Financial Procedures: The government financial year is closely linked to the parliamentary year and runs from 1st April to 31st March. However, the government initiates action before the actual year. The Treasury in the late summer asks all departments to submit their expenditure estimates for the next financial year. The budget estimates are made in the form required by the Treasury on a realistic basis and using the prices ruling at the date of the estimates.

The budgets have to be returned to the Treasury by 1st December. There, they are aggregated and are subjected to discussion, negotiation and amendment before they are published as a House of Commons paper. After that stage they represent the government policy for the following year.

Estimates are allotted a debate time of 29 'supply days' governed by the House of Commons Standing Order No. 18. The Opposition chooses the subjects for debate and this gives them the opportunity to exert pressure on the government. As it is crucial for the government to be speedy in the despatch of financial business, Standing Order No. 18

provides three separate 'guillotines', namely the sixth, tenth and twenty-ninth Supply days. This enables the government to prevent further debate by putting down a number of items for consideration which are the subject of a single resolution.

The resolutions taken on the supply days signify the consent of the House of Commons for money to be granted for the purposes given in the estimates, but they do not constitute legislative authorisation; for this an Act of Parliament is necessary. The Public Bill Office summarizes the Supply resolutions in the form of a Consolidated Fund (Appropriation) Bill. This Bill appropriates the issue of funds to the various purposes of the estimates and on receipt of royal assent becomes the Appropriation Act in July or August.

This Supply system has one important defect in that no provision is made for government expenditure between the beginning of the financial year and the passing of the Appropriation Act. This is accounted for by means of the 'Vote on Account' which is presented by the government to Parliament prior to the beginning of the financial year together with certain Winter Supplementary Estimates. This is incorporated in a Consolidated Fund Bill which is made law in January or February and provides money for approved services until the Appropriation Act becomes law.

5.2.5 Form of the Estimated Accounts: There were about 160 estimates divided into twelve groups in 1974: 1. Government and finance; 2. Commonwealth and foreign; 3. Home and justice; 4. Trade, industry and employment; 5. Agriculture; 6. Environment services; 7. Social services; 8. Education and science; 9. Museums, galleries and the arts; 10. Other public departments and common governmental services; 11. Miscellaneous; 12. Defence.

In 1978/79 the estimates were divided into 17 "classes", each depicting a main government function, e.g. education and science, social

services, etc. Each class is divided into a series of votes each of which coincides with an administrative block of expenditure. In addition to each estimate there is a total net expenditure figure, which represents the estimated gross expenditure less any appropriation-in-aid.

Each estimate is divided into two sections: the first section states the purpose of the estimate which is called the "ambit of the vote" and the net grant required; section two of the estimate states the sub-heads and the gross estimate of the appropriations-in-aid.

Subdividing the estimate by class and by vote enables Parliament to allocate money to a specific identifiable purpose, for transfer of money is not permissible between classes or between votes, and government departments are required, in case of exceeding the estimate, to inform the Treasury immediately.

5.2.6 Government Taxation: The Chancellor of the Exchequer introduces a financial statement of government in United Kingdom summarising the receipts and expenditures of the government year ending March 31st, together with judgements relating to the necessary taxation rate.

Government expenditure depends broadly on revenue raised by taxation. The budget debate lasts five days and the specific resolutions in relation to taxation and changes in allowances are passed at the end of debate. The Financial Bill is based on these resolutions and it becomes an Act after four months. Although Members can propose decreases in taxation, they can not increase taxation over and above the proposals made in the Finance Bill. If there are a large number of amendments, government has power to apply a means known as the "kangaroo" whereby it chooses the amendments to be debated.

5.2.7 Accounting for Departmental Spending: Government accounting, like other systems, is designed to provide effective accounting information for the control of financial activities.

A standard plan of accounts, book-keeping, etc., was first begun by the Treasury under an Order in Council of 1873 in accordance with Section 23 of the Exchequer and Audit Departments Act 1866. Since 1921 the Treasury has had the power to prescribe the manner in which public departments keep their accounts. Expanding use of electronic accounting systems resulted in changes in the methods of preparing accounts but these still have regard to the basic plan of accounts.

Government accounting uses accounts books and statements depending on the recording of transactions on a double entry basis and are described fully in the government accounting guide (HMSO, 1985) and its supplements, 1-4.

Monthly or quarterly accounts are submitted by departments to the Comptroller and Auditor General for the purpose of audit. The accounts signed by or on behalf of the accounting officer should be attached to:

- a. Schedules of receipts and payments, etc.
- b. The paymaster general's statements of receipts and payments, etc.
- c. Vouchers supporting the receipts or payments, etc.
- d. Details of payments outstanding.
- e. Extracts, copy from any Treasury or any departments.
- f. Any papers necessary for the checking of the accounts.

Accounting information is transferred from the ledger accounts to the final government statements in accordance with the Exchequer and Audit Act of 1921, which empowered the Treasury to direct or approve income and expenditure for shipbuilding, manufacturing, trading or commercial services

conducted by departments, together with such balance sheets and statement of profit and loss and details of cost as the Treasury may require. The form of final accounts presented to Parliament is accordingly prescribed by the Treasury in each case.

5.2.8 Appropriation Accounts: Appropriation accounts are estimated and summarised in the form prescribed by the Exchequer and Audit Departments Act 1866, and they include all expenditure during a year beginning 1 April. An accounting officer must sign the forms before they are rendered to the Comptroller and Auditor General according to the Act of 1866 as amended in 1921. Appropriation accounts ensure that the attention of Parliament, (through the Public Accounts Committee), is drawn to matters concerning the effectiveness of parliamentary control and they give more comprehensive information about transactions recorded in the accounts, including outstanding loans.

Government appropriation accounts are essentially simple. They show the cash available from parliament during a specific year of account for all services for which a specific ministry is responsible for providing and the cost of actual provision. These services are divided into votes and more detailed sub-heads (Henley, Sir D., 1979, p.27).

The Comptroller and Auditor General is required to audit the appropriation account which is accompanied by a statement of assets and liabilities on 31 March. The statement must be signed by an Accounting Officer, with final surplus to be surrendered.

The Public Accounts Committee was originally established in 1861, and is a select committee of the House of Commons, whose purpose is to examine the government accounts. MacRae and Pitt, D. (1980, p.150) said:

it has nevertheless a very important and powerful role in the investigation of waste, inefficiency and maladministration.

Reports raised by it are debated in the House of Commons and receive considerable attention in the press.

5.2.9 Role of the Treasury: The Treasury is responsible for the management of the economy as a whole; in addition it is the custodian of the Consolidated Fund and National Loan Fund and the authority for government accounting. Its functions can briefly be summarised as follows:

- a. To formulate the general objectives of economic policy and the achievement of these objectives.
- b. To relate individual department activities and requirements to national economic policy objectives.
- c. To control government expenditure and to allocate funds to each department.
- d. To advise departments on efficient and economic use of funds in the public sector.
- e. To prescribe the form of government accounts and watch their use by departments.

There are two Treasury Officers of Accounts appointed to assist and advise officers who render appropriation accounts upon all technical points concerned with bookkeeping and accounts. They are the main Treasury link with the Comptroller and Auditor General and with the Public Accounts Committee and their duties are closely linked with the parliamentary control of expenditure.

At the same time, the Treasury Officers of Accounts have authority over share accounts and government inventories, for the Exchequer and Audit Department Act 1921 provides that store accounts and stock shall be kept in all cases under the Treasury. The Comptroller and Auditor General is required to investigate these accounts and to ensure that they are adequately controlled. (Stores and Store Accounting, HMSO, 1974).

5.2.10 Trading Accounts: The government uses government accounting principles, but applies the commercial principles in trading accounts, stores and store accounting, the Post Office and Her Majesty's Stationery Office (HMSO, 1974).

5.2.11 Stores Accounting, Inventories: The Exchequer and Audit Department Act 1921 provides that stock or store accounts shall be kept in all cases which are of a sufficient amount to require the keeping of such accounts. In addition the Comptroller and Auditor General is required to investigate these accounts to satisfy himself and the Treasury reports the result to the House of Commons.

5.2.12 United Kingdom Public Sector Accounting Evaluation: Government accounting can be studied from different aspects, for example, its effectiveness, efficiency, budget methods, etc. In 1978 the Comptroller and Auditor General considered whether the government system was suitable for the demands made on it. Henley, D. 1978 stated that:

The basic form of central government accounting is the straight forward cash appropriation account used under Treasury directions by all government departments. I think this basic form is entirely suitable for displaying to parliament how much has been voted and spent for all the main central public services including defence, education, health, social security and so on, which for the most part involve no trading activities and where therefore, profit or loss, and accounting for the use of assets in relation to income, is not relevant. There is a good deal of current parliament interest in the most appropriate price basis and structure for the estimate and hence the appropriation accounts, but this does not affect the basic form as cash accounting.

The main objective of government accounting systems is obtaining adequate accounting information for the control of financial activities and making decisions; Henley, D. (1978, No. 1, p.41) argued that:

the first objective of the system of public expenditure control which was established during the 1960s was simply to get better information and warning about its total extent and likely development and to enable ministers to take decisions sufficiently far ahead to avoid - it was hoped - either unmanageable

budgetary problems or disruptive short term cuts; and it was postulated that that objective did require some forecast of what the economy as a whole is likely to do.

In accordance with the Exchequer and Audit Departments Act 1921, the accounting information from the ledger accounts is transferred to the final statements, which includes the Revenue Account and Balance Sheet. Accordingly the day-to-day accounting books are prepared to show the accuracy of the government budget. Nevertheless, the accounting and financial information provided by the current accounting system, is inadequate to estimate the efficiency and effectiveness of government departments.

However, the main question facing the public sector in the United Kingdom is more fundamental than better ways of pursuing efficiency, effectiveness and economy. It is, whether the current institutions, conventions and communication systems which assist the management of the public sector are able to face the requirements of the next forty years. Stonefrost, M. (1985, p.8) states that:

I believe that a sustained period of radical, comprehensive reform of the public sector management is now necessary to meet the demands of the future. Such reform needs to include Parliament, central government and political parties. The need for this reform is no less now than during the reform period of the 1880s/1890s which set up the main characteristics and conventions of management of the public sector today.

Various writers have criticised successive governments for a broad failure to acknowledge the weakness in financial management and neglect of the key financing control issues in the management of public activities. These issues were raised in a paper by the president of CIPFA: "Why public sector management needs radical reform" presented at the conference of the ICAEW held in Cambridge in 1985. This identified four areas of weakness in the public sector of the United Kingdom.

The first issue is the difference between the reality and the image of corporate management in the public sector. The functions of the public

sector are so varied that it can hardly be comprehended as a single entity. On the other hand, in contrast to the organic nature of some parts of the public sector, the centre gives the impression of a powerful single corporate entity, making decisions of a type for which a large holding company would regard its operation companies as responsible.

The second issue is the dominance of the annual process of cash allocation control, in which formal silence about years two to five leaves scope for political ambiguity and public waste.

The third criticism concerned the role of parliament in the management of public expenditure. It was argued that while Parliament's basic control of the executive should continue in importance, Parliament's limited role, in the ritual financial management of public affairs limits its effectiveness in that area.

The fourth issue raised was that of central/local relations. It was pointed out that the internal management of local government had gone unchanged for a considerable period, and that local tax accountability was very weak.

5.3 LOCAL GOVERNMENT ACCOUNTING

United Kingdom local authorities are controlled by an elected council. In England and Wales there are 54 county councils, 402 district councils and about 11,300 parish or community councils. These councils employ over 900,000 staff together with nearly 700,000 teachers and over 100,000 construction staff (Birch, A. 1983).

Local government is responsible for education, police, sanitation and public health and must not fail to provide these services at a level which meets the minimum standards set by the relevant ministry (Ibid, 1983).

The local authorities find the money from two sources: from levying local rates and from grants paid by the state out of national taxation. However, the grant from central government has become the most important source in recent years.

5.3.1 Accounting in Local Authorities: Local authorities' accounting and auditing is governed by the Local Government Acts 1972 and 1982.

Where special regulations have been issued dealing with particular services such as housing accounts under the Housing Act, 1957, and rate accounts to which the Regulations of 1962 apply, the form of accounts and method of book-keeping is defined, but the primary records and accounts are left to each local council.

Local authorities usually apply the double accounts system, which separates loans and revenue transactions. Statutes are imposed on local authorities to control borrowed funds. From its primary accounts, records and statements, the local authority annually prepares a Balance Sheet. This differs from that of a commercial undertaking owing to the fact that local authority is not a private business run for profit. There are, also, government statutory requirements for the local budget allocation, consolidation funds and expenditures. Auditors of balance sheets must consider whether they are statements of fact or evaluations of local property. Also, because separate funds may be considered by the council to be necessary in order to register transactions, the balance sheets should be examined back to the ledger accounts concerned. Local authority balance sheets present a complete statement of the financial position at the close of each year.

United Kingdom central government is responsible for the general economics of the country, and has specific power of intervention in local government's financial affairs throughout the Funds. Central government

is responsible for spending about three quarters of the planning total. Local authorities spend most of the rest. The remainder is the net amount public corporations, including nationalised industries, need to finance their activities (Cmnd 9702).

Seventy per cent of central government spending within the planning total is voted by Parliament through the annual supply estimates. The rest consists mainly of those social security payments which are paid out of the National Insurance Fund. In total about 40 per cent of central government spending goes on social security. The two other largest components are defence and health.

Spending by local authorities accounts for about a quarter of public expenditure. Education spending is over 40 per cent of the local authority total. Most of the rest goes on law and order, housing and other environmental services, personal social services and transport expenditure. Detailed material on local authority spending is given in Part 4 of White Paper Cmnd 9702 (1986). Current expenditure by local authorities has continued to exceed the government's plans for it, leading to calls on the Reserve and imposed additional financing burdens particularly on ratepayers (Ibid, p.22).

Chandler, R. (1985) who had surveyed the annual reports and accounts of fifty local authorities, pointed out the need for these to show the comparison between the budget and actual output of revenue transactions, and commended those authorities whose reports gave clear information of this type. He remarked:

we were impressed by those authorities who took the trouble to explain to readers the nature of and reasons for major variations. Sadly though this was by no means common practice.

Chandler criticised the fact that there seemed to be on the capital side of the budget very little desire to illustrate between actual and

capital allocation. As the accounting figures involved are high, he felt ratepayers may be given cause for concern (Ibid, 1985).

5.3.2 Current Developments in Local Government Accounting and Auditing: In recent years, local authority finance and auditing have been discussed by, among others, Austin, J., and Smith, P. 1985, and Topham, N. (1985), Smith, B. (1985). Most of these articles were written as contributions to CIPFA and concentrated on local authority finance without first discussing accounting in local authorities in the United Kingdom.

Literature on this field indicates problems in local authority finance, which suggest a need for further research.

Chandler, R. et al (1985) surveyed the annual reports and accounts of fifty local authorities. Their survey, the first of its kind, was intended to be the first of an annual series. The need for such a survey was highlighted by certain requirements and recommendations relating to local authority accounts, including increased government prescription of accounting disclosure and measurement; the recent CIPFA guidance, endorsed by the accounting standards committee, on the applicability of SSAPs to local authorities, and the new style audit opinion required under the audit commission's code of practice.

"Account and Audit Regulation 1985", an advisory manual of local accounting principles and practices, covered six main areas:

1. Highways and transportation of local authority.
2. Education, libraries, museums and art galleries.
3. Social Services.
4. Housing.
5. Home Office services - police, fire, magistrates, prosecuting solicitors, civil defence, trading standards, and

6. Other services, including rate collection, environmental health, cemeteries and crematoriums, leisure and recreation planning.

Although that publication appeared in 1986, criticisms and arguments were raised on some accounting and finance technicalities by Rogers, M. (1985) and Dunn, J. (1985). Rogers, M. indicated in his article on accounting development in PFA Journal, October, 1985, that the institute would shortly publish the first parts of the comprehensive manual of local accounting principles and practices, which national and tactical considerations required should be published piecemeal. Rogers commented on the operative date of the new draft Accounts and Audit Regulations and expressed the concern of CIPFA about the style and content of the document and its expected practical impact on the financial reporting of local government.

Dunn, J. (1985) expressed awareness of the size of the task for authorities in making the changes recommended by the CIPFA manual, which in turn were the result of significant changes in government regulations. Not only the regulations and the standard classification but also all CIPFA and D.E. (RO form) collections changed in harmony at the same time. The institute committed itself to keeping the 'standard form' volumes up to date so that each would always reflect the latest principles, law and practice and remain compatible with all related official statistical collections.

A number of articles have been published concerning auditing in local authorities. Burnham, P. (1985) and Wilkinson, H. (1985) asked should the internal auditor be involved in the development of new systems or in the major amendment of computerised systems? How far should any involvement go? Does any involvement in systems development by internal audit compromise its subsequent position when conducting post implementation review? Burnham also looked at the conflicting pressures on the auditor and presented an outline of the systems development process which may act

as a practical checklist.

The Audit Commission has actively sought feedback on the implementation of the Code of Local Government Audit Practice for England and Wales, which was published by the Commission in February 1984. Wilkinson, H. (1985/6) described some of the problems which have arisen in opinion reporting and offered some suggestions for future action. The number of matters resulting in qualified opinions reported to the Audit Commission in 1983/84 statements of accounts as at July 1985 was 54; several audits were, however, not closed at that time, mainly because of outstanding objection. The numbers and causes of qualifications were analysed; failure to accrue external loan interest, inadequate provision for doubtful debts, problems associated with housing benefits, problems associated with stores, errors in financial statement presentation, incorrect accounting for grants receivable, failure to accrue to creditors, inadequacies in accounting records, prior year adjustments incorrectly stated, uncertainty on inclusion of DLO painting, incorrect accounting for fixed assets, uncertainty on major capital contract and uncertainty due to outstanding approval for transfer.

Accounting literature has, then, drawn attention to a number of problems facing local authority accounting and auditing, which merit further research.

5.4 ACCOUNTING IN HIGHER EDUCATION

This part discusses and interprets accounting practice in higher education: the University Grants Systems, revenue and expenditure, university accounts, university internal and external auditing.

5.4.1 Brief Introduction to University Grants System: Until the mid 1970s grants made to the universities for their recurrent expenditure were paid by the government through the UGC and were assessed for periods of five

years. Local authority grants were organised separately. At the end of each five-year period the universities situation was reviewed and the grants set for the following five years. If the government approved increases in academic salary scales during any particular period, supplementary grants would be paid. The same applied if the general costs, as measured by the Index of University Recurrent Costs, increased. Supplementary grants would also be made if the number of students was to be increased, to meet government needs, over the level on which the original grants were paid.

In times of low inflation, the five year system gave universities stability in planning and in budgeting their expansion over relatively long periods. The advantage to the government was that they did not need to worry about the universities wishing to renegotiate and it gave them a firm limit of commitment, whilst avoiding the constraints of the system of annual parliamentary estimates.

Recurrent grants were mainly given to the universities as block grants without strings attached. Universities were free to determine their use without any control by the UGC or the government although the committee sometimes felt it desirable to indicate special areas for financial provision. These indications were not mandatory and the financial amounts were not earmarked.

The block grant principle was regarded as necessary to ensure a reasonable measure of academic freedom and to avoid the management of universities by both the UGC and government. The block recurrent grants ensured the sufficiency of the universities' general income for the overall activities and the twin functions of teaching and research, both of which were to be regarded as complementary and not conflicting activities. Allocation was, in the main, determined on the number of students and not

divided between teaching and research. It was up to the decision makers of the university to decide how much was to be spent on research and on which research project.

In September 1984, however, the UGC announced its intention to be more selective in allocating funds for research and to indicate the extent to which it had taken into account individual universities' research plans within the allocation of the recurrent grant.

5.4.2 The Quinquennial System: In 1975, the economic situation and decrease in demand for university places, brought about a review of the last two years of the 1972-77 quinquennium which resulted in the breakdown of the system as it had existed and the grants for 1975-76 and 1976-77 were given as annual grants. Since then grants have been awarded on a year to year basis or at the most two or three years in advance. In 1984 the UGC expressed their hope that they could establish a longer term planning horizon of a firm figure for one year followed by a provisional figure for the following three years.

A major review, early in 1981, of the government expenditure prompted radical changes in the method and level of funding universities:

- (a) A reduction in recurrent grants in respect of Home and European Community students by $8\frac{1}{2}\%$ in real terms by 1983-84 compared with previous plans.
- (b) A basic change in control leading to university grants being determined by the total amount the Government considered it could afford for education as a whole and within this the amount Ministers decided to devote to the universities rather than being demand led through the application of units costs to the likely number of students. The fixed amount is then distributed by the University Grants Committee using criteria which include target student numbers in each university.
- (c) A UGC decision to distribute the reduction in resources unequally between institutions and fields of study. This led to a small number of institutions receiving very much more severe reductions in student number targets and in grant allocations than the average.

- (d) The provision of much more detailed 'guidance' both for universities as a whole and for individual universities on particular subject areas including in some cases 'advice' to particular institutions to discontinue subjects completely.

(Cmnd 8175)

The government, having been urged by the CVCP to provide resources to enable the universities to meet their existing obligations and new demands, responded with the publication in May 1985 of the Green Paper on the Development of Higher Education into the 1990s. The paper was a source of disappointment to the CVCP, who judged from its general approach that the consultations of the previous two years had been to no avail. They believed that the government's policies on finance and student numbers were incompatible with the Green Paper's emphasis on excellence.

The universities have submitted to the University Grants Committee their plans for the next five years, indicating the steps they will have to take if the government imposes a 10 per cent cut over that period. These will enable the UGC to assess university aspirations and the seriousness of the current situation. If more funds are not made available, decisions will have to be taken as to how the system could be cut down (CVCP "The Future of the Universities", January 1986, p.21).

5.4.3 The Annual System: Planning of public expenditure by the government is based on an annual cycle although there is a systematic and continuous reappraisal. The first stage is the publication of the annual White Paper on Public Expenditure, usually in February. This first stage extends from February to June and guidelines are given to the ministries before the exercise begins. All work is coordinated by the Treasury through the interdepartmental Public Expenditure Survey Committee (PESC). The DES prepares its own estimates of funding requirements - essentially in the form of proposed changes to plans already given in cash terms for the two succeeding financial years (April-March) and new proposals for the

third year. The Secretary of State settles the overall departmental priorities taking the views of the UGC into account.

The Treasury officials discuss the departmental submissions to resolve any ambiguities and then report this first stage to the Cabinet in June or July. The Ministers then take strategic decisions based on the forecasts for the economy. These decisions form the agenda for ministerial discussions, in September and October, between the Treasury and departments after which the Treasury Minister reports to the Cabinet in October. Individual Ministers might not agree with the proposals in which case the differences must be resolved and final plans decided.

Following the general announcement by the Chancellor of the Exchequer in November departments announce their programmes relating to the next financial year, as they are required by other bodies to complete their own budgetary plans. The Secretary of State for Education and Science then announces the recurrent grant and equipment grant for universities in the forthcoming academic year (August to July).

The UGC determines the allocation of the total among the universities as soon as the recurrent grant figure is known and the time taken depends on whether it is necessary to make substantial changes to provisional plans or not. In 1981, when the government announced the major reduction in the planned expenditure on higher education, the UGC announcement was not made until July, but in 1983 and 1984, when changes were minimal, the announcements were made in February.

The bulk of the recurrent grant is announced at this stage but some may be held back by the UGC for distribution later in the year. This would include provisions for local authority rates; minor building works of less than £1 million; reimbursement of staff severance costs; and of part-time re-engagement of teaching staff.

5.4.4 Value Added Tax: The situation with respect to Value Added Tax (VAT) is different. Educational institutions are exempt from levying output tax on teaching, research and other basic activities but they must levy it on activities of a trading nature such as launderettes, bookshops, etc., except where such activities are zero-rated. Catering services for students or students and staff combined are exempt but catering for staff or staff and visitors is liable. Universities must pay input tax on goods and services relating to their basic activities but the basic grant was increased to offset this. Input tax is offset in respect to trading activities to which output tax is applied.

The CVCP and the officers of H.M. Customs and Excise came to a working agreement as to the application of VAT in universities, details of which are contained in a CVCP memorandum dated 2 March, 1973. Supplementary notes were issued in June 1975, April 1977 and July 1977. Recently, as universities are charities, a concession was won whereby they are zero-rated on medical and scientific equipment supplied solely for medical research, diagnosis and treatment. (The Chartered Institute of Public Finance and Accountancy, 1986, pp.18-20).

The Committee of Vice-Chancellors and Principals last circulated a comprehensive note of guidance to universities on the application of VAT to their activities in May 1977. Since then, changes in legislation and the need for clarification have caused separate notes on specific topics to be circulated from time to time. The CVCP's annual report for 1984-85 refers to a series of meetings held between officials of H.M. Customs and Excise and officers of universities and the secretariat to clarify further matters, and to seek such improvements as were possible within the law. It was intended to produce a comprehensive document for circulation in the autumn of 1985 (CVCP Annual Report 1984-85, p.13).

5.4.5 Academic and Related Staff: Up until the end of the second world war academic salary scales in individual universities were not standardised, since the UGC was of the opinion that each university should decide what best suited its needs and that size, wealth and standing should be reflected in differences in salary structures.

Inflation in prices and salaries and the growth of the scale of universities caused a change of views in the 1940s. In 1946 the UGC laid down a standard rate of professorial salaries and in 1949 they laid down a basic salary framework for all the principal grades of university teacher. For the following twenty years increases in salaries were awarded directly by the government after consultation with the UGC following the UGC's discussions with the Committee of Vice-Chancellors and Principals and the Association of University Teachers (AUT). The AUT were not satisfied with this arrangement and periodically pressed for the introduction of a system based on collective bargaining. The government, in 1967, instructed the National Board for Prices and Incomes to keep under continuing review the salaries of university academic staff and for several years increases in scales were based on their recommendations. The Board however, agreed that salaries should be determined through collective bargaining and in 1970 the present system of salary negotiation was agreed and put into practice.

This system consists of two stages. In the first stage a committee is formed of five representatives of the AUT and five of the Universities Authorities Panel (UAP) who meet under an independent chairman with officers of the UGC attending as advisors and assessors.

The function of this committee is to consider the position of staff recruitment and data relating to salaries, promotion prospects and other relevant factors and then to make proposals to the second committee. If

the two sides cannot agree the chairman may offer proposals. The secretariat is provided by both the UAP and the AUT.

The second committee is chaired by an appointee of the DES and its members include the chairman of the first committee, three representatives of the UAP, three representatives of the AUT and government representatives. If this committee fails to agree they can resort to arbitration by a tribunal which consists of an independent chairman and two members. The Secretary of State for Employment appoints a chairman who in turn appoints one member from the list proposed by the first committee and one member from the list proposed by the DES.

This system covers approximately 50,000 persons and these include senior administrative, library and research staff, whose salaries were for many years related to those of academic staff but with scales relating to the individual universities' circumstances. National scales for these groups took effect from October, 1974. The UGC called for a review of the existing system in September 1984.

5.4.6 Conditions of Service: Except for the question of superannuation, salaries and closely related matters, conditions of service of academic and related staff are not the subject of national negotiation. Negotiation takes place at institutional level after consultation with the local branch of the AUT. Periodically, the Committee of Vice-Chancellors and Principals issue guidance on particular conditions of service after consultation with the AUT. The AUT's proposals to establish a national negotiation machinery to deal with certain aspects of the terms and conditions of service have been resisted. Even the important, controversial matter of whether academics should continue to have tenure on the same terms as in the past is being dealt with as advice from the committee to universities who will have to negotiate any revised terms with the AUT locally.

5.4.7 Other University Staff: In 1952 the CVCP established a Universities Committee of Technical Staffs to discuss with the trade unions concerned questions raised by the universities or unions. Nearly all universities were represented on this committee and they undertook to give careful regard to any salary scale recommended to them for technical staff employed within a national grading scheme. Therefore this was a major step towards establishing a national salary structure for this staff category.

The TUC approached the CVCP, in 1964, to seek a national system of salary negotiation for all university non-teaching personnel. A joint working party of the TUC and university members was appointed in 1968. Dr. T.A.F. Noble - the Vice-Chancellor of Leicester University - was appointed as Chairman and in 1969 they reported recommending the establishment of national machinery. As a direct result a joint body was established from 1st June 1970 for the general purpose of promoting good industrial relations and to provide guidelines of dispute procedure. This body, the Central Council for Non-Teaching Staffs in Universities, comprises of representatives of the universities and the six participating unions. The Council has three joint committees representing Technical, Clerical and Manual staff. The universities set up a Universities Committee for Non-Teaching Staff (UCNS) in which all universities are represented to be responsible for appointing the university membership of the Central Council. The Universities Committee for Technical Staff was disbanded. The UCNS has a permanent secretariat. The Committee meets intermittently to consider matters of policy and the progress of ongoing negotiations; there are also regional group meetings. Overall financial surveillance on pay settlements is exercised by the General Purposes Committee of the CVCP.

Other Schemes: Non-academic staff are not eligible for the foregoing schemes; therefore separate schemes are in operation to provide benefits for them and they vary from university to university. Many institutions

have agreements with local authorities under the Local Government Superannuation Acts. Sometimes these agreements cover a large number of staff and sometimes they are limited to specific categories of staff; often to those with previous service with local authorities or other public bodies. Most non-academic staff are covered by the university's own schemes which are usually administered by a major insurance company. A few universities operate and fund their own schemes. Although they vary in detail most are now on a terminal salary basis.

A few universities following local negotiations with the relevant unions modified their schemes within these recommendations. Further modifications were made to the majority of schemes to comply with the contracting out requirements of the Social Security Pensions Act 1975. In 1977 the Trades Union side pressed for a negotiated national scheme and discussion was continued by a reconvened Joint Working Party. The CVCP did not support inclusion of non-academic staff in the USS.

During March 1982 the UGC announced that they would meet the costs incurred by the purchase of additional years of service for non-academic staff over 50 years of age who were made redundant, up to the number of added years allowed under the Local Government Superannuation Scheme during its availability until September 1984.

5.5. UNIVERSITY ACCOUNTING PRACTICE

University accounting and auditing have received considerable attention over recent years. The UGC receives most of the information it requires about each university's activities from the Annual Return of Income and Expenditure (Form 3), which every university is required to submit to it. It also considers the annual report and accounts that every university prepares. (Appendix No. 3)

The United Kingdom universities provide sets of accounts and reports including:

- a. An income and expenditure account. (The format and content nearly always follows the requirements of the UGC Form 3).
- b. A balance sheet.
- c. A statement of accounting policies.
- d. Various notes to the accounts.
- e. An auditor's report - For example the University of Hull Annual Report 1985/86 which shows all of these accounts and reports. (Fig. 5.1)

In addition to the above some universities also include the following in their accounts.

- a. A report from the Treasurer or similar office.
- b. Estimates of source and application of funds.
- c. Accounts for various "self-financing" activities such as halls of residence, catering or adult education facilities.
- d. Notes which give considerably more detail than Form 3 requires, e.g. details of expenditure by departments, or of expenditure against each research contract, etc.

The details of each of the above vary considerably between universities. There is a minimum level of informative disclosure below which the accounts would not be meaningful. On the other hand, too much detail could be confusing to the reader, and could make it difficult for the auditors to report satisfactorily without having to perform excessive audit work.

The UGC's concern as to the varied accounting practices adopted by universities in preparing these accounts led the UGC to approach Professor Flint of Glasgow University, requesting that he study university accounting practice. Williams, D. and Silcock, C. (1985, p.2) stated that:

Figure No. (5-1)

The University of Hull Annual Report 1985/86 *

- BALANCE SHEET at 31st July 1986
- Report of the Auditors to the Members of Court of the University of Hull
- INCOME AND EXPENDITURE Account for the year ended 31st July 1986
- STATEMENT OF SOURCE AND APPLICATION OF FUNDS
- NOTES ON THE ACCOUNTS
 1. ACCOUNTING POLICIES
 - BALANCE SHEET
 2. Capital Funds
 3. Trust Funds
 4. Unexpended Balances
 5. Provisions
 6. Reserves
 7. Net Current Assets (Current assets, current liabilities)
- INCOME AND EXPENDITURE ACCOUNT
 8. Investment Income
 9. Academic Departments and Services
 10. Administration
 11. Buildings and Grounds
 12. General Education Expenditure
 13. Staff and Student Facilities
 14. Miscellaneous Expenditure
 15. Revenue Contributions to Capital Expenditure
- SCHEDULE OF TRUST FUNDS at 31st July 1986
- TRUST FUNDS INCOME AND EXPENDITURE Accounts for the year ended 31st July 1986
- SCHEDULE OF INVESTMENTS at 31 July 1986
- SCHEDULE OF SHORT TERM LOANS AND DEPOSITS at 31st July 1986
- TEACHING AND RESEARCH EQUIPMENT AND FURNITURE for the year ended 31st July 1986
- APPEAL FUNDS for the year ended 31st July 1986
- EXPENDITURE MET BY RESEARCH GRANTS AND CONTRACTS for the year ended 31st July 1986
- REFECTORY INCOME AND EXPENDITURE ACCOUNTS for the year ended 31st July 1986
- STUDENT RESIDENCE INCOME AND EXPENDITURE ACCOUNT for the year ended 31st July 1986

* A full report of the Auditors to the Members of Court of the University of Hull is shown in Appendix No. 4.

certainly, the UGC would have found it difficult to use the universities' accounts either to compare their performance or to assess their financial position particularly the availability of financial reserves.

Professor Flint considered that a major problem was the different opinions held by universities as to the objectives of, and the users of university accounts. Further, the diversity of accounting practice adopted by universities was not a necessary result of their different circumstances and made the accounts difficult to interpret (Ibid, p.3).

Williams, D. and Silcock, C. 1985 presented a discussion document "Universities - Accounting Practices and Related Audit Problems".

The CVCP were themselves aware of the problems, and after considerable discussion and consultation had published "Guidance on Recommended Accounting Practice in UK Universities" in response to the growing interest in the financial position of universities, which were experiencing difficulties in a time of declining resources. Both publications were based on the identified needs of the principal external and internal groups of users of university accounts. In addition, both of them tried to help the development of financial reporting techniques and formats appropriate to the changing economic environment in which universities are operating. The CVCP initiative in producing the guide was welcomed by the Accounting Standards Committee.

The CVCP Guide was divided into four parts; Explanatory Notes which define the potential readership, in internal and external groups. Part two covered the Principles of Financial Report by University, discussed the primary purpose of the accounts. This part was broadly divided into fund accounting and ambit of the financial statements. Part three proposed that all universities produce a minimum number of separate financial statements which individual institutions may supplement to satisfy their

own particular needs. It was classified briefly into (1) minimum list of statements and (2) relationship with current statements of standard accounting practice. Part four contained notes on items in the minimum list of statements. It discussed briefly the income and expenditure accounts, balance sheet, notes on the accounts and accounting, e.g. the historical cost convention.

This guide, and the Williams and Silcock discussion document represent a move toward uniformity of accounting in UK universities. This uniformity of accounting practice benefits the users, i.e. external and internal university environment.

5.5.1 University Accounts Forms: There is no specified form of account preparation and universities are not required to submit annual accounts to an external body but there is one significant influence on the form which accounts take. This is the Annual Financial Return, known as Form 3, which universities are required to submit to the UGC. Form 3 requires income and expenditure to be analysed under the headings set out above and, understandably, university accounting systems are to a large extent geared to facilitate the preparation of this return. The published university accounts tend to classify income and expenditure in the same form as required for Form 3 even though accounts are provided for a much wider audience and should perhaps follow a different format from that required by the UGC.

The UGC exercises little control over the way in which universities allocate or spend their block recurrent grants and there is no documented guidance to this aim. What guidance there is may be found in the notes specifying how Form 3 should be completed. For example, these notes list the items of expenditure which must be charged against catering income and thereby precisely control the extent to which universities are able to

subsidise that activity.

Despite specific guidance on the treatment of particular items of expenditure there are areas where only a general indication is given and it is in these areas that inconsistencies of classification of expenditure between universities may arise.

In 1982 the UGC invited the CVCP to consider the need for revision of university accounting practices. A working group under the chairmanship of the Vice-Chancellor of Sheffield University, Professor G.D. Sims, which included both university and outside members, was appointed to examine the matter and prepare a draft statement of recommended accounting practice for universities.

The draft statement was considered by universities, their auditors and finance officers, government bodies and the relevant trades unions, before being submitted to the Accounting Standards Committee which agreed to support the statement for an initial period of two years, during which it would seek to identify and undertake further studies on particular aspects of accounting practice with a view to a statement being fully accepted by the ASC. The statement would also be subject to revision in the light of university experience of its application.

The hope was expressed that universities would adopt the principles of the document beginning if possible in the financial year 1984/85. Comments from universities and other interested bodies on the operation of the guidelines were requested by the Vice-Chancellors' Committee, together with suggestions for incorporation in the final version, which it was hoped to issue after two full years of operation (CVCP, April 1985, p.1).

Volume Form 3: Finance, issued by the University Grants Committee, includes a full set of tables from 1 to 10; 1. Recurrent Income; 2. Expenditure; 3. Academic Departments; 4A-4C. Student statistics; 5A-5B. Salaries

of academic and related staff; 6. Earmarked grants; 7. Unallocated revenue balances; 8. Equipment and furniture grant; 9. Catering and residence accounts and; 10. Allocated revenue balance. Each table is divided under headings and sub-headings. In addition, the UGC produces comprehensive notes of guidance on Form 3. Each year the UGC publishes details of any changes to the documents, e.g. "Amendments to Notes of Guidance 1983/84" (Form 3) and circulates them to the universities. (Fig. 5.2)

5.5.2 University Costing: In practice, the accounting information contained in Form 3 is used by the UGC for various purposes, the most important being the assessment of the total grant needs of universities for use during grant negotiations with the DES and the distribution of grants to individual universities.

Besides financial information, Form 3 includes details of student admissions. Prior to 1983/4 these were divided into 17 designated subject groups but from 1984/5 the number of groups was expanded to 37. Because academic expenditure is analysed over the same heads it is possible to reckon the annual unit costs of students in each subject group. The deductions of these basic costings enter into the discussions with UGC sub-committees, but any resulting decisions would always be modified by qualitative considerations.

The CVCP makes available to the UGC and to the government the twice-yearly index of university recurrent costs. The costs of equipment are also monitored by means of an index of price movements prepared by the Department of Industry from indexes weighted so as to reflect the pattern of university purchases. Between November 1985 and November 1984 the provisional price increase was 6.1% (CVCP Annual Report 1984-85, p.13).

Figure No. (5-2)The University Form 3 Finance

TABLE 1: Recurrent Income: This Table should be used to record details of recurrent income only. As far as UGC grants are concerned, it should only cover items which appear under 'Block Grant 1' on UGC Payments Cards.

TABLE 2: Expenditure: Throughout Table 2 and in succeeding expenditure tables, unless there is any specific instruction to the contrary, "salaries" and "wages" includes employers' superannuation contributions, employers' National Insurance contributions and any family allowances.

TABLE 3: Academic Departments: Universities are asked in Table 3 to show the expenditure of academic departments, i.e. Head 1 of Table 2, under 18 subject groups. It is important that departments should be classified under these groups on a consistent basis and an index of departmental title showing their allocation to the appropriate subject groups is attached.

TABLE 4 (4A-4C): Student Statistics: The definition of an undergraduate is given in the USR Manual of Operating Procedure Vol. 1, Part 1, paragraph 9 while a postgraduate is defined in Vol. 2, Part 1, paragraphs 8 and 9.

TABLES 5A-5B: Salaries of Academic and Related Staff: The table refers to all full time and part time staff financed wholly or in part from general university income who are of academic status or whose salaries are fixed by analogy with those of academic staff.

TABLE 6: Ear-Marked Grants: It shows the movements of UGC earmarked grants, that is amounts within block recurrent grant notified as being earmarked. It does not include UGC indicated grants, capital grants or amounts that the institution has itself earmarked for particular purpose.

TABLE 7: Unallocated Revenue Balances: It represents the general reserve of the university available for revenue equalisation and essential to maintain university services in periods when the level of recurrent grant income is reduced in real terms.

TABLE 8: Equipment and Furniture Grant: When completing Table 8, reference should be made to UGC's letter of 10 May 1973, reference 22/24/019 and amendments.

TABLE 9: Catering and Residence Accounts: The main purpose of this table is to enable the UGC to monitor the balance which universities are able to maintain between income and expenditure in their catering and residence accounts.

TABLE 10: Allocated Revenue Balance: It records amounts set aside for particular purpose which in terms of university procedures are then available only for such purpose, e.g. unspent balances of research support grants, uncommitted allocation for minor works, balances of departmental and library grants

Sources:- UGC "Notes of Guidance for the Completion of Form 3: Finance (1981/82)

- Re-amendments to Notes of Guidance 1982/83
- Amendments to Notes of Guidance 1983/84

Note: The Figure represents the researcher's summary of the above sources.

The CVCP Report for 1983-84 referred to the DES document concerned with comparisons of funding and costs across the sectors of higher education. In May 1985, a revised version of the paper was produced, and the basis of these calculations reviewed by the CVCP, who endorsed the statement in the Green Paper that "comparisons of whole sectors, even by subject, don't necessarily mean a great deal". (CVCP Annual Report 1984-85, p.13).

5.5.3 University Teaching and Research Forms: A much more difficult task in allocating costs to universities is to separate the inputs to teaching and research. In the mid 1960s the UGC attempted to do this by requiring the universities to analyse academic departmental expenditure for each subject group over undergraduate teaching, post-graduate teaching, research and non-attributable expenditure when compiling Form 3. The validity of these results was always in doubt because of the difficulty of allocating academic time on a consistent basis between research and teaching as so many of their activities are enjoined between the two. Most universities tend to allocate according to a retrospective analysis of the proportionate time spent.

The CVCP attempted a stronger approach to the subject in 1969/70 by undertaking a diary exercise, the results of which were published by the CVCP, in 1972, under the title "Report of an Enquiry into the Use of Academic Staff Time". Universities were provided with an analysis of the time distribution of their own participating academics.

Meanwhile the UGC abandoned its requirement of academic expenditure being allocated between teaching and research and the CVCP report did not generate any great support from the universities for renewing this type of activity costing. This type of costing is only carried out by a few research groups in individual universities (The Chartered Institute of Public Finance and Accountancy, 1986, pp.20-18).

5.5.4 University Statistical Records: (USR) Under the joint auspices of the UGC and the CVCP the USR was set up in 1968 to meet the need for more comprehensive statistics on staff and students in universities. The record is in the form of a computer based information system based on five main records: undergraduate and postgraduate students, the first destination of graduates, academic related staff and continuing education courses. This provides the UGC, universities and other users with statistics relating to most areas of university activity. A number of changes will be made in the information contained in Form 3 and the USR to provide links between the two.

Until 1979 the data collected from Form 3 and the USR was annually published in detail in 'Statistics of Education - Volume 6 Universities' (HMSO) but from 1980 the data has been published by the Universities' Statistical Record 'University Statistics'. This series contains three volumes namely:-

- Volume 1 - Students and Staff
- Volume 2 - First destinations of university graduates
- Volume 3 - Finance

Research grants provided by sources other than UGC must be separately accounted for. In the majority of cases submissions of claims are made to the grantor for periodic repayment. The input from research grants is shown in university accounts by 'grossing-up' the income and expenditure account by the actual amount spent in the year under review.

Research contracts are expected to make a contribution towards general university expenditure and their accounting treatment is the same as research grants except that direct costs are shown under the research heading and the 'overhead' element is shown as miscellaneous income.

Regarding the auditing of university accounts, UGC in its notes for guidance on Form 3, advised that tables 1, 2 and 8 should be duly audited as correctly representing income and expenditure under the heads shown for the year ending 31 July and be returned to the University Grants Committee by 31 December following. Universities are advised that auditors should be members of one of the following associations which comprise the standard list agreed with the Department of Trade and Industry in the department's capacity as the government contact with the accounting profession:

- a. The Institute of Chartered Accountants in England and Wales;
- b. The Institute of Chartered Accountants in Scotland;
- c. The Association of Certified and Corporate Accountants;
- d. The Institute of Chartered Accountants in Ireland; or
- e. Any other body of accountants established in the United Kingdom and for the time being recognised for the purposes of paragraph (a) of subsection (1) of Section 161 of the Companies Act 1948, by the Department of Trade and Industry.

Auditors should indicate their status with their signature on the certificate at the foot of Table 8 of Form 3 (UGC; Notes of Guidance for the Completion of Form 3, 1981/82).

A memorandum from the National Audit Office (NAO) proposed that Senate and Council minutes should be made available in advance of visits to universities. The CVCP responded by drawing attention to the original concordate of 1967 concerning the access of the Comptroller and Auditor General to the books of universities which specifically excluded academic and policy matters from investigations. As no change of policy was proposed the NAO was informed that it would only be appropriate for universities to make available such papers as were relevant to the particular remit of the audit office. (CVCP "Annual Report of 1984-85", p.13).

5.6 SUMMARY

As this thesis is concerned with accounting and finance in universities, this chapter has broadly reviewed the accounting practices of central and local government and given a brief account of the recent development of these sectors as background information to this research, before relating the discussion more specifically to the universities.

Central and local government have different accounting practices related to their different functions and their relationship to each other. There has been a considerable amount of literature dealing with public accounting in general, and a number of problems have been revealed. However there has been little attempt to examine the implications of these for central and local government.

There is documentary evidence of the long term planning of higher education into the 1990s, imposing a 10 per cent cut over the present quinquennium. However public expenditure procedures are based on an annual cycle.

The UGC receives most of the information it requires from the Annual Return of Income and Expenditure (Form 3), which every university is required to submit to it. It also considers the annual reports and accounts prepared by the universities.

However the degree of detail in these reports has tended to vary considerably between universities. There is a minimum level of information disclosure below which the accounts would not be meaningful. The concern of the UGC and CVCP as to the varied accounting practices adopted by universities has caused them to seek specialist advice.

There have been a number of recent initiatives to improve accounting practice in universities, the impetus for which has been the growing interest in the financial position of universities on the part of the

users and the difficulties experienced in a period of declining resources.

The CVCP, like the UGC, has accepted the need for clear and standardised accounting information, and has cooperated in attempts to improve the situation. In particular the requirements of Form 3 have been extensively commented upon.

This, then, is the background against which the financial and administrative affairs of universities in the UK must be viewed - the influence of central and local government finance and administrative procedures, increasing inquiry into the universities' financial position, and awareness by the UGC and CVCP of the problems created by varied or deficient accounting procedures. The broad picture having been outlined, the following chapters will discuss in detail the accounting and resource allocation of UK universities, and determine their efficiency in these areas.

CHAPTER SIXEFFICIENCY IN UNITED KINGDOM UNIVERSITIES - A CASE STUDY

- 6.1 INTRODUCTION
- 6.2 THE EXTERNAL INFLUENCES ON THE EFFICIENCY OF UNIVERSITIES
 - 6.2.1 United Kingdom University Finance
 - 6.2.2 United Kingdom Universities after 1981
 - 6.2.3 The Efficiency of Universities
- 6.3 INTERNAL PROVINCES OF UNIVERSITIES IN THE UNITED KINGDOM
 - 6.3.1 Objectives of the Universities of the United Kingdom
 - 6.3.2 Functions of the Universities of the United Kingdom
 - 6.3.2.1 Range of Academic Activity
 - 6.3.2.2 Professional Loyalties
 - 6.3.2.3 Participation and the Tenure Issue
- 6.4 THE GOVERNANCE OF UNIVERSITIES AND THEIR EFFICIENCY IN USE OF THEIR RESOURCES
 - 6.4.1 Councils and Senates
 - 6.4.2 Committee Systems and Informal Processes
 - 6.4.3 Vice-Chancellors, Pro-Vice Chancellors and Deans
 - 6.4.4 Heads of Departments and Academic Staff
- 6.5 SUMMARY

CHAPTER SIXEFFICIENCY IN UNITED KINGDOM UNIVERSITIES - A CASE STUDY6.1 INTRODUCTION

Chapter Four outlined the main developments in higher education in the United Kingdom and described university administration. Chapter Five concentrated on government accounting and, in particular, accounting practice in universities. These descriptive chapters provide background knowledge on the United Kingdom, to aid comparison between the United Kingdom and Iraq. This background information serves to introduce the present chapter, which attempts to analyse the efficiency of universities in relation to the following main points: the influence of central government, the University Grants Committee (UGC), the Committee of Vice-Chancellors and Principals (CVCP), etc., on the efficiency of universities and their accounting and financial management; whether or not universities' management structure and systems are efficient from the point of view of internal efficiency; and planning, resource allocation and monitoring of funds, and methods of improving efficiency.

We have already discussed the shortage of studies on university accounting and financial economics, a shortage upon which Preston, H. commented (1969, p.44) as follows

Although a great deal of empirical work concerning the British education system has been carried out during the past ten years, it is remarkable how little research has been carried out into the way individual institutions work and of how they are interrelated. It is also remarkable how few attempts there have been at analysis or at the provision of pure theory of educational behaviour. We have a great deal of macro information concerning such things as social class and education, or national income and total expenditure on education, what we lack are explanatory theories either at the macro level or more importantly at the micro level involving the decision-making process and its outcome.

The present chapter constitutes an attempt to fill the gap in micro-level information in the field of university finance.

6.2 THE EXTERNAL INFLUENCES ON THE EFFICIENCY OF UNIVERSITIES

The researcher has stated that interaction between the government and the universities goes back to 1944 when under the Education Act a Minister was created and given almost absolute power being subject only to Parliament (Smith, L. 1965, p.11).

Government control increased from 1949 when national scales for academic staff were created, and at the same time the Treasury started to fund growth. From then on relationships became more definite and prescriptive (Kogan, M. 1975, p.196).

One of the major influences on the universities is the University Grants Committee (UGC), established in 1919 as a mechanism for channelling funds to universities, which had suffered severely through neglect and lack of government funds during World War One. Primarily it is a mechanism for allocating given resources amongst a group of needy university claimants and it was reactive to the universities (Shattock, M. and Berdahl, R. 1984). For the first time, in the quinquennium of 1952-57, the UGC asked for institutional predictions and bids for growth and by the 1957-62 quinquennium the UGC was reiterating the government's view of what universities might do to keep up with USA and USSR plans for science and engineering (Kogan, M. 1975, p.196).

The UGC has been well supported throughout and this in turn created a large responsibility for the UGC, whose membership increased between 1964 and 1968. In 1976 it had a full-time chairman and nineteen part-time members: fourteen from universities, two each from schools and industry and one from local administration. Members of the UGC periodically visit all the universities on its grant list for discussions with their representatives on development plans and their financial needs. In addition, the UGC holds periodic meetings with representatives of the

Committee of Vice-Chancellors and Principals and with the Association of University Teachers and the National Union of Students (Dent, H. 1977, p.143).

Since its foundation, the UGC has been seen as the most beneficial way of channelling funds from government to universities, although over the years there have been many changes in its relationship with the universities and the government. Depending on the circumstances of each period its effectiveness has varied (Shattock, M. and Berdahl, R. 1984, p.471). Its largely passive role of buffer between the government and universities worked well until World War Two. The establishment of the Robbins Committee was indirectly caused by the failure of the UGC, after 1946, fully to exploit its enlarged terms of reference and its subsequent failure to take an ongoing comprehensive view of higher education was criticised in some quarters. During the period 1963-1979 the UGC tried to be more active, but the country's needs for greater and more diverse higher education as well as the increased number of institutions, created the paradox whereby the more active UGC actually lost power to the government. As the national economy worsened, more was needed of the UGC than it was able or willing to give. In the period from 1979 to the present, the UGC has played a central role dealing with the controversial retrenchment in higher education policies (Shattock, M. and Berdahl, R. 1984, p.496).

The principle that the quinquennial block grant system represented the cornerstone in the preservation of university autonomy was convincingly maintained by the government, the universities and the UGC even though 95% of the recurrent grant is derived from central government resources and the UGC found it increasingly necessary to give advice for the quinquennia (Shattock, M. 1975, p.62).

The environment in which universities function changed considerably in the 1960s and 1970s. The external environment has been characterized

by decreased economic growth, high inflation, adverse demographic factors, low political priority for higher education and increased public attention to the performance of universities. These changes in the external environment resulted in an increase of external constraints as shown by increased centralisation and a reduction in autonomy with increased legislation, increased uncertainty and reduced resources (Lockwood, G. 1981, p.183-4).

The British system of local authority grants is another powerful control and, in comparison to many European countries, also acts as an instrument by which public authorities in Britain have a sanction over students which is non-existent in Europe. To this extent, taking the indicator of the proportion of a year's entrants who graduate, the degree of efficiency of British higher education is probably higher than its European counterparts. In other words, the public sector influences higher education in Britain far more than in Europe where the pattern tends to involve a relatively weak control (Neave, G. 1982, p.7).

A comparative study of patterns of influence in US and UK universities was made by Beyer, J. and Lodahl, T. (1976, p.104) who state that the control of institutions of higher education in England has been more centralised than is the case in the United States. This centralisation has taken various forms such as controls exercised by central government over buildings, general budget, salary levels, research funds, etc. The implementation of centralisation to ensure the greatest return from limited resources was largely successful, the authors believe. It made competition between universities impossible and tended to discourage the development of strong executive power in the hands of Vice Chancellors as enjoyed by their counterparts in the United States (Beyer, J. and Lodahl, T. 1976, p.107).

6.2.1 United Kingdom University Finance

Since the Second World War, public expenditure on university education has risen dramatically. Until 1939, Parliamentary grants to universities

for capital expenditure were rare and, when given, were for special projects. By 1970 the annual capital grant was between £25 and £30 million and covered almost all new building. The recurrent grant which had been a little more than £2 million a year was well over £150 million: all this money came from the central government. Additionally, the LEAs, which in 1962 had been given the duty of grant-aiding all students offered university places, were expending over £100 million to this effect and were making further grants to individual universities totalling several million pounds.

Until 1967, university expenditure was not subject to public audit but from January 1968, in accordance with a recommendation of the Public Accounts Committee (PAC), it became a condition of grants to universities that their books and records in respect of grants should be open to the inspection of the Government Comptroller and Auditor General.

Central government grants for universities' recurrent expenditure are agreed for five years at a time but are paid annually. Accordingly, every five years the universities submit detailed estimates of their financial requirements for the following quinquennium to the UGC, which scrutinises the estimates and then recommends to the government, through the office of the Secretary of State of Education and Science, the total amount to be granted to the universities for that particular quinquennium. The government is only concerned with the total grant and the division between universities is decided by the UGC in consultation with the individual universities. The funds at the disposal of the University Grants Committee are administered with an eye to proven need - offset by endowments, benefactions, fees or other revenues.

In theory, universities are not obliged to spend the money in exactly the way stated in their estimate to the UGC, but in practice no major departure would be made without discussion with the UGC.

Only about 11% of the universities' income is derived from student fees; most of the rest is funded from taxation. Therefore - apart from questions of standards - universities cannot be founded lightly, for each new establishment means a heavy drain on tax resources, not only for instructional and research expenses, but because students will be maintained at public expense. A student admitted to higher education receives fees and generally a substantial or complete maintenance grant, according to his parents' financial position.

In these circumstances it seems strange to insist that there are no state universities in the United Kingdom. In the strict sense, all are private, though publicly financed for the most part. They are also autonomous, for although the state may recognize their degrees for various purposes, nevertheless determination of curricula, standards, and the like rests with the universities themselves. This kind of academic freedom is essential, though, in view of the financial burden they represent, there have from time to time been murmurs about requiring them to be more accountable financially. By a system of "external examiners" mutually exchanged, the universities maintain approximately equal standards. Salaries of university teachers are practically uniform throughout the country, with a small addition for those in London (King, E. p.234).

In the 1960s and 1970s the expansion of higher education led to some countries doubling and even trebling their student enrolment figures and this led to increases in the personnel allocated to higher education and to increased funds, figure No. (6-1).

From 1981 the government embarked on a programme of substantial reduction of both gross expenditure and student numbers in higher education. The 1982 White Paper on public expenditure stated that expenditure on higher education would rise in cash terms from £2.75 billion in the

Figure No. 6-1

Ratio of Expenditure on Higher Education to Total Expenditure on Education¹
in European Countries

	1960	1965	1970
Below 10 percent	10	6	3
Between 10 and 15 percent	12	9	10
Between 15 and 20 percent	3	7	6
Between 20 and 25 percent	-	3	4
Over 25 percent	-	-	2
Number of Countries ²	25	25	25

1 Recurring public expenditure

2 The following countries are not included: Cyprus, the German Democratic Republic, Luxemburg and Turkey.

Source: UNESCO, 1973 Higher Education in Europe, Problems and Prospects, Paris: UNESCO and Sadlak, J. (1978, p.214).

fiscal year of 1981-82 to £3.1 billion in the fiscal year of 1984-85, representing a probable drop in resources in real terms of about 10%. About 10,000 teaching posts were lost, in this period, in higher education (1 in 6 teaching posts). By 1984-85 it was estimated that there would be 30,000 fewer undergraduate and postgraduates than in 1981-82, and the annual intake of undergraduates would fall by 18,000. The age participation rate would fall by 12.5% from 12.9% to 11.2%. In effect, 1 in 8 of those that would have been admitted in 1981-82 would not be admitted by 1984-85.

According to existing accounting practice almost all university budgets are produced in 'line-item' format based on the grouping together of aggregate transactions by subject of expenditure, i.e. academic or

technical salaries, materials, etc., in a way that facilitates the stewardship function. Financial statements give little insight into the actual activities of the university or how they are funded, and consequent attempts at effective planning of resources are conducted with little information. The budgetary process usually provides for the continuance of existing activities and the disposition of the remaining funds is then discussed.

But the recent quinquennial settlement indicates that universities may be placed in the position of having to continue existing activities on a level of financial support lower in real terms than that to which they have been accustomed. One consequence may be that finance officers will be increasingly concerned with problems of resource reallocation under conditions of such financial stringency that expansion of innovation can only be financed by the contraction of existing activity. The stewardship function that finance officers have traditionally carried out will remain very important, but more attention will need to be given to the management accounting type of financial information that will become of increasing importance in the decision-making processes of universities (Sims, M. 1975, p.200).

6.2.2 United Kingdom Universities after 1981

A crisis was reached in July 1981 when major cuts were imposed on the universities' recurrent grant and, even though spread over three years, the strain was so severe as to raise doubt whether some of the more greatly affected universities could survive. These cuts ranged from 6% to 44% on individual universities and 17% over the whole system (Ashworth, J. 1983 and Steering Committee 1983). In the six universities studied by the Steering Committee the reduction ranged from 8% to 20%. The government helped the universities by making £80m available to them to encourage

early retirement by staff. Consequently at the time of the Jarratt report, most academic staff over the age of 55 had been retired, reducing to single figures the percentage in many faculties reaching normal retirement age during the rest of this decade, therefore rendering difficult future changes or economies.

The universities hoped that after the three year period 'level funding' would be introduced, as the Government appeared to favour this. However, the Government's concept of 'level funding' was based on planned levels of provision for pay and price increases. By 1984 universities were told that their provision would be less than 'level funding' and that they were expected to increase their efficiency to compensate for this.

The Public Expenditure White Paper of 1985 proposed an average increase in the UGC grant of $2\frac{1}{2}\%$ per year in cash terms, whilst the Treasury forecast inflation as being well above that figure. Jarratt recognised that the effects of this gap might be exacerbated by:

- a. Annual salary settlements rising faster than allowed for in the general inflation rate.
- b. Escalating cost of staff arising from annual increment payments on a routine basis. Prior to 1981, increasing costs due to annual increments were largely offset by engaging staff at the lower end of the scale to replace those retiring at the top. Low staff turnover reduced the value of the offset and was expected to do so throughout the decade.
- c. Important university commodities have increased in real cost more rapidly than general inflation, exacerbated by the fall of the pound against the dollar.
- d. Changes in tax, such as VAT being imposed on building repairs in 1984

and the National Insurance charges of 1985 raised university costs without an increase in the UGC grant by way of compensation.

To take into account the varying degrees of excellence in research within universities, the UGC is engaged in rethinking its allocation process and will most probably allow two-thirds of the grant to teaching requirements and one-third to research. The research grant will, of necessity, become highly selective and increasingly so for the rest of the decade. For some universities this will mean a substantial adjustment in the range of research carried out. Moreover, the UGC expects that within individual universities the distribution between departments will be more selective, with those that are strong on research being more favoured. Some universities will not be strong enough in all departments to spread the cuts evenly so severe cutbacks in limited areas will occur and this, together with the overall erosion of the grant, will cause substantial reductions in funding in some areas. The management of the universities will encounter more problems as the situation will be worsened by some parts of the university growing in recognition of the strength of their research.

A plan founded on planned student numbers, their distribution between subjects and unit teaching costs in each subject will most probably be the teaching-based criteria. Numerous special considerations will need to be calculated within this, such as the 'London Weighting'.

It was announced by the Secretary of State for Education and Sciences to the universities in the United Kingdom that they should implement these changes by taking a number of distinct measures. One was to look for an increase in the generation of income from alternative sources, such as industry, overseas students, etc. (The Times, October 27th, 1984, p.4). Another is that the use of available resources must be maximised in the

universities. The need for value for money is at any time desirable but in an era of constrained funding it becomes essential. However, the crucial issue is how does a university achieve maximum value for money whilst fulfilling its objectives?

Even with a clear view of what they wish to achieve universities will not meet their objectives unless they have the necessary structure to effect adequate rates of change and the will to produce it. The Steering Committee study finds this to be the greatest need for the universities in preparation for the period up to the year 2000.

6.2.3 The Efficiency of Universities: It is widely believed that university education is economically inefficient. Unfortunately, empirical testing of such a proposition is not likely to be very convincing without a model of the educational institution that will permit us to formulate testable hypotheses and to isolate the data that are relevant to the test (Cootner, P. 1974, p.217).

We have, at the beginning of this study, discussed the importance of investigating problems of efficiency and the concept of "efficiency" in literature. Some of the difficulties in defining "efficiency" as applied to universities result from differences in the socio-economic goals of education, levels of education, types of institution, methods of financing, etc. (Sadlak, J. 1978, p.215). The notion of efficiency applied to higher education entails the assessment of the adaptation of the education system to its objectives. This adaptation may be assessed on at least two levels. A participant at the seminar on internal efficiency in higher education in Europe 1975, organised by the UNESCO European Centre for Higher Education in Bucharest, defined the term "efficiency" as follows:

External efficiency: Society usually assigns a number of overriding cultural, social and economic objectives to the education system. External efficiency is concerned with the success of the

educational system in meeting these objectives. In many countries this task is made difficult by the fact that the objectives are not always explicit nor compatible with each other.

Internal efficiency: To the educational system and its individual institutions the broad aims of society are taken as given. They have more specific targets established within this framework. The internal efficiency of an educational system or an institution is a measure of its success in meeting these operational targets with the resources made available to it.

(Sadlak, J. 1978, p.215)

There is a widespread belief that the expansion of the universities in the 1960s and 1970s did not provide commensurate economic returns to the country. Ashworth, J. (1983, p.60) expressed the view that the problems of universities were to a large extent caused by aspects of the UGC and its activities.

However, he looked at the universities in his study as if they were a homogeneous set.

Criticism of the UGC has come from the CVCP who claim that

in the last decade the UGC has become so preoccupied with close consideration of academic fields and financial problems that it seems to have lost sight of universities as entire institutions. The proposal for formula funding appears symptomatic of this trend.

(Times Higher Education Supplement, 1986, No. 687)

It has been argued that the authority of the UGC must be strengthened to cope with the changing patterns ahead. The Committee of Vice Chancellors and Principals said in its evidence to the Croham Inquiry into the role and functions of UGC that there must be proposals to ensure

1. A higher degree of independence for the UGC.
2. The ability for it to give disinterested advice to the government.
3. The realisation that its effectiveness depends on its continuing to deal with each university as an entity in its own right,

and

4. The retention of its independence of judgement in the working of the dual support system.

For an efficient relationship on planning procedures and resource allocation between the Government, UGC, CVCP and universities, the Steering Committee recommended the following points:

1. Recommendations for Government:
 - A. Government should provide broad policy guidelines within which the UGC and individual universities can undertake strategic and long term planning.
 - B. Government should consider what action can be taken to restore a longer funding horizon for universities in view of disincentives to strategic planning inherent in the present system.
 - C. Government should avoid thrusting crises on universities by sudden short term changes of course.
 - D. Government should be prepared to provide funds to meet the whole or greater part of the realistic cost of future staffing agreed between individual universities and the UGC.
 - E. Government should examine whether a change can be made in the method used in England and Wales to channel fees to universities.
 - F. Government should commission an examination of the role, structure and staffing of the UGC.
2. Recommendations for UGC:
 - A. The UGC should provide and make known its own views about the prospects and direction for higher education.
 - B. There should be an increase in the frequency and scope of informal and confidential discussions between individual vice chancellors, the UGC Chairman and sub-committee chairmen.

- C. The UGC should encourage further inter-institutional collaboration.
 - D. Within the next 12 months the UGC should agree with each university a programme for implementing the recommendations in this report and the relevant findings of the special studies and should take progress into account when allocating grants.
3. Recommendations for the CVCP:
- A. The CVCP should encourage and assist universities in adopting best practices as outlined in this report.
 - B. The CVCP should consider whether it can extend its role in training to developing the management skills of vice chancellors, pro-vice chancellors, deans and heads of departments.
 - C. The CVCP should discuss with the Council of Local Education Authorities the possibility of universities reporting on student attendance on a by exception basis.
4. Recommendations for the UGC and CVCP:
- A. The relationship between the secretariats of the UGC and CVCP should be strengthened.
 - B. The universities' statistical record should be given increased access within the university system.
 - C. A range of performance indicators should be developed, covering both inputs and outputs and designed for use within individual universities and for making comparisons between institutions.

(Times Higher Education Supplement, April 1985, p.4)

The Steering Committee also made many significant recommendations concerning the universities' internal efficiency.

Although the Steering Committee was set up by central government to study universities in the United Kingdom it should be mentioned that

the government spending on it was "of the order of £330-450,000 having been increased slightly during the course of the committee's work; approximately 85 percent of that money was used to meet the bills of management consultancy firms" (THES, 2812, 1986, p.15). The external influences of the university environment - central government, UGC, CVCP, DES, etc., ought to be studied at the same time in order to make a complete study which would be more useful to both the external environment and to the universities. These studies should consider rules, regulations, organisational structures and the handling of the financial affairs in order to complete the picture of efficiency and effectiveness of UK universities. The Steering Committee's assessment concentrated on planning in relation to external factors, but not in sufficient detail.

Jarrett recognized the difficulties facing university planning and drew attention to factors constraining against optimal deployment of resources. Outside bodies exert increasing pressure on universities, yet planning for these demands is hampered by uncertain grant levels. University attitudes to tenure, fear that detailed planning may stifle creativity and belief that consensus management is not conducive to planning, also hamper universities. However, universities must give consideration to their academic standing, market performance and must endeavour to assure optimal use of resources by adopting effective monitoring procedures.

The Steering Committee for Efficiency Studies asked how universities in the United Kingdom were able to plan when the external environment was so uncertain, and met that plea in part by urging the Government and University Grants Committee to "stop chopping and changing" funding (THES, August 20, 1985, p.5).

Criticism was, however, levelled at the report on the grounds that the Steering Committee for Efficiency Studies was a member group and presumably this meant no discussion was held on what many universities in the United Kingdom considered to be the hopeless quality of UGC decision taking and the bureaucracy involved.

"Try and sell the freehold of our own land to a company locating on our Science Park", said a Midlands University Registrar, "it's a morass of UGC and Treasury restrictions"

(Times, May 8, 1985, p.4)

The question of university funding had previously been raised by the Secretary of State for Education and Science when opening a Commons debate on the development of higher education. He acknowledged the need to maintain and enhance the quality of higher education and its contribution to scholarship, research and the economy, and the need to ensure that the resources available were spent in the most efficient and effective manner. Quality and cost effectiveness (he said) were the keynotes. However, efficiency was not synonymous with cheapness. There was a point where it was not possible to increase economies without lowering standards. Saving would be coupled with efficiency, not convenience or academic muscle.

In the future, it would be wise for universities and other institutions of higher education to inch towards a larger contribution to their funds from the private sector (Times, October 27, 1984, p.4).

Another suggestion had been that, in view of the pressure on university places, there should be much closer cooperation on funding between the UGC, the National Advisory Board and industrial firms so that

as much opportunity as possible is given to those who wish to partake in higher education (Times, March 17, 1984, p.4).

The Steering Committee for Efficiency tackled the university problems put to it and carried political weight. Nevertheless, Lockwood, G. (1986) suspected that the contrast in output would demonstrate the need to infuse further the national university mechanisms with the lay element.

In that regard I will comment on the claim made by some critics, and some friends, that the composition of the Jarratt Committee led its report to be an attempt to impose "industrial management" practices and policies without an understanding of the academic and distinctive essence of the universities. Such criticism has no basis in either the work of the committee or the contents of its report.

Finally, the main implication for the British universities can be stated very simply. There are many influences in society at large, and in Whitehall and Westminster, in favour of strengthening the external managerial control over the university system in which the individual institutions would be treated as mere local administrations. The Jarrett Report came down heavily in favour of universities as individual corporate bodies managing their own affairs and futures.

(THES, 1986, p.15)

The universities will not retain that managerial autonomy unless they improve their strategic and operational effectiveness along the lines suggested. Among the people monitoring the response to the report are the members of the Steering Committee, most of whom have been involved in the subsequent discussions and whose analysis of the effectiveness of that response will play a part in the overall assessment (THES, 1986, p.15).

There has been an upsurge of interest in and attention to the need for performance indicators in and between universities. It would seem that the UGC is not, as yet, using performance indicators as its main basis for allocation, nor are most universities. It is clear, though, that some part is played by relatively crude norms, e.g. student:staff ratios (Shattock and Rigby, 1983; Fielden, J. and Lockwood, G. 1973, p.221; Bramley, 1986, p.12). Therefore the pace of activity is becoming more intense with a joint working group of the CVCP and the UGC reporting on the feasibility and acceptability of a range of indicators (THEES, April 18, 1986), while in the Jarrett Report the National Data Study raised the role of performance indicators much more clearly (Coopers and Lybrand, 1985).

Nevertheless, other countries in Europe have similar problems. The ability of Higher Education in the Federal Republic of Germany to efficiently manage itself is often questioned. The scepticism with which universities and colleges themselves approach questions of economy is as responsible for this as is the observation that working conditions are worsening. It is this lack of confidence in the economic competence of universities which inclines the state authorities to bureaucratic intervention. Granzow, H. (1979, p.55) stated that

If, on the one hand, increased defensive behaviour is understandable we must none the less understand that the inauspicious circle of mutual mistrust is the breeding ground on which additional instruments of control thrive. Still, I am optimistic that colleges and universities have sufficient competence in the area of higher-education economics, or will develop that competence.

6.3 INTERNAL PROVINCES OF UNIVERSITIES IN THE UNITED KINGDOM

The internal government of universities has been studied by different writers, each one describing or analysing the university from a different view. Livingstone, H. (1974) and Rice, A. (1971) described it in terms of organisational theory or political science concepts. Univer-

sities in the United Kingdom have also been described in terms of planning and management (Fielden, J. and Lockwood, G. (1973)). This research, however, is investigating UK universities from the viewpoint of efficiency in accounting and financial management.

The universities are independent, self-governing bodies with a large degree of constitutional autonomy. This is despite the fact that three-quarters of their income comes from the government through UGC funds (Dent, H. 1977, p.138). In almost every case, autonomy is guaranteed by charter and statutes promulgated by the Privy Council, which broadly outline the constitutional framework within which they operate, as discussed in Chapter Four. The Council is the governing body which carries financial and employment responsibilities, and the Senate is given responsibility for academic affairs. The exact relationship between Council and Senate is discussed in the Report of the Steering Committee for Efficiency Studies in Universities (1985, p.8) and it varies considerably. In some universities the Council has ultimate powers in all matters. Other Councils require the Senate's advice. It is rare for Councils to intervene in purely academic affairs and in practice the views of Senate are often sought. This division of role between Council and Senate is an aspect of management unique to universities and enables Senate to protect academic freedom in teaching and research. Unfortunately, financial constraints create a potential for unrest between the Council and Senate in deciding where funds should be spent and, since 1981, the changing circumstances of universities in the United Kingdom have provoked the question of whether the working relationship is still viable.

The degree of autonomy provided in the charter and statutes gives a substantial amount of freedom to universities in the way in which they organise and manage their affairs. In terms of university structure, there is considerable variety in the detailed constitutional arrangements of bodies in the charters or statutes, and significant variation of "management style" from one university to another. The Report of the Steering Committee for Efficiency Studies in Universities (1985, p.8) found that:

This arises from variations in history, tradition, size, location and, in some instances, from the influence of outstanding leaders. Indeed, individual universities rightly develop their own ethos and establish a very particular image in the eyes of other universities and of the wider public. Size is of particular importance. For example, in 1983/84, among the six universities which we studied, full time student numbers ranged from 3188 in the case of Essex to 9866 in the case of Edinburgh. Full time academic staff numbers (financed from UGC grant and fees) in these universities range from 259 to 1097.

Nevertheless, and despite the constitutional autonomy of the universities, their financial freedom of action is significantly limited in practice. As they are dependent on the state for funds for teaching and research, universities' financial matters are subject to public accountability through Parliament and they operate within the annual planning limit designated by central government and the UGC (Education Act 198 and Further Education Act 1985, Section 471).

6.3.1 Objectives of the Universities of the United Kingdom: Having discussed the system of funding with its problems and recommendations from various sources, the logical next step is to relate these funds to the internal affairs of universities. However, a difficulty is created by the university education system and structure, and the lack of clearly stated objectives. Universities in the United Kingdom are complex entities, the university is an organisation, it is an educational institution, and

it is a community. Basically, it is an organisation that employs labour and capital to generate the products of teaching and research (Lockwood, G. 1981, p.184).

Russell, B. (1985, p.198) held a similar idea that universities exist for two purposes; one, to train personnel for certain professions and, two, to pursue learning and research without thought of its immediate use. To add to the complexity of the university, there are four further features which make the university unique.

Firstly, the combination of its basic goals in its pursuance of teaching, research and public service activities highlights its multi purpose and because these activities are interrelated they become almost inseparable. Secondly, the outputs of a university are difficult to measure. Accurate quantification of the value to society or to the individual, in the university turning a pupil into a graduate, is virtually impossible. The value of research output also cannot be adequately measured. Thirdly, chief executives operate through overlapping spheres of power and no one person has absolute authority. Fourthly, internal units have a degree of autonomy based upon professionalism, specialisation and tradition (Lockwood, G. 1981, p.185).

However, although UK universities are seen to be complex organisations with multiple objectives and functions, in practice they have, as the Robbins Report states, four main roles in higher education.

1. Instruction in skills suitable to play a part in the general division of labour;
2. Teaching to promote the general powers of the mind;
3. The advancement of learning;
4. The transmission of a common culture and common standards of citizenship.

Although the Robbins Report draws similar conclusions to Lockwood, G. (1981) and Russell, B. (1983) they differ on the "transmission of a common culture and common standards of citizenship".

A formal statement of overall objectives is provided in the Charter and Statutes of the UCL.

The objects of the College shall be to provide education and courses of study in the fields of arts, laws, pure sciences, medicine and medical sciences, social sciences and applied sciences, and in such other fields of learning as may from time to time be decided upon by the College and to encourage research in the said branches of knowledge and learning and to organise, encourage and stimulate postgraduate studies in such branches.

A clear framework within which a university can operate is not provided by broad objectives and in particular their very general formulation does not provide a good basis on which to judge, in a measurable way, its effectiveness (UCL, Vol. 1, 1985, p.32).

In many discussions about universities it has been noticed that a good part of the discomfort concerning questions of economics is due to ignorance of the goals of universities, e.g. Reports of the Steering Committee, University College London and Edinburgh University. Moreover, there are also reservations with regard to methods and instruments that derive from economics, in which standards, largely alien to higher education, such as profit maximization and other market conditions, are used. This all generates the concern that economics could put the real goals of higher education into jeopardy (Granzow, H. 1979, p.54).

6.3.2 Functions of UK Universities: A number of functions have been attributed to the universities which have implications for the roles to be played by faculty and students. Blau, P. and Scott, W. (1963) distinguish four types of organisation. These are service, by which the major beneficiary is the client; commonweal, whereby the general public is the

major beneficiary; mutual benefit where the general participants are the major beneficiaries; and lastly business where the major beneficiary is the owner. They suggest that universities are primarily organisations of service with the student being the client and the academic faculty providing the service. Similar organisational aspects of universities have been discussed by Denis, A. (1973, p.155).

However, the prime function of a university is the attainment of university objectives through teaching and research. Figure No. (6-2) is useful therefore as it explicitly shows a university's functions by means of an input - output approach. The efficient performance of teaching and research requires an essential secondary function such as the provision and maintenance of plant and buildings, many forms of student support, administration and forward planning.

The empirical study of Fielden, J. (1969, p.65) found that United Kingdom university administrators have few friends. Administrators have appeared to central government as being remote and therefore suspect; to the student they are the symbolic target for blame; to the academic a single error could be construed as complete inefficiency and their requests for information merely blatant bureaucracy. From his research covering approximately half of the universities he concluded that these were erroneous suspicions.

Nevertheless, it can be seen that firstly, universities have in common complex and multi-purposes; secondly, the Report of the Steering Committee for Efficiency Studies in Universities, 1985, did not mention the universities' goals and objectives nor their purposes.

However, in order to maximise efficiency it is necessary to define organisational goals, to measure the degree of goal attainment as well as the value of organisational resources, and to know all possible alternative

The Universities Input-Output Process

The University inputs consist of:

- a. Academic staff time, used for teaching, research, administration, or on activities which contribute to two or to all three of these functions.
- b. Ancillary staff time.
- c. The use of equipment, books and records.
- d. The use of land and buildings.
- e. Organisation.

The Universities Produce:

- a. Students who have completed various stages and types of education. These can be counted and classified. Note that the product is the completed course, not the numbers undergoing it. The use of staff/student ratio as a measure of productivity is like measuring the productivity of a distillery by the ratio of labour to the volume of whisky maturing in the stores.
- b. The discovery of new knowledge. There is no satisfactory measure of this.
- c. A service of the conservation and reinterpretation of existing knowledge or culture. There is no satisfactory measure of this.

Source: This is adapted from: Universities Conference "Universities and Productivity". Conference convened through the Joint Consultative Committee of the Vice-Chancellors' Committee and the Association of University Teachers, 21 March, 1968.

- Notes: (1) This form does not show the financial aspects of a university.
- (2) The Conference did not define their observations in terms of input/output which is very important in discussing the productivity of universities.

arrangements for these resources. Short of such performance, researchers have measured "efficiency" and labelled their findings variously as: efficiency, quality, performance, effectiveness, goal achievement or success (Becker, S. and Neuhauser, D. 1975, p.40).

The experience of the researcher, and a survey of literature suggest that universities in the United Kingdom need more research directed at defining and analysing their goals and objectives which will help them to improve their efficiency. For example there is a need to define key result areas, "those areas or aspects of organisation that most significantly reflect the result of its activities" and key success factors which "focus on identifying those factors in a managers environment which must go right in order for the manager to achieve his/her goals and objectives" Dermer, J. 1977, Rockart, J. 1979 respectively.

At the same time the internal environment has become more characterised by technological change, the move to become more unionised, democratisation and the rapid rate of knowledge advancement and other factors all too familiar to university members in their daily working lives. A summary of the impact of these changes is the increase in internal constraints at the management and institutional level. An instance of internal limits is the broader ability to block or delay decisions; the increase of formalisation of business conduct; and the increased competition over scarcer funds, etc. (Lockwood, G. 1981, p.183).

Nevertheless, the Report of the Steering Committee for Efficiency Studies in Universities, 1985, revealed a number of features which complicate the managerial and administrative process and affect the efficiency of the university as a whole. They are:

- a. Range of academic activity
- b. Professional loyalties
- c. Participation and the tenure issue

6.3.2.1 Range of Academic Activity: Each university in the United Kingdom contains a variety of activities and this is reproduced in the number of departments in some universities. Edinburgh University's departments number as many as 120. The faculties vary considerably in size and also in style of management. In this respect see Figure No. (6-3) which condenses many variables;

Figure No. (6-3)

<u>Number of Faculties and its Expenses</u>						
1983-1984	STAFF (FTES)					
FACULTY	No. of Depts.	Student load FTES	Teaching	Clerical	Technical	Gross Expenditure £,000s
Arts	23	2276	201.8	46.6	10.7	4,316.7
Divinity	5	206	19.3	3.8	0.0	406.5
Law	7	667	43.0	11.0	0.0	817.8
Medicine	35	1458	297.4	150.1	360.6	10,517.0
Music	1	68	9.2	1.3	0.0	219.3
Science	23	3079	306.4	79.2	305.9	9,486.2
Social Sciences	16	2354	174.6	81.5	23.5	3,897.5
Veterinary Medicine	10	314	74.6	28.6	120.0	2,791.6
TOTAL	120	10422	1126.3	402.1	820.7	32,452.6

Source: University of Edinburgh "Report to the Committee of Vice-Chancellors and Principals Steering Committee for Efficiency Studies," January 1985, p.9.

number of departments, expenditure, etc. In discussing the concept of structure with the Dean's Committee of a large faculty the Steering Committee Report recommended discussions to examine the case for merging the faculties of Arts, Divinity and Music, and also for grouping Law

and Social Sciences, though it found no comparable case for merging Veterinary Medicine with either Science or Medicine. It was also recommended that these new groupings of Arts, Divinity and Music; and Law with Social Sciences - should each have a single representative on University Committees.

This would effectively save the time of three Deans and significantly reduce the size of several committees (University of Edinburgh, 1985, p.9)

The Report of the Steering Committee for Efficiency Studies, 1985, p.6 specifically did not tackle issues of academic judgement and the academic and educational policies, practices and methods of the universities, but the main report did not refrain entirely from commenting on matters inevitably raised, for example, overall planning and resources allocation, the roles of the heads of departments, staff appraisal and tenure. Subsequently the Report was linked with other policy initiatives bearing directly on academic decisions including research selectivity, performance indicators, and their role in resource allocation. Separation of academic and administrative matters may be artificial or unsustainable in the analysis of university performance (Bromley, G. 1986, p.4).

6.3.2.2 Professional Loyalties: The Report found that a third or half of the total staff of UK universities are 'professionals' in fields such as medicine, science or the law. Conflicts of interests may occur, when individual professional status is regarded at least as highly as university role, and it may be difficult for management to unite an institution to work to a common purpose and objectives.

6.3.2.3 Participation and the Tenure Issue: The tradition of a university's constitution is one of self government and over the years this has extended to further groupings within the university who feel they should have a voice in either academic or administrative affairs. This participation can have a two-fold effect on the university. It can be a unifying influence but conversely it can also be used to delay or block unpopular decisions. The second effect can be particularly burdensome in times of scarcity of funds.

In recent years it has been suggested that desirable changes in universities might be hampered by inflexible terms and conditions of staff service. Technically, tenure gives a permanency of employment in the university and staff contracts can only be broken in special circumstances. Whereas conduct or inability to perform the job might be grounds for dismissal, redundancy generally is not. The position varies from one university to another. Jarratt summarized the three main categories as follows:

- I) Universities where academic staff have a complete and watertight tenure.
- II) Universities where the security of tenure is subject to the legal interpretation of Charters, Statutes or Conditions of Service.
- III) Universities where there is no apparent security of tenure for academic staff.

(Steering Committee Report, 1985, p.10)

Because, despite the confused legal position, many staff and Senates act on the presumption of security of tenure for all academic staff, a situation exists not conducive to change or even discussion of change.

The Secretary of State voiced his intention to regularise the situation by legislating on tenure at some future date, but claimed:

We have in mind no interference with existing contractual rights, we wish only to limit the tenure that may be granted by contracts made after some specified future date.

The Committee of Vice-Chancellors and Principals is anxious as to the effect of long-term erosion in the pay levels of academics of universities and they told the Secretary of State for Education and Science that ambitious academics are leaving the system to teach abroad or to enter commerce and industry where pay is much better. They added that universities are experiencing increasing difficulties in filling vital jobs in a comprehensive range of subjects. The evidence collected by the CVCP at the Secretary of State's express request showed that 37% of the academics leaving their posts move out of the higher education system, with a fifth of all leavers moving into commerce and industry and a further 7% emigrating to university jobs overseas.

The basic problem is that academic staff have had, in recent years, such low salary settlements that universities have lagged behind other professions recruiting staff from the same sources and the salary scales are moving further apart, making the future prospects of recruiting staff even gloomier (THES, 1981, p.1).

The relationship of salaries in universities to those available outside was highlighted by examples given in THES October 18, 1985:

Universities are blaming the relative pay levels for the exodus. One university told the Vice-Chancellors' Committee that a chair in electronics ought to carry a salary of £30,000 to £35,000 to be competitive with industry, but it could only offer about £20,000. Professional salaries in areas such as insurance or accountancy were nudging £20,000 but the top of the lecturer scale was just £14,925.

Similar arguments have been raised by the AUT, which has argued for several years that the outcome of Government policy, in comparison of academic salaries with others, would be damage to the efficiency and effectiveness of universities (THES, Sept. 13, 1985, p.1).

It is a gloomy picture and without doubt academic and administrative staff morale is low. Boorman, D. (1982) showed that financial cuts could not be absorbed by natural wastage. The annual rate of retirement was 1% whilst wastage for other reasons was about 3%. Cuts could not be absorbed by reductions in expenditure other than salaries and wages. About 72% of university expenditure was spent on salaries and wages, although this varied slightly between universities. The other large categories were books and periodicals (2%); library supplies and computers (7%); fuel, power and water (4%); repairs, maintenance and minor building works (6%) and postage and telephones (3%). A great deal of thought, Boorman argued, had been given to achieving savings on non-staff expenditure and whilst minor economies could be made, any greater saving might be counter-productive (Boorman, D. 1982, p.3).

6.4 THE GOVERNANCE OF UNIVERSITIES AND THEIR EFFICIENCY IN THE USE OF THEIR RESOURCES

This section is concerned with the formal elements forming part of the university's system of governance. After analysing these, it recommends the changes needed for efficient planning and resource allocation.

6.4.1 Councils and Senates: In most universities in the UK the governing body is the Council (in Scotland the Court), the majority of whose members are not members of the university. These are called lay members. The supreme academic body is the Senate, which is made up of academics and usually a small number of students and is responsible for all affairs concerning admissions and welfare of students and the selection and

promotion of staff (Commonwealth Universities, 1985, p.224).

Nearly all Councils have a high proportion of lay members as required by the Privy Council when approving Charters and Statutes, and they play a vital role in university affairs. Recruitment varies between universities, although the consultants thought Edinburgh University Council a reasonable size given the interests to be represented and they liked the practice of having a lay chairman. They thought University College London an extremely large body, being composed of 235 members in total in 1984/85. (Edinburgh University, 1985, p.45; UCL, 1985, p.15 respectively). The size of the local authority element of some Councils reflects their original sources of funding and support, but the Reports expressed a desire to see this reduced in favour of more appropriate skills and experience, such as commerce and the professions, on which some universities already draw. The Reports propose encouragement of greater involvement by laymen in university planning and a revival of the Council's role, which has weakened since the 1960s.

Senates are often large bodies and may contain 200 or more members, but powers are delegated to Faculty Boards, departments and committees. Delegated work includes the admission of students, organisation of teaching and examination arrangements, although any matter involving extra funds must be referred to the Councils.

The operation of Senates is influenced by their size. They are the proper bodies for formally approving academic policies and decisions, but their very size prohibits their undertaking academic management, policy formation or strategic academic planning. Thus

Senates become bodies which legitimise policies, provide a forum for discussion and disseminate information. Reductions in size might facilitate an increased role in management, but a large representative body of this type has a valuable role of its own.

The views of the Committee concerning Councils and Senates may be summarized thus:

- (a) Lay members of the Council provide essential knowledge and experience.
- (b) Councils should try to attract young executives. It may be desirable to reduce local authority representation to make room for a range of skilled laymen.
- (c) Better use should be made of the time given by laymen, especially in strategic planning.
- (d) Councils should play a much more active role in academic and financial planning.
- (e) To leave time for these activities, Councils must delegate routine business to others.
- (f) Senates should continue as the main forum for generating academic views and giving advice on broader issues to Councils, although much of their work consists of endorsing and co-ordinating work carried out by Faculty Boards, departments and committees.

- (g) Planning and resource allocation should be carried out by a central committee comprised of Council and Senate members, appointed by the Council and reporting to both bodies.
- (h) There was cause for concern over the relationship between Council and Senate. Reduced Council influence has encouraged the conservatism of Senates. However a degree of tension between Senate and Council could be creative and beneficial in the long-term, but this depends on Councils asserting themselves.

The overall findings of the Reports on University College London and the University of Edinburgh identified a number of recommendations to help both universities increase their effectiveness and efficiency through the Council and Senate. The main recommendations, elaborated in Figure No. (6-5), are that:

First: Council and Senate should have less involvement with the detailed allocation of university resources.

Second: In general, it seems that the Council and Senate have a broad interest in the overall strategy and effectiveness of the university, while the lower hierarchy level is more involved in the allocation of resources and productivity.

6.4.2 Committee Systems and Informal Processes: Exercise of the powers of Councils and Senates has traditionally been carried out through an elaborate system of committees. Typically, a university could have between 50 - 100 such committees reporting to Senate or Council. For

Council and Senate of UCL

- a. The presentation of Council agendas and supporting papers should be modified so as to separate more clearly matters for discussion from those which are for formal report only;
- b. Consideration should be given to providing brief summary documents on important policy issues;
- c. A short section of Council business should be provided for giving advance notice, whenever possible, of major policy items which are to be introduced to the committee system and council members should be offered the opportunity to submit papers or to attend the responsible committees as observers (by agreement with the Provost and committee chairman);
- d. Wider and more strategic issues should be introduced to council agendas for discussion from time to time (we note that the Provost and Secretary have in the past endeavoured to do this as part of 'Provost's Business' and as separate items (e.g. Health Centre, Library and Shenley Sports Ground), but that this has been hindered by the volume of business to be transacted at recent meetings);
- e. Consideration should be given to providing a further annual informal meeting of lay members, although this may not prove feasible given the extent of demands on their time;
- f. Efforts should be made to appoint to Council a lay member with a professional background in commercial law.

Council and Senate of Edinburgh

- a. The Court is a reasonable size given the interests to be represented and we (consultants) like the practice of having a lay chairman.
- b. We (consultants) recommend that the Court should review its role both in regard to strategic planning and to delegation of its powers;
- c. We (consultants) consider that there should be an increase in both the number of elected and academic members of the Resources Committee.
- d. We (consultants) recommend that Senate should evolve a system delegating more of its responsibilities to faculties, educational policy committee and other committees.
- e. We (consultants) recommend that alternative methods of providing and disseminating information now associated with Senate meetings be devised.
- f. We (consultants) believe that the time has come to question the right of every professor and every head of department to belong to Senate.
- g. We (consultants) recommend that steps be taken to reduce the size of Senate to between 75 and 125 members.
- h. We (consultants) propose that both committees should be regarded as joint committees of Court and Senate.

Sources: (1) Report of the Study Officer of University College London, Vol. 1, Part 2, 1985, p.3.
(2) Report of Edinburgh University, 1985, pp. 45-48.

example in University College London, there are two main statutory committees, a. Finance Committee; b. Academic Board Executive Committee. In addition to these committees, the 1984/85 schedule of committees listed 74 standing committees and major sub-committees coming under the auspices either of Council or of the Academic Board (Report of UCL, Part Two, 1985, p.11).

In comparison, Edinburgh University, according to the 1985 report, had 28 standing committees and three sub-committees of the University Court, 29 of the Senate (including 3 sub-groups of educational policy committees), and 7 joint Court and Senate Committees. Thus, there are in total 67 committees reporting to Court and Senate (Report of Edinburgh University, 1985, p.45). The number of key committees is much smaller as some committees meet infrequently for specific purposes, e.g. the award of prizes.

It is not surprising that in the Report of UCL, Part Two, 1985, p.38 and the final Report of the Steering Committee, 1985, this system came under scrutiny. A number of significant features of procedures and the committee management of university efficiency are worth mentioning in this respect.

Committees provide a means of achieving consensus and spreading information. They also have a coordinating role, bringing together related features of broad policies. Yet committee structures hamper coordination. A function carried out by one committee in one university may be distributed among several committees in another. Some committees rely too much on informal processes. Joint committees of Council and Senate are important to the working relationship between the two bodies. It is important that committee members act in the interests of the university as a whole, rather than pursuing sectional interests.

The Reports of Edinburgh (1985) and University College London (1985) agree, in the main, on the actions to be taken by the universities to improve the effectiveness and efficiency of committee systems. The Steering Committee recognised that there was great scope for this and made the following recommendations:

- (a) Distinction should be made in the committee systems between parts dealing with academic matters and those concerned with non-academic functions. It was suggested that while committee decision taking in academic matters is desirable and necessary for sound functional reasons, non-academic decision-making could be assigned to individual managers or appointed officers without the involvement of committees.
- (b) It is necessary that universities realise the costs, in time and money, needed to maintain elaborate committee systems.
- (c) The number of committees and their inter-relationship needs to be comprehensively reviewed on a regular basis and well defined terms of reference outlined. There is too great a tendency for committees to stay in existence when they are no longer needed, because it is difficult to scale them down.
- (d) Regular and thorough review should be given to the size and frequency of meetings of committees and universities should ensure that committees are not allowed to become over large or continue when their usefulness is past.
- (e) A committee system involves a cycle of meetings to integrate the consideration of business and to monitor and plan its flow through the committees and generally one cycle of meetings per term should be adequate provided that the scheduling of business is undertaken with careful forethought.

(f) Significant increases in the delegation of authority to Chairmen and officials should be made for routine matters. Time of committee members is expensive and should not be wasted when only routine items of business have accumulated. (Final Report of Steering Committee, 1985, p.25).

The Committee recognized that formal organisation of a university and its operation is of the greatest importance, but it felt, on the basis of the Reports of Edinburgh (1985) and University College London (1985), that Vice Chancellors rely considerably on informal processes operating in conjunction with established committee structures. While such arrangements are important for effective management of the university, they must be adequately controlled and used with some discretion. The involvement of lay members of Council in these informal processes is beneficial, but they should not, on that account, be used as a substitute for a proper committee system. Under the role of Vice Chancellor - Provost - of University College London, two particular informal groupings of Provost within the college are of especial significance in this light. First, the Provost's meeting with Deans and secondly the weekly meeting with senior administrative officers. These meetings provide a forum in which the Provost is able to sound out views and gather adequate information. The informal meeting is described by the Provost as his "management meeting" (Report of University College London, 1985, p.18).

6.4.3 Vice Chancellors, Pro-Vice Chancellors and Deans: Vice Chancellors are the chief academic and administrative officers in their universities and without a doubt their effectiveness and efficiency are of prime importance to the success of UK universities (see also, Howell, D. 1979, p.20).

As the Reports of Edinburgh (1985) and University College London (1985) show, the primary roles of the Vice Chancellors are to give academic leadership to the Senate as Chairman; as chief executive answering to the Council; to represent academic staff on Council; and to act as the university's representative to the outside world, from local to international level.

The Steering Committee drew attention to the different management styles and modes of operation which characterised university Vice Chancellors. Some Vice Chancellors felt the need to assume executive authority, while others thought that as chairman they should seek consensus.

Although to some extent these changes can be ascribed to personality differences, a trend is detectable away from the traditional role of the Vice Chancellor as primarily a scholar, towards a more executive position. The emphasis on management seems likely to increase in the future.

It is apparent from the Steering Committee report that Vice Chancellors have virtually no formal constitutional powers other than those delegated to them by the Council, Senate or a committee, relying on qualities of leadership or persuasion. As the Committee suggested, although the Vice Chancellor should continue to be recognised as the academic leader of his university, there is a need for him to play an executive role, and have clearly defined authority.

This highlights the importance of selection, and the need for in-service opportunities to develop managerial skill, including an awareness of methods used in other types of organisation. Any attempt by universities to seek alternative funding will also necessitate some knowledge of finance and business.

Because of the academic element of the Vice Chancellor's role, posts will continue to be filled by senior academics. All senior academics are

therefore potential managers and will need appropriate training.

The status of a Vice Chancellor is comparable to that of an American University President, but a Vice Chancellor is not as strong an executive as his American counterpart. This is because United Kingdom universities operate with restricted resources compared to those in the United States, and have tended towards concentrating on a narrow range of high quality products both in choice of student and selection of research areas (Beyer, J. and Lodahl, T. 1976, p.107).

Universities may also have three or four Pro-Vice Chancellors (Vice Principals, Vice Provosts) serving for a period of three to four years. As they are usually senior professors their teaching load is reduced during this time. The reports make it clear that they are not line managers, as their role is subject to the Vice Chancellor's use of them. Sometimes they are valuable as 'trouble shooters' but are often given a particular task in developing academic policies. Moreover, they play a part in policy co-ordination as they frequently have ex-officio membership of major committees, notably Academic Board Executive Committee, Academic Development Sub-Committee and Planning and Building Committee. As they have regular meetings with the Vice Chancellor and the Registrar they are important to the informal process of policy development.

Another important academic office in a university is that of Dean - Head of Board of Study. They are elected or appointed for a period of two or three years and there is one for each faculty or school within the university. They act as academic leaders at faculty level and chair Faculty Boards but, like Vice Chancellors, they rely mainly on influence and persuasion as they have few formal powers.

There is a variation in the roles of Deans arising from the dual roles they play. Because they are responsible to their Faculty Boards

for many academic matters, they are expected to promote and defend their particular part of the university. However they also help to implement university policies, e.g. through their membership of key committees such as Academic Development Committee and in the case of UCL, the Provost's informal Deans' Committee (UCL, 1985, p.21) even when they conflict with the views of their own constituents. In a few instances they may be budget holders with a degree of authority given to them by the centre. This dual role creates a differing opinion as to whether they should be heavily involved in central university policy formation.

The Reports make no comment on academic leadership within faculties but, where Deans have some executive responsibility or budgetary control and resource allocation; they need to operate within a management system appropriate for heads of academic departments as described below.

(Report of Steering Committee, 1985, University College London, 1985, p.22).

6.4.4 Heads of Departments and Academic Staff: Heads of academic departments in UK universities play a vital role, not only academically, but also in the allocation of resources. The key units in most universities are the academic departments; therefore, their efficient management plays an important role in the overall management of the university. Universities can have as few as twenty or as many as one hundred academic departments, with as few as two or three staff members or upwards of 100 staff members and technicians. Heads of academic departments are usually appointed by the Council, but in some instances they are elected from within the department. There is no clear pattern of accountability for heads of academic departments, even though they may administer considerable sums of money. They also have an important personnel management role, and of course, must oversee the standard of teaching (Report of Steering Committee, 1985, UCL, 1985, p.22).

Academic departments in most universities are the basic budgetary units with the heads of department often being the budget holders. Study Reports have suggested a number of ways in which their effectiveness might be enhanced:

- (a) The headship of a department is a key position and ideally the head should have two definite abilities: one to be a manager and the other to be an academic leader. This could lead to problems as it does not necessarily follow that a head who is unquestionably an adept academic is also fitted to manage a department. Although it is preferable for these functions to be carried out by one person, if this is impracticable, priority should be given to the head's managerial role, and he should delegate some academic responsibilities to others.
- (b) Because of the responsibilities and accountability of heads of departments the Steering Committee feels that they should always be appointed by Council after consultation with and advice from the Vice Chancellor.
- (c) Heads of departments should serve for a three to five year term, should be re-appointable, and given a responsibility allowance.
- (d) Heads of departments should be given clear guidelines on their responsibilities, duties and reporting lines. Their duty to consult with and to keep their colleagues informed should be emphasised.
- (e) Heads of department will need back-up support ranging from detailed reference manuals of university rules and practices, to the provision of administrative assistance. Any attempts by universities to review their management information and procedures, must take account of the needs of heads of department.

- (f) Heads of departments should be responsible for allocating the duties of the academic staff and, as the time of the academic staff is the primary resource of the university, it should be carefully and skillfully managed.
- (g) Universities need to ensure that heads of departments are trained in management techniques.

It is noticeable that universities make little formal attempt to appraise academic staff with a view to either personal development or succession planning. The usual pattern is to review staff on confirmation of their appointment (usually after three years), on reaching a salary bar in the lecturer scale, or if they are later considered for promotion. Even then, there is no formal feedback. The Committee argues that:

A regular review procedure, handled with sensitivity, would be of benefit to staff and to the university as a whole. In considering the form of staff appraisal system for a university, three main objectives can be identified.

- (a) Recognition of the contribution made by individuals.
- (b) Assistance for individuals to develop their full potential as quickly as possible.
- (c) Assistance for the university to make the most effective use of its academic staff.

(Report of Steering Committee, 1985, p.29)

The Report commends an annual review on this basis as occurs in staff development systems used elsewhere.

From the above discussion of the governance of universities in the United Kingdom, it would seem useful to summarise the main points, which are given in Figure No. (6-6) "Governance of Universities in the United Kingdom and its Effectiveness and Efficiency".

Figure No. (6-6)

Governance of Universities in the United Kingdom and its Effectiveness and Efficiency

University Positions	University Control Systems	Effectiveness and Efficiency	Role in Allocation of Resources	Accounting and non-Accounting Information*
Council/ Senate	-strategic level	Effectiveness	None	-internal, external -accurate -specific -aggregate -objective -accounting and non-accounting
Vice-Chancellor	-strategic level (dual job)	-Effectiveness -Efficiency (maintaining and promoting)	-less specific -formal and -informal process	-internal, external -accurate -specific -aggregate -objective -accounting and non-accounting
-Deans/ board of studies	-management control level (dual job)	-Efficiency	-specific -formal and -informal process	-internal -accurate -specific -aggregate -objective -accounting and non-accounting
-Head of Department -Academic Staff	-Operational level	-High efficiency	-key resources -very specific	-internal -absolutely accurate -very specific -very detailed -very objective -accounting and non-accounting
-Administration Department	-Administration	-highly efficient (in monitoring and controlling)	-very specific	-internal, external -absolutely accurate -very specific -very detailed -very objective -accounting and non-accounting

Note * See UCL, Vol. 1, 1985, p.36, p.40

- See Edinburgh University, 1985, pp.81-89.

Analysed by the researcher from documentary evidence

Universities in the United Kingdom vary in structure but the important levels of departments, faculties and Vice Chancellors are obvious points at which to place personal responsibility for staff reviews. Parallel appraisal systems should be used for all non-academic personnel. There should also be some central co-ordination of the reporting processes.

Administrative Departments: Usually the senior administrator in the university is the Registrar, but some universities have two administrators, a Registrar and a Bursar. The tasks undertaken by the central administration in universities are numerous. They include: servicing the committee systems and governing bodies; academic administration including course regulations, student records, awards and welfare services; supporting the strategic planning process; financial administration; personnel work; and property maintenance. Universities have an immense variety of activities in relation to their size, large staff, and relationships with various external bodies, for example, the National Health Service in universities with medical schools. All this increases the administrative burden, while Registrars and Bursars also contribute to policy formation, via the informal processes.

The Study reports of the Steering Committee all praised the organisation of the central administrative services of their universities, and acknowledged that the 1981 cuts affected administration more severely than academic staff in terms of staff reductions, though their workload had increased considerably in the past four years.

The Reports raise a number of points on the question of ensuring value for money and their views are tabulated in Figure No. (6-7).

Figure No. (6-7)Value for Money in Universities in the United Kingdom

- (a) Administrators are important in providing support for all the universities principal activities. Their role has changed considerably in the past decade and senior administrators now have an increasingly important task in supporting the Vice-Chancellor.
- (b) Universities should develop the skills and potential of their administrative personnel. To widen the experience of the administrators facilities should be given for them to move across departments and indeed universities. As a part of this development it is advantageous for staff from central administration to support posts in large faculty units. From the point of view of the staff this avoids the isolation of being employed in one faculty and allows movement and greater experience. From a faculty point of view it provides staff who are already familiar with the organisation of the central offices.
- (c) There should be greater delegation of authority to senior officers. Although they have already had increases in their workload the Reports suggest that there is scope for more management responsibility in non-academic areas.
- (d) Five universities have a unitary administration with a Registrar or Secretary as the sole chief administrator responsible to the Vice Chancellor and the Council while the sixth university has two chief administrators of equal status and it was felt that this co-ordination of the administration needed some reviewing as it was felt that dealing with two administrators would add to the burden of the Vice Chancellor. However many administrators there are, the administration should be treated as one unit for the purpose of resources so as to make redeployment possible when changes occur.
- (e) University administrations do not always have a clearly defined budget for which they are accountable. It is the Study's view that they should have the same disciplines, with respect to costs, manpower budget and performance indicators as all other departments.
- (f) Academic-related staff have conditions of service such as salary scales and tenure closely related to their academic colleagues. It is the Study's view that this should not be and is not conducive to good university management. Their conditions and salaries should be related to the nature of their work and to similar employment outside the university. There is a gap in the grades of work and salaries available between secretarial and clerical staff and those of the administrative staff. Universities should examine whether or not an intermediate 'executive' grade should be established.

Source: CVCP "Report of the Steering Committee for Efficiency Studies in Universities," March 1985, p.29 (Condensed by the researcher).

The Steering Committee asserted that academic leadership must have clearly defined ideas and objectives for the university as a whole. Nevertheless the pursuit of these ideas and objectives by partial or short-term devices is no substitute for explicit strategic planning. Effective participation by academic staff and lay members together with a strong leadership and the devolution of responsibility to units are all compatible with a well designed planning process. (Steering Committee Report, 1985).

Though the complaints linked to 'bureaucratisation' are not usually sufficiently clarified one main objection can be identified. The simplest way out could be chosen by pushing the bureaucracy discussion aside with the provocative observation that the state government not only has the task of providing funds but also has the duty to supervise the sensible use of funds and that only those with no demands are really free. Instead, Granzow, H. (1979, p.59) tries to present a few factors that mark the present picture of bureaucracy and administration of higher education in the Federal Republic of Germany. These are:-

- The process of increasingly subjecting higher education administration and policies to legal definition;
- The specification of appeals to the auditing courts;
- The system of mixed administration in the educational system as a whole, but especially in higher education and research aid.

Although it might appear that these factors concern the external influences of the universities the situation of bureaucracy is the same internally in the universities of the United Kingdom.

6.5 SUMMARY

This chapter has shown that the efficiency of UK universities is considerably affected by their interaction with the government arising from its responsibility for funding. These funds are applied by, or derived from mediators, i.e. UGC and local authority grants, and controlled by the CVCP. Their roles have developed over a lengthy period, with significant changes occurring since 1981. Inflation, changing priorities and increased public scrutiny have led to a number of constraints on universities, including increased centralization and cuts in resources. The need has become apparent for universities not only to seek income from other sources, but also to maximize their use of their resources. This, in turn, necessitates that they have an appropriate managerial structure.

Literature and empirical investigation have revealed inefficiencies in UK universities' administrative and financial dealings with central government, the University Grants Committee (UGC) and the Committee of Vice-Chancellors and Principals (CVCP). In brief, it seems that these bodies have problems of huge bureaucratic structure and lengthy routines. They appear to be losing sight of their objectives and there is a need for performance indicators in and between United Kingdom universities. It would seem that these are not as yet used as the main basis for allocation of resources in UK universities.

The difficulty here is the complexity of university objectives. The output of a university is difficult to measure. Quantification of the value to society or to the individual of undergraduate and post-graduate study is virtually impossible.

Thus far, there has been a failure to analyse university goals in relation to profit maximization and other market conditions, and there

has been no analysis of the administrative efficiency of universities.

We have seen that a number of features complicate the managerial, administrative and financial and accounting processes, namely: the range of academic activity, the professional loyalties and participation and the tenure issue.

The wide range of activities in universities is reflected in the number of departments. There is scope for investigating the size and complexity of university administrations and academic departments and their effect on efficiency.

On the question of professional loyalties a third or half of the total staff employed in the United Kingdom universities are professionals in many diverse fields, creating divided loyalties and difficulty in directing the institution towards a common purpose.

Participation and the tenure issue are important influences on the efficiency of universities. Academic satisfaction affects performance. In the UK conditions of tenure of academic staff vary. Dissatisfaction and lowered morale have caused many academics to leave their posts for commerce and industry.

The governance of a university also affects its efficiency. In the UK, university governance is by a complex hierarchy of the Council, Senate, Vice-Chancellor, Deans, Heads of academic departments and the administrative department. In theory the Council is the most important central body of a university. Councils are extremely large bodies, as are Senates. This creates difficulties of communication and organization.

In order for universities to increase their efficiency in Council and Senate, it is recommended that they should have less involvement with the details of allocation of resources of universities, leaving such questions to the lower hierarchy level.

Further problems are created by complex and cumbersome committee systems, which are costly to operate, as well as inefficient.

The role of the Vice-Chancellor of the United Kingdom universities influences the efficiency of the university and the way in which it manages its resources. As the chief academic and administrative figure, he has a very important dual role dealing with the internal and external environment; though he has little formal constitutional power. In view of the Vice-Chancellor's changing role, from scholar to executive, the need has been highlighted for the development of financial and management skills.

Pro Vice-Chancellors, who vary in number from one university to another, are not line managers as their role is subject to the Vice-Chancellor's use of them. Because they serve on major committees, they can influence the allocation of resources within the university. Deans likewise have some executive responsibility in budgetary control and resource allocation, and they need to operate within an appropriate management system.

However in UK universities, it is the heads of academic departments who play a crucial role in the allocation of resources. Because the department is the basic budgetary unit, with the head of department often being the budget holder, it is clearly necessary for department heads to have opportunities to acquire and develop managerial skills.

University administrative responsibilities are divided mainly between the Registrar and Bursar. Since 1981 administration has suffered from staff cuts and an increased workload. The Report of the Steering Committee brought out the need for staff development, for the application of systems of accountability, including performance indicators, and for conditions and salaries to be related to the actual work, with the possible introduction of a new 'executive' grade.

Overall, a number of general points may be made regarding administrative efficiency in UK universities:

- i) Because manpower is the greatest component in university expenditure, it has a great effect on university finance and reveals the weaknesses in university administration.
- ii) A review is needed of the administrative hierarchy, with a view to streamlining the system, thus reducing its cost and simplifying budgeting, accounting and decision-making.
- iii) The top level of the administrative hierarchy is concerned with university effectiveness in general, rather than with resource allocation. It is subject to considerable external influence, particularly through the funding process. This highlights the importance of accounting and other information, and its communication to external bodies, which in turn imposes certain requirements on university staff, and may influence their selection, training and management procedures.

These topics will be dealt with more fully in the following chapter, which will examine financial planning, budgetary control, and the quality of management information in UK university administrations.

CHAPTER SEVENACCOUNTING, RESOURCE ALLOCATION AND PLANNING EFFICIENCY IN UK UNIVERSITIES

- 7.1 INTRODUCTION
- 7.2 A BRIEF INTRODUCTION TO UNIVERSITY FINANCE AND INTERNAL EFFICIENCY
- 7.3 UNITED KINGDOM UNIVERSITIES' PLANNING, RESOURCES ALLOCATION AND ACCOUNTABILITY IN PRACTICE
 - 7.3.1 Universities' Strategic and Long-Term Planning
 - 7.3.2 Criteria for Resource Allocation
 - 7.3.3 The Resource Allocation Process
 - 7.3.4 Management Accounting Information
 - 7.3.5 Responsibility for the Resource Allocation Process
 - 7.3.6 The Universities' Budgetary Control
 - 7.3.7 The Accountability Process in Resource Allocation
- 7.4 THE ACADEMIC DEPARTMENTS AND HOW THEY MANAGE THEIR RESOURCES
 - 7.4.1 Authority of Departments
 - 7.4.2 Accountability of Academic Departments
 - 7.4.3 Management Style
 - 7.4.4 The Problem of Departments
- 7.5 UNIVERSITY MANAGEMENT CONSTRAINTS AND THE COST CENTRE APPROACH
 - 7.5.1 Performance Indicators in Universities
 - 7.5.2 University Internal Planning
 - 7.5.3 The Identification of University Goals and Objectives
- 7.6 THE SCHOOLS COST CENTRE APPROACH
 - 7.6.1 Financial Accounting at Departmental and School Levels - a viewpoint for discussion
 - 7.6.2 Cost Centres and Academic Departments
 - 7.6.3 Cost Centres and the Accounting System
 - 7.6.4 The Organisation of University Schools
 - 7.6.5 Improvement of School Resource Allocation and Planning
- 7.7 SUMMARY

CHAPTER SEVENACCOUNTING, RESOURCE ALLOCATION AND PLANNING EFFICIENCY IN UK UNIVERSITIES7.1 INTRODUCTION

Chapter four reviewed the financing of the United Kingdom's universities and gave some general statistical background information. Chapter five described government accounting with particular emphasis on accounting in higher education which forms the background to this thesis and is valuable as a basis for the investigation of United Kingdom universities' accounting and financial efficiency. Chapter six reviewed literature on the external environment of universities and their efficiency. It was shown by the Steering Committee Recommendations, 1985, that the discussion of efficiency needs to include the external influences on universities: central government; the University Grants Committee (UGC) and the Committee of Vice-Chancellors and Principals (CVCP). The chapter also discussed other aspects of university administration in the United Kingdom and their efficiency.

This chapter investigates financial planning, the allocation of resources and monitoring of funds and the improvement of their efficiency in long-term planning, resource allocation, the quality of management information, responsibilities for the allocation process, budgetary control mechanisms and the process of accountability.

The chapter also reviews literature concerning universities' accounting and finance in the United Kingdom - Fielden (1969), Fielden, J. and Lockwood, G. (1975), Lockwood, G. (1981). Other literature is descriptive, illustrating the constraints on the financial affairs of universities and also discussing the University Grants Committee; Shattock, M. (1982); Shattock, M. and Rigby, G. (1983). Newspapers such as the Times

Higher Education Supplements (THES) and the Times have also been surveyed.

7.2 A BRIEF INTRODUCTION TO UNIVERSITY FINANCE AND INTERNAL EFFICIENCY

The foremost of the many influences within universities are the sources of funds, of which the primary and most important source is the central government of the United Kingdom.

The public money gained by the universities through the DES or other government departments is subject to the annual Public Expenditure Survey process and the precise levels of cash funding for the next financial year (April - March) are given in a Public Expenditure White Paper published in January or February. This White Paper also gives broad indications for the two succeeding years although recently these have been unreliable. Between the years 1985/86 and 1987/88 the UGC grants in real terms were expected to reduce on average by approximately 2% per annum (Steering Committee, 1985, p.13).

The 'forward insight' given by the annual Public Expenditure Survey leaves the UGC and individual universities with major problems in forward planning, because of the time-scale of the admissions procedure.

The financial year of the universities begins in August. First degree courses have a duration of at least three years and students apply through UCCA about a year before entry using prospectuses prepared six months before then. This requires longer-term planning than is possible using White Paper figures, but although occasionally the UGC has endeavoured to provide guidance on the situation further ahead, it cannot make projections any more reliable than the figures given in the Public Expenditure White Paper. The relationship between government annual expenditure and universities' annual operation seems rather confused, and there is scope for smoothing the flow of funding into universities.

More important than giving guidance on resources beyond the Public Expenditure time horizon is the very real need for government to set the broad objectives expected of the university system in future years. The universities should not abandon their search for improved value for money even though the problems relating to the planning horizon are severe.

Universities have been forced, by these short-term horizons, to operate a crisis management and this uncertainty is made worse by any additional short-term financial changes. For example, the decision by the Chancellor of the Exchequer to reduce the cash limits for the financial year 1983/84 at short notice in the late summer of 1983 resulted in a cut in the income of universities for the year 1982/83 by £23m within two months of the end of that year. (Steering Committee, 1985).

A detailed analysis of University College London's income from 1979/80 to 1983/84 is illustrated in Figure No. (7-1). The figures are in terms of 1983/84 prices using the CVCP Index of University Costs (all recurrent items index) to adjust figures in the earlier year. In investigating the general income position, there are two main separate funding sources (1) public funding (vis court grants and home fees in the figure) and (2) overseas students fees.

The figure shows that public funding is best indicated by the sum of lines 5 and 6, i.e. court grants and home fees. The sums of these in 1979/80 and 1983/84 were respectively £35.1m and £31.5m, a decline in real terms of 10%. However, these figures are not the best guide to the effect of the public funding cuts on general income for recurrent activities as they contain the abnormal PRCS grants for early retirement and rates grants which are a specific and fixed cost. If these two grants were removed the truer figure would be a decline in real terms of about 13% over the past five years, although in the past three years there has

Figure No. 7-1AUCL Income: 1979/80 to 1983/84 (at 83/4 prices)

<u>Line</u>	<u>£'000</u>	<u>79/80</u>	<u>80/81</u>	<u>81/82</u>	<u>82/83</u>	<u>83/84</u>	<u>Note</u>
<u>Court Grants</u>							2
1	Recurrent Grants	28,569	27,629	23,356	25,799	25,132	2a
2	Rates	1,649	1,482	1,609	1,568	1,731	2b
3	Restructuring (PRCS)	-	-	1,183	825	635	2c
4	Earmarked	-	-	232	195	594	2d
5	Total (lines 1 to 4)	<u>30,218</u>	<u>28,111</u>	<u>26,380</u>	<u>28,387</u>	<u>28,092</u>	
<u>Fees and Support Grants</u>							
6	Full time: home fees	4,904	5,194	5,627	3,364	3,374	
7	overseas fees	1,264	1,227	1,838	2,252	2,365	
8	Other fees and grants	207	189	259	332	310	
9		<u>6,375</u>	<u>6,610</u>	<u>7,724</u>	<u>5,948</u>	<u>6,049</u>	
10	<u>Other Sources</u>	<u>1,676</u>	<u>1,398</u>	<u>1,541</u>	<u>1,217</u>	<u>926</u>	3
11	TOTAL GENERAL INCOME (line 5, 9 and 10)	<u>38,269</u>	<u>37,119</u>	<u>35,645</u>	<u>35,552</u>	<u>35,067</u>	
12	Research Grants and contracts	9,951	10,177	9,527	11,176	12,590	
13	Other Services Income	809	547	1,817	1,671	1,605	
14	Net Allocations Reserves	204	-	731	413	329	
15	TOTAL SPECIFIC INCOME	<u>10,964</u>	<u>10,724</u>	<u>12,075</u>	<u>13,260</u>	<u>14,524</u>	
16	TOTAL RECURRENT INCOME (lines 11 and 15)	<u>49,233</u>	<u>47,843</u>	<u>47,720</u>	<u>48,812</u>	<u>49,591</u>	

Notes:

- These figures are analysed from UCL's "Form 3" returns. Figures are reconcilable to UCL's accounts.
- Court grants are usually classified as general, supplementary and special. In discussion with UCL's Finance Secretary, we have analysed these using a 4-part classification:
 - recurrent grants covers all Court grants except for items (b) to (c) below:
 - rates, a specific grant for local authority rates;
 - restructuring, to finance Premature Retirement Compensation Scheme;
 - other earmarked, these cover specific initiatives (New Blood, Bio-technology, Information Technology) and capital in recurrent.
- These include endowments, donations and subscriptions, rents and interest.
- UCL also receives equipment and capital grants; these are not shown above.

Source: UCL, Vol. 1, 1985, p.14.

Figure No. 7-1BUCL - General Recurrent Income Publicly Funded*

	<u>£'000</u>	<u>Index</u>
79/80	33,473	100
80/81	32,823	98
81/82	29,215	87
82/83	29,358	88
83/84	29,100	87

* Lines 1, 4 and 6 on Table 7-1A

Source: UCL, Vol. 1, 1985, pp.14, 15.

been more or less level funding. Again if funds earmarked for specific government initiatives were excluded the real decline would be in the region of 15%. The position was slightly worse in 1983/84 as the student numbers were slightly increased. The college attracted a small increase in the volume of grant because of the QMC's Department of Geology's transfer to UCL (UCL, Vol. 1, 1985, p.14). Central government's change in the fee policy to one of charging overseas students more realistically is reflected in line 7 of the table, which shows an increase of over £1 million in revenue from this source, thereby compensating for a little over 20% of the cuts in public funding. After an initial drop in the numbers of overseas students the figures rose again and in 1984-85 they exceeded the numbers in 1979-80 (UCL, Vol. 1, 1985, p.15).

Successive governments have attempted to influence the universities in such areas as student numbers, finance or subject mix, though since 1981, indications of government expectations have been stronger and more direct. In particular, there has been pressure to develop such fields as biotechnology and information technology. However, government attempts to shape the development of universities more positively than hitherto, have not been supported by funding in line with rising costs. Nevertheless, the

government has not clarified its policy on higher education; clear planning is necessary, given that the subject choices of 15-16 year old school students will determine the shape of universities a few years hence.

The main agency of government involvement in universities is the UGC which sets up broad targets for student admissions, issues funds and interprets the pronouncements of the Secretary of State for Education.

The level of UGC grant is partly determined by its targets for numbers of undergraduate and post-graduate students, from Europe as well as the UK. The unit of resource per student in theory covers teaching and includes an element to support research. In the attempt to protect this, the UGC has responded to financial cuts by reducing student targets. The planned reduction in student numbers, across the whole system, from 1979/80 to 1984/85 was 5%. On top of that, in 1984 central government asked the UGC to plan for a 15 percent cut in resources over the following 10 to 12 years (THES, April 13, 1984, p.7) leaving the universities facing a considerable problem in planning for future developments.

The UGC has in correspondence with universities, deplored the fact that government has not accepted the case for "truly level funding", and pointed out that each university must as a result plan for an average annual decline in recurrent grant of 2 per cent in real terms.

Furthermore, many universities fare badly under the selective research funding policy, facing a 1990 with strong hints of a greater rate of loss in subsequent years. So some universities would lose around 13.5 per cent of their grant over four years (THES, May 17, 1985, p.1).

The acceptance of students over and above the targets by some universities, stemmed partly from the belief that university education should be afforded to all qualified students and partly from the wish to acquire extra income in the form of additional tuition fees. The

Steering Report quotes fees for 1985 of £500 per home/EEC student, paid regardless of student targets, thus obscuring the relationship between UGC student targets and university income.

University income derives mainly from the UGC recurrent grant and from tuition fees. These finance teaching and the UGC's contribution to research funding in the form of academic staff activity and laboratory facilities. The money is not earmarked for specific purposes, but in practice, the universities will take account of UGC advice.

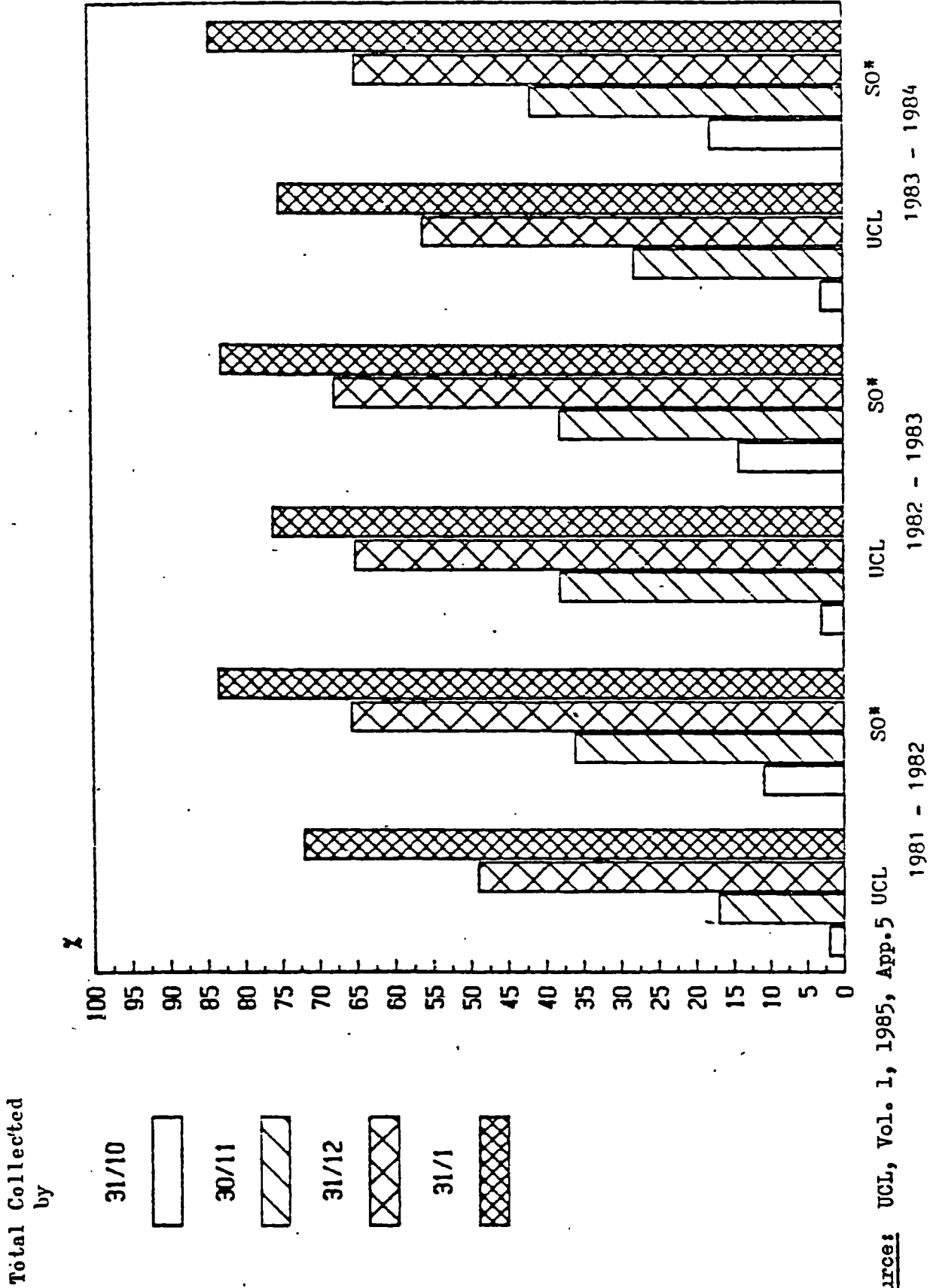
To all intents and purposes, the UGC grant and home students fees are interchangeable; for example, government alteration in the level of tuition fees is counter-balanced by a change in the UGC grant. A typical university receives 64% of its funding from the UGC and 13% from tuition fees. In England and Wales, Local Education Authorities pay directly to the universities global amounts for all students from the authority concerned. Although the claim is made soon after registration at the beginning of each academic year, payment can be subject to considerable delay.

Thus, the system used in England and Wales for fee collection uses two distinct routes to channel funds from the same source to universities, not the most efficient practice. This is not so in Scotland, where the Scottish Education Department pays the fees directly to the universities. The Report on University College London highlights the late payment of fees to universities by the LEAs and the effect on the university cash flow.

In the case of UCL the amounts unpaid at 31 January in 1982/83 and 1983/84 were 24% and 25% of the total sum due. Figure (7-2) illustrates the fees collection performance of UCL against the average for universities in southern England. Outstanding debts were mainly those

Figure No. (7 - 2)

RATE OF COLLECTION OF FEES



Source: UCL, Vol. 1, 1985, App.5 UCL

* Average of Southern Universities

of Local Education Authorities for students receiving mandatory grants. The main reasons for slow payment in the case of UCL were as follows:

(a) UCL usually invoices after enrolment procedures are completed to ensure that only students actually taking up studies are invoiced, which means that invoices are raised two to three weeks after term has started. Even though incorrect invoices might be raised the university recommends that invoices be raised prior to the start of term, with the possible exception of first year students. All other students could enrol for their new year at the end of the previous year.

(b) Slow payment by LEAs assist their own cash flow and it would be of help for the DES to review this matter. One answer would be to alter the Award Regulations to require the LEAs to pay tuition fees once a student's 'ordinary resident' status had been confirmed. Another would be for the DES to make 'direct payments' to universities through the UGC/Court of tuition fees (University College London, Vol. 1, 1985, p.28).

Debate over methods of increasing university funding has continued since the 1960s when there was controversy over Anthony Crossland's proposal to recommend sharply increased fees for overseas students and to take account of the new level in fixing the total government grant to the universities. The debate, however, focussed on the ethical, rather than the financial, implications of discrimination. Some suggested that discrimination should be eliminated by raising all fees, for overseas and home students alike, thus making universities more dependent upon fee income, i.e. upon attracting students who could pay - and less upon UGC grant.

These issues once again came to the fore in the 1970s (THES No. 302, 12 August, 1977, p.12), and in recent years, the importance of fee income, particularly from overseas students, has been stressed.

Tuition fees from overseas students are a private source of income for universities. The government implicitly encourages such students, though there are university and departmental limits on their numbers. They are also welcomed as an important contribution to the international character of universities. They are a valuable source of income as they can often be educated at marginal cost to the university but it must be ensured that they are not subsidised from other income. Indeed, such importance has fee income assumed that, opening a Commons debate on the development of higher education, an MP said there was increasing evidence that overseas students were being treated merely as a financial resource and less and less as an integral part of British education (Times, October 27, 1984, p.4).

Research funding also comes from the Research Councils in grants to individuals and research groups for research staff, equipment and materials. Research Council grants are normally for periods of two or three years but can occasionally be of longer duration. Some universities additionally receive large grants on a continuing basis for substantial or specialised research facilities, for example, the Mullard Space Science Laboratory at UCL. 6% of the total income of a typical university comes from the Research Councils, excluding any large special facility grant.

Where universities have medical schools and associated hospitals, the situation is more complex as the DHSS funds the hospitals through the Regional and District Health Authorities. Medical research is dual-funded, funds being received from charitable foundations and hospitals. As the assistance received by medical schools from Health Authorities is very variable, it is difficult to compare them and assess value for money.

Less significantly some universities with 'responsible body status' receive other government funding, e.g. direct DES funding, for extra-mural teaching. The sums however are minimal, according to the Steering Committee Report, 1985.

A growth phase, which had lasted more or less unbroken since 1945 came to an abrupt end in 1981 when all universities were required to reduce their commitments because of the reduction in government funding. Vice Chancellors and their management teams faced problems as universities had to cope with unaccustomed resource limitation. The relatively broad advice given by the UGC, posed universities with the difficulty of establishing academic priorities, and a situation of potential conflict between financial and academic priorities was created. Some universities responded by cutting funds other than salaries across departments, pro-rata to their existing expenditure, and refraining from replacing retiring staff regardless of their subject. As this gave no selective protection to subject areas, it resulted in deterioration generally in the effectiveness of resource utilization.

Universities will experience restricted funding for some time despite the financial support from non government sources, and it is necessary that universities be much more selective in reducing expenditure. Universities are now faced with the need to create the structure and procedures needed to optimize the use of their limited resources. Such procedures must be flexible to allow substantial changes in the deployment of resources within individual universities, in order to create confidence that they are making effective use of their resources.

One of the reasons for the absence of selective policy was the traditional reliance of the universities upon a policy of staff tenure.

Legally the position is unclear and the policies of individual universities vary, but there is a general reluctance to use financial exigency

as grounds for compulsory redundancy of academic staff. Programmes of voluntary redundancy and early retirement were adopted to reduce staff while avoiding conflict between senates and councils.

The encouragement of universities to increase their income, from sources other than the state, led to a significant increase in the amount of work undertaken for industry; this income has, of course, to be offset against the cost of carrying out the contracts and the extent of the funds raised differs between universities. It is not believed that the profit made from these contracts will make a substantial impact in the funding of universities as a whole. Another development is the setting up of Science Parks, Innovation Centres and Limited Companies for the exploitation of inventions, etc.

Not only do such enterprises benefit universities financially, but they also create valuable links with industry and commerce. Thus, academic staff gain experience and students gain post-graduate opportunities. However, there is a need for discrimination, as the pursuit of inappropriate activities from financial motives may erode academic standards. Universities must separate operations which are not compatible with their legal status as educational charities and these extra developments must be run on a strictly commercial basis with their own objectives, management styles and staff conditions, divorced from the universities themselves.

Universities thus have many sources of funds, the most important being the central government, the UGC, the DESS and the Research Councils.

The second main funding source is fees from both home and overseas students. It was found that because of government decisions home students fees were unstable and even though overseas students fees have been raised the increased revenue is still not enough to equal the government cuts.

Despite these circumstances universities still have to plan for the future. Internally, universities need to create the necessary governance

structure and procedures to deal with the substantial changes in resources and also deal with the equally important problem of tenure of academic and administrative staff.

7.3 UNITED KINGDOM UNIVERSITIES' PLANNING, RESOURCE ALLOCATION AND ACCOUNTABILITY IN PRACTICE

This section investigates planning, resource allocation and monitoring processes in practice. In this area, according to the investigation of Edinburgh and London universities, is found the greatest scope for improvement within universities.

To investigate this, seven questions were posed by the Steering Committee. The questions posed were as follows:

1. How much strategic and long-term planning takes place in universities?
2. On what criteria are resources allocated?
3. By what mechanisms are resources allocated?
4. What is the quality and extent of management information?
5. Who, below council, is responsible for the allocation process?
6. What is the budgetary control mechanism?
7. What is the process of accountability?

There follows a review of the evidence under these seven headings, concentrating on the evidence indicating scope for improvement. The Committee admitted that each of the universities studied had some good features in its planning procedures, but claimed that all had room for improvement.

7.3.1 Universities' Strategic and Long-Term Planning: Strategic planning involves the setting of objectives, for the whole university and

its constituent parts, taking into account long-term trends. It also involves preparing plans with stated priorities and options for achieving those objectives. Of necessity, it must allow the means for making changes in content and pace as the plans evolve and outside circumstances change.

Regarding the level of strategic and long-term planning in universities in the United Kingdom, the reports submitted to the Steering Committee from Edinburgh and UCL show that objectives and goals in universities are only defined in very broad terms, usually as general statements of intent to maintain and improve the quality of teaching and research. Long-term, as opposed to medium-term planning, is largely ignored. Plans should be produced based on adequate knowledge of demography and the changing patterns of employment.

To facilitate improvements in strategic planning at University College London, a small informal planning group should be set up and a strategic plan developed, including identification of priorities and resource implications (UCL, Vol. 1, Part 2, 1985, p.4).

The Report (1985, p.45) defines the major obstacles in the way of an individual university undertaking a proper strategic plan.

Little consideration is given to the alternative means of arriving at objectives and some universities hold the belief that strategic planning is too difficult to be of any great help and prefer their departments to be flexible with contingency plans ready. Such strategic planning as does take place is a mixture of 'top down' proposals in an effort to give academic leadership and 'bottom up' proposals to coordinate departmental plans and uncritically to adopt the results (Report of Steering Committee, 1985, p.17).

UCL is in the process of developing some of the inputs needed for strategic or long term planning (UCL, Vol. 1, 1985, p.44). However, the Steering Committee Reports do not show clearly enough whether the universities in the United Kingdom might successfully apply Planning Programmes and Budgeting Systems, and research is definitely needed in this field. American universities lost little time in adopting these methods following their introduction into government departments. University planning and budgeting in the UK is ripe for improvement. Although PPBS may eventually provide the answer, present attempts to apply a cost centre approach present difficulties for reasons discussed in a later section.

7.3.2 Criteria for Resource Allocation: In discussing the resource allocation criteria in UK universities the reports show little relationship between long-term university objectives and the allocation of resources, since the central government and University Grant Committee offer short term planning horizons and universities have virtually no strategic planning. The most significant obstacles identified by the UCL were classified into national obstacles, obstacles specific to UCL and internal management obstacles. Those related to university objectives were that:

- (a) there is no national planning framework within which individual institutions can develop their own strategic plans.
- (b) associated with (a), there is no environment of stable funding, although many university objectives, for example building a major research team or establishing a new course, can only be effected over a long time-scale.
- (c) the basis on which funds are provided by the UGC is not made adequately clear to institutions.

(UCL, Vol. 1, 1985, p.6)

The reports abound with examples, particularly in relation to equipment and space, that the dominant method of incremental allocation is on an historical basis. The Resources Committee of Edinburgh University tends to make allocation decisions at the margin. In practice, the division of resources between academic and non-academic departments appears to be historically-based in both financial terms and manpower. The division of resources between academic and non-academic functions is, therefore, not seriously questioned by the committee (Edinburgh University, 1985, p.30).

Some universities have a method of coordinating the relative needs of the academic and non-academic sectors prior to passing the total package to the council. Where universities do not examine needs, an historical share basis is used to divide the funds between academic and non-academic sectors. The shares are not questioned and it is not clear how far the size of the non-academic sector is determined by its service to the academic sector.

Edinburgh University's resources allocation process in respect of recurrent needs can be divided into four main stages:

- a. allocation between the academic and non-academic sectors;
- b. allocation amongst the faculties and academic services;
- c. allocation within faculty to academic departments;
- d. allocation amongst non-academic functions. (University of Edinburgh, 1985, p.29).

In most universities, resource allocation is not related to the strengths of departments, though the Steering Committee cites examples of allocation of a proportion of non-salary funds in relation to research income, thus also encouraging departments to increase research grant income (Report of Steering Committee, 1985, p.18).

7.3.3 The Resource Allocation Process: Much information in the reports of UCL, Edinburgh University and the Steering Committee Report 1985 relates to the question, "By what mechanisms are resources allocated?"

The fragmentation of the allocation process is an obvious feature in the majority of universities, which tend to divide resources into staff costs (academic, technical, clerical); departmental running costs; equipment grants; minor works; research support funds; funds for academic services such as libraries and computing; and administration.

The Edinburgh University report shows that the Resources Committee is responsible to the Court for the university's financial affairs and provides the forum for the overall review of the budget. To commence the process the university assesses the income available to it particularly from the UGC, which normally provides in October a provisional indication of funding in respect of the following year (August 1 to July 31).

It is suggested that major blocks of resource allocation should be left to the central government of the university as this would ensure coordination, re-deployment and the achievement of goals. Heads of Departments should be given control over blocks of resources for their requirements other than posts. They should also be given the power to transfer from one account to another within an agreed set of rules.

Councils, more often than not the only body to see the whole pattern, are by their nature not really equipped to examine in detail the validity of that pattern. Thus they may be unaware of inconsistencies and opportunities for change.

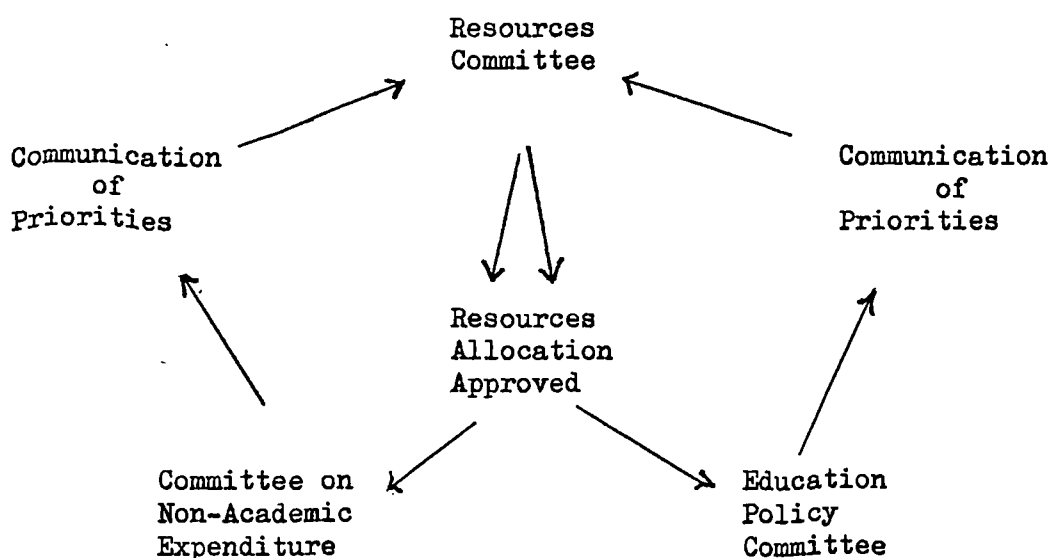
The Report points to evidence that coordination of resource allocation often relies too heavily on the Vice Chancellor and senior administration officers and the unsatisfactory mechanism of committee

cross membership.

While the process works well within faculties, at Edinburgh the report found that there are weaknesses in the mechanisms for coordinating the separate avenues of resources and allocating these on the basis of an overall assessment of academic priorities. In addition, cross membership of committees is not an efficient way of overcoming deficiencies in the formal system, as it relies on members carrying with them all relevant considerations from one committee to the next, which may not be the case. It is believed that the effectiveness and efficiency of the allocation process could be improved by combining the functions of a number of key committees and formalising the links between them. Thus, in the particular example of Edinburgh University, it was recommended that the decision process for resources allocation be provided by three key committees, as shown by Figure No. (7-3). This system would have the advantage of combining the allocation process for capital and operating expenditure and would thus ensure a more coordinated approach.

Figure No. (7-3)

Resource Allocation Recurrent and Non-recurrent



Source: Report on Edinburgh University, 1985, p.33.

Committees involved in the allocation process are not always well-coordinated. For example, the allocation of equipment grant is often undertaken by a committee other than the committee which provides staff. Similarly, when buying expensive equipment thought is not always given to the building work needed to install it. (Report of Steering Committee, 1985, p.18).

7.3.4 Management Accounting Information: Management information is the key to the economic efficiency of a university. The absence of information - both accounting and non-accounting - on performance can perpetuate inefficiency because it suggests limited use of feedback. On the other hand, possession of information by groups or individuals can increase their capacity to achieve power and influence. In this case, management information is not a neutral force and the manner of its handling and organising within the context of universities rightly gives rise to concern (Fielden, J. and Lockwood, G. 1973, p.145).

It is not surprising therefore that UCL and Edinburgh University in their reports to the Steering Committee considered management information as an important variable to be studied in order to examine university efficiency.

The production of accounting and financial information in UK universities is extremely fragmented. Accounting and finance departments produce information which can broadly be categorised under the following headings:

1. Academic departments;
2. Non-academic function and academic services;
3. Committee accounting and non-accounting information;

4. Research grant information.

(Edinburgh University, 1985, p.83)

In both universities, accounting and financial management information, and its use were found to be inadequate. For example, the Edinburgh University Report (1985, p.89) stated that financial management information is inadequate both in content and timing to allow efficient management in the financial affairs of the university.

Financial information provided to the department managers varies in quality and often arrives too late to be of use. Because it does not show forward commitments, which are very important for some departments, they are forced to keep their own accounts. To remove these problems some universities are developing on-line committee accounting information (Report of Steering Committee, 1985, p.19).

Measures of input, such as applications per place; 'A' level scores, research grants, and unit costs are better developed than output indicators, which might cover, for example, the value and quality of research, publications, the number and quality of graduates and their subsequent employability. Steps need to be taken to improve measures of output. Comparisons of departmental performance over time are among the most useful indicators but should be handled with great care (Report of Steering Committee, 1985, p.18).

Although abundant information is collected, it is mainly for the use of administration, not management, and is received without effective analysis, although the data collected, relating to students and staff, is normally of reasonable quality.

Fielden, J. and Lockwood, G. (1973, p.25) made a number of key points relating to university practices in the provision of management

and accounting information. Improvement in the provision of accounting and non-accounting information will lead to improved decision-taking, whether judged from the point of economic efficiency or of political rationale. However, the collection of management information might prove expensive, therefore cost benefit must be kept to the forefront by using a carefully planned approach.

According to the National Data Study, universities should first clearly decide what they are trying to achieve before they can know what management information is required. However, empirical studies are needed to investigate the adequacy of university information and one of the methods used could be the key variables, the key success factor and key result areas. The approach which is increasingly popular for identifying external and internal factors for both public and private sectors, was developed to link with performance indicators for strategic planning organization (see Jenster, P. 1987, p.102). However, the approach will be discussed in more detail later in this chapter.

7.3.5 Responsibility for the Resource Allocation Process: Regarding responsibility below council for the allocation process, some discussion has already taken place in the previous chapter. There is evidence (e.g. Reports of the Steering Committee, UCL and the University of Edinburgh, 1985) that the present committee structures for planning and allocation are ineffective. Often too many committees are involved with different methods of reporting to senates and councils (Edinburgh University, 1985, p.43). Often, different committees perform the functions of allocating staff; running costs, equipment money, space, minor works and supporting services fund allocation, yet these are not well coordinated. Councils are too large to be able to merge the separate inputs.

Some planning committees are too large because they are established to represent sectional interests. Instances also occurred where committee members did not support the recommendations when presented to a superior body. It has been suggested that the responsibilities of every committee should be reviewed on a regular basis, perhaps every five years (Edinburgh University, 1985, p.51).

Where universities have established a resources and central planning committee there is often confusion between its role and that of the council's finance committee. In addition, it has been found that the committee is not formally linked to the university-wide planning of recurrent expenditure. Again it relies on informal connections and on overlapping committee membership. The dangers inherent in this system are emphasised in the Edinburgh report:

Reliance on an overlapping membership can be dangerous because it assumes that committee members carry with them all the relevant considerations from one committee to the next. In fact this is rarely the case. Hard-pressed academics on committees do not necessarily make the relevant policy connections that full-time administrators assume they will do. It is only too easy for a committee member to tackle each question on its merits rather than see it as part of an overall process. It is therefore important that committee systems should explicitly reflect the linkages between different items of university business. This is particularly true in the field of resource allocation where inconsistent decision-making can both waste scarce resources and produce internal contradictions. It is equally important that universities should not underrate the damage that inefficient committee systems can cause.

(Edinburgh University Report, 1985, p.68)

The Study Reports generally felt it necessary to combine into one body the responsibility for planning, resource allocation and accountability. One suggestion was that the senate and council should have a single unifying body able to integrate both financial and academic policies, thus providing a mechanism for effective evaluation of alternatives. (Report

of Steering Committee, 1985, p.20). Moreover, a number of suggestions have been put forward by the University of London and Edinburgh. Bodies allocated resources should be sufficient in size to take advantage of their financial authority and virement allowed to them. A group of units or departments could be joined as one for the purpose of resource allocation. Also encouraging efficient management is permission for budget centres to carry-forward over-or underspending each year to a limited extent.

7.3.6 The Universities' Budgetary Control: The previous discussions suggest that in most universities academic departments are the main budgetary units, with the Heads of Departments seen as the responsible officers (Edinburgh University, 1985, p.37). Departments are responsible for expenditure and non-recurrent items; running costs and, usually, departmental equipment allowances. All staff expenditure is a central university responsibility although there is occasional and limited freedom with temporary staff. Moreover, it has been recommended that the budget responsibility of academic departments should be extended to include payroll expenditure (Ibid, 1985, p.37).

On the other hand, the Finance Division monitors costs more regularly; salary expenditure, academic and administrative, which accounts for 70% of total expenditure is monitored centrally by means of monthly reports prepared in the Finance Division showing the total salary expenditure for the university to date and the expected out-turn. The division also monitors monthly expenditure on recurrent grants, equipment and research grants and the financial performance of self-sufficient units. The revised estimates prepared in January and June provide the formal means for monitoring progress during the year (see budget process in the

previous chapter). Therefore, although there are no formal management accounts, budgetary control by the finance division at UCL over college activities is effective (UCL, Vol. 1, 1985, p.36).

Responsibilities of Heads of Departments are not always clearly defined, for example, the head of a department might not be familiar with the state of a research grant dealt with by another academic. A conclusion is that the hierarchy of accountability should be more clearly defined (Steering Committee Report, 1985, p.20). On the other hand, academic departments are allowed to spend their equipment and recurrent grants in whatever way they wish, subject to rules controlling the total amount they spend. Recurrent grants are not supposed to be overspent but there is limited scope for carrying-forward any over or underspending to the next year.

An inherent weakness in the budgeting system is the lack of any direct link between inputs and outputs in cost and volume terms. Unlike manufacturing companies, universities can not realistically undertake variance analyses comparing actual and budgeted expenditure and explaining differences in terms of prices, mix, volume and efficiency. (UCL, Vol. 1, 1985, pp.36, 37).

There is general support for the extension of the practice of charging departments for services. Telephone costs are already recharged and power, cleaning and space rental should also be considered. A distinction between services over which departments have full control and those over which they do not should also be made (Steering Committee, 1985, p.20).

Services which are now controlled centrally by Edinburgh University should, when the opportunity arises, be given back to the relevant department to become their responsibility and as soon as practically possible these departments should bear their portion of these service costs.

(Edinburgh University, 1985, p.37).

On the other hand, the non-academic budgetary responsibility lies directly with the secretary. This situation has been regarded as unsatisfactory and it is stated that

The Secretary agrees with this assessment and we have seen plans to delegate budget responsibility to senior officials within the secretary's offices. For example, the Director of Finance would be responsible for the costs of running the finance office and the Buildings Officer would be accountable to the Secretary for the expenditure directly within his control.

(Edinburgh University, 1985, p.37)

7.3.7 The Accountability Process in Resource Allocation: Academic departments are informally accountable to the Dean or the Board of Studies for the use of resources. However, there is no formal control of university departments through the use of plans and budgetary control reports. The Steering Committee quotes recommendations that the accountability of academic departments be formalised by the monitoring of financial performance against budget. (For details of recommended requirements see Part 10.23 Edinburgh University).

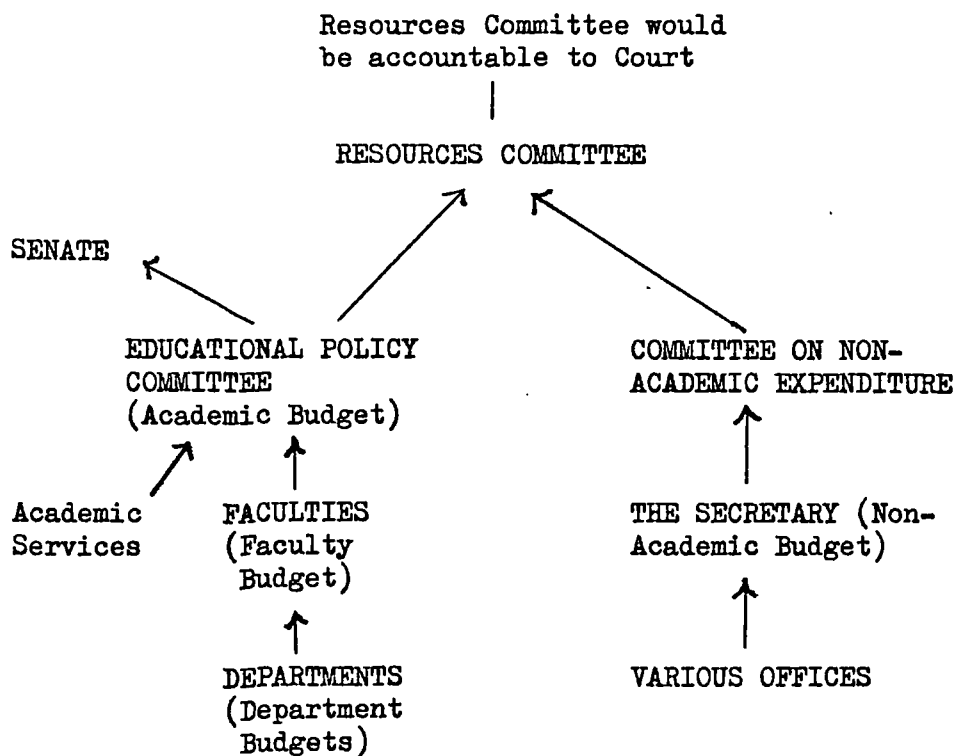
With little formal accountability for resource usage, allocations are made in various ways and are rarely examined retrospectively by the allocating authorities. Informal feed-back mechanisms are heavily relied on, especially in the use of academic staff time and this is mainly due to the difficulty of measurement. This is also true of the use of equipment, space and other items of resource.

A move is recommended towards a structured approach to university budget responsibility with clear accountability for the use of resources

to the next level in the hierarchy. Figure No. (7-4) illustrates the structure of responsibility which was recommended to the University of Edinburgh. Nevertheless, a cause for concern in the figure is the absence of clear links between the financial budget plans and academic budget plans.

Figure No. (7-4)

Accountability In Edinburgh University



Arrows show direction of accountability

Source: Report of Edinburgh University, 1985, p.38.

The level of accounting information necessary to ensure proper accountability has been shown for Edinburgh University. In addition, a hierarchy of financial reports is produced for academic departments as follows:

1. Expenditure to date.
2. Forecast of expenditure for the remainder of the year showing that expenditure which is committed.
3. Total forecast expenditure for the year (1 + 2).
4. Annual budget.
5. Variance between 3 and 4.
6. Reserves (unspent balances).

It should also be possible to create a brief summary report for each academic department and for the academic budget as a whole.

Findings from all the universities discussed by the Steering Committee recommended that the lines of accountability and accounting and non-accounting reporting should be clearer and that there should be annual reports of departmental activity showing how performance compared with plans and objectives. The annual report should include some pre-specified performance indicators (Steering Committee, 1985, p.21). Nevertheless, UCL's performance measurement and accountability were found to be satisfactory in discussing the arrangements for financial control and in the cash limits system for control of spending by academic departments. There is, however, a general reluctance to formalise the arrangements for measuring performance and monitoring in non-financial terms, e.g. refectory management is monitored by its overall financial performance but the average cost of a meal is not incorporated into its targets. (UCL, Vol. 1, p.30).

7.4 THE ACADEMIC DEPARTMENTS AND HOW THEY MANAGE THEIR RESOURCES

The following discussion is based on the study of four departments at UCL, namely, the Department of Physics and Astronomy; the Department of Chemical and Biochemical Engineering; the Department of English

Language and Literature and the Library. Their management of resources is analysed under the following headings:

1. Authority of Departments
2. Accountability
3. Management style and
4. Problems of the Departments

7.4.1 Authority of Departments: There is clear evidence that real power over resources coincides with formal authority which is vested at an appropriate level, with departmental heads. The room for manoeuvre in their distribution of UGC resources is limited, though there is absolute discretion over 15% of those funds for equipment and recurrent grant each year.

In the library, however, there was some confusion over the power to allocate resources, resulting from the fact that both the librarian and the library committee have fairly broadly stated terms of reference (University College London, 1985, part 2, p.41).

7.4.2 Accountability of Academic Departments: It seems that, although the Finance Division monitors the amount of recurrent and equipment grant spent and the department's establishment is monitored under the savings and development programme, there is no formal accountability for the use of resources at the departmental level. The department head is not required to justify to some higher college authority how he uses his resources, nor has he to conform to any specific ruling on, for example, the allocation between teaching and research. However there is inherent justification in most areas, for most of the activities of a department are conducted in a competitive environment in order to attract good quality students and staff, and to win outside sponsorship. Furthermore, degree

courses must meet certain standards and it is necessary for individual research grant holders to report their progress to their sponsoring bodies.

In addition, the academic department has adopted a formula of allocating recurrent and equipment grants to departments, i.e. the bulk of their disposable revenue which encourages them to seek more outside funds. The department has been very successful in attracting outside funds and this is shown by the proportion of total resources which outside funds now comprise.

Consequently, although there is no formal systematic appraisal for determining whether the college gets good value for money from the departments, there are many informal and indirect constraints which tend to ensure that it does.

Within the departments, the head monitors the results informally, from his own observation, through staff feedback and from the department's student consultative committee. In the main, the head will accept the judgement of the research group leaders regarding resource allocation, but he would expect discussion on significant items.

Within the Department of Chemical and Biochemical Engineering

The head of department practises a "very loose" form of accountability. Results are monitored in an informal manner. For example, in research, the head of department monitors research papers produced, but this is a slow process. He would not expect results from an individual for a minimum of 3 years but would feel disappointed if nothing had been published after 5 - 7 years.

(UCL, Vol. 2, 1985, p.22)

The Librarian's accountability is different in that he is formally accountable to the council for his stewardship of the library and a detailed annual report is received by council after consideration by the Library Committee and Academic Board. However, the grant is allocated directly to the library by the Finance Committee.

7.4.3 Management Style: The management of departments is essentially informal, being based on personal contact. The head and his 'chief-of-staff' are at the centre. The Teaching Committee organises all teaching and all departmental members are expected to partake in this. The heads manage by consensus and direction is only used when necessary to ensure that decisions are made.

The main management and accounting information available to control the academic departments' activities consists of:

- a. UCL Financial Statistics - compiled by the Finance Division and issued annually to all heads of departments. They give an 8 years' history of staff and student numbers and of costs for each department;
- b. Basic accounting returns and staff statistics from the Finance Division;
- c. A stores' budget and reports of expenditure on stores' items;
- d. A substantial amount of ad hoc and informal accounting and non-accounting information, e.g. contained in grant applications or gathered from consultations, observation and close working relations.

Although there is information on the allocation of staff and space, etc., unless this could be made more objective and systematic, and measures of performance used, it is impossible to judge whether a department is being managed as well as possible. It is characteristic of informal information that it is subjective and haphazard. The UCL report adopted the criterion of comparison of results with those of comparable departments in other institutions, concluding for example that the success of the Department of Physics and Astronomy in this respect must imply effective

management. (University College London, Part Two, 1985, p.9).

7.4.4 The Problems of Departments: The main problems facing the departments result from the funding cuts with their effect on resources and manpower. Figure No. (7-5) shows the main problems facing the departmental efficiency of University College London. However, no attempt is made here to investigate how the heads of academic and administrative departments manage their resources, but only to define their problems. It should be mentioned that, although the Department of Physics and Astronomy has some trouble with its recurrent grant, its head feels that, overall, he is not prohibitively short of money to run the department effectively (University of London, Part Two, 1985, p.12).

7.5 UNIVERSITY MANAGEMENT CONSTRAINTS AND THE COST CENTRE APPROACH

UK universities have faced financial crisis since 1981 with repeated central government cuts in funds as mentioned in previous chapters and in the Report of the Steering Committee, 1985. Cardiff University, for instance, in its constituent colleges and in the Central Registry suffered a reduction of 0.3 per cent in its grant from the University Grants Committee in 1986. As this is a cash figure the real reduction is much larger, probably about 5 per cent. In Scottish universities the cash cut was 0.5 per cent, and average reductions in England have been greater still (THES, July 25, 1986, p.1).

The effect on universities of these financial constraints needs to be studied in order to ascertain beneficial methods of measurement.

The United Kingdom central government wishes to see that it is getting value for money and it has been felt that higher education's best defence against further damaging cuts is to show that it is giving this. The question therefore has been, not whether to introduce more

Figure No. 7-5. The Main Problem Facing Departments

Department of Physics and Astronomy

a. A severe shortage of technical staff resulting from savings made in response to the cuts imposed on the College. The shortage means that academic staff undertake technical work; that some equipment is effectively redundant because of technical staff shortages; that some work is sub-contracted out which results, in effect, in a double payment of overheads.

b. The top-heavy age profile, again resulting from the cuts.

c. The lack of flexibility in the use of money resources. Most of the various money inputs are constrained or specified in some way or other. This can lead to the position where it can be relatively easy to get £100,000 for a new computer, but very difficult to raise £1,000 to air-condition a room to keep it in. This arises out of the concept of 'dual support' whereby universities are expected to provide the basic facilities for research whereas major equipment may be supplied under a research grant. However, the tight control of the College's part in dual support can be seen as a safeguard against the College being over-committed as a result of outside sponsorship (p.9).

Department of Chemical and Biochemical Engineering

a. A lack of room to manoeuvre in controlling the department's resources.

b. A lack of research students and funds to support them. This is a problem for chemical engineering in general.

c. A lack of secretarial support.

d. The difficulty in attracting good calibre staff to work in London, although the department currently has no vacancies (p.26)

The Library

a. A lack of book funds despite full compensation for inflation, which means that the quality of the library has become increasingly difficult to maintain.

b. An inadequate level of automation which means that management information is poor, although this issue is being addressed by the Librarian. Significant improvements are expected from the recent decision of the University of London to upgrade its main computer.

c. The dispersal on 5 sites (about to be reduced to 4) which inevitably reduces the efficiency and effectiveness of the library, e.g. through the duplication of certain services (p.46).

Source: University College London, Part Two, 1985
(Condensed by the researcher)

indicators, but when, and how to do so.

The Vice Chancellors have recognized this, as their working groups report shows. It starts from the premise that a range of indicators should be produced both for use within universities and for making comparisons between institutions. And it is a measure of the seriousness with which the task is being undertaken that the group now wants to involve the Department of Education and Science, the Research Councils and the University Grants Committee in the task.

(THES, July 25, 1986)

There has, then, been considerable emphasis on a need for reliable and consistent performance indicators, to be developed for universities as a whole and for individual universities as an integral part of their planning and resource allocation processes. Universities face strong external political pressures, from the UGC, for example. Therefore, they need an accounting and information system capable of fulfilling external requirements and working efficiently in the context of these external demands. Whilst there is great scope for improvement of performance in respect of allocation of resources and university planning, the effects of efficiency or lack of it in using these resources are seen mainly in schools and academic departments because they are the main units of output.

The Report of the Steering Committee for Efficiency Studies in Universities, 1985, "University Management Statistics and Performance Indicators" 1987 and other material published since the 1981 financial cuts have, in effect, added to the external pressures upon universities. Such documents have suggested that the solutions to the problems of the universities lie in the external situation and can be imposed from outside, whereas universities claim that they are capable of pinpointing their own problems, and that their internal performance should be made the main issue.

A possible failing has been to look at universities from the viewpoint of industrial methods. The two reports, Jarratt and the white paper, "Meeting the Challenge" attempted to impose the organizational forms and control mechanisms of manufacturing onto the British university system. Both reports are obsessed with the need for more external "strategic planning" and suppose that control can be exercised through "performance indicators" used as a basis for allocation of resources within and between universities (Williams, K. and J. 1985, p.16).

Nevertheless, the Steering Committee Report did not discuss which performance indicators should be used to assess the accounting and financial efficiency of universities. Non-profit performance assessment techniques are varied and include programme planning budgeting system (PPBS) and cost benefit analysis (CBA). However, both techniques attempt to relate costs to outcome evaluations and require the introduction of cost collection and allocation systems. While allocation of joint costs poses many problems, it is the measurement of outcomes which presents the more serious difficulty. PPBS requires the specification of objectives which can be readily transformed into outcome quantities and statistics, and CBA the transformation of essentially non-monetary outcomes into monetary outcomes.

A variety of criticisms could be directed at the report of the Steering Committee, 1985, and its conclusions, for example in relation to performance indicators. Some of the more important problems posed by the Report will now be discussed, focussing on two main areas, namely the management and organisation of universities and accounting for funds and financial efficiency.

7.5.1 Performance Indicators in Universities: In practice there is a strong emphasis, particularly in recent years, on financial control of

UK universities by UGC, DES, etc., through the use of performance indicators. Before discussing this approach as applied to universities, it would be as well to review briefly the concept as it has appeared in literature.

It was mentioned in Chapter Two of this thesis that Sizer, J. (1979) discussed a 'partial performance indicators' approach. He argued that, as the long term planning process is surrounded by complexities and difficulties, and, given that the universities use a wide programme of evaluation techniques, it was important to recognise those parts of the system which are already monitored and measured with a degree of precision and the uses or abuses to which the information could be put. Although agreeing objectives, measuring outcome and developing performance indicators might not be possible for a whole institution it should be possible to do so for parts of the institution, i.e. to develop partial performance indicators relating to physical and monetary inputs and building them into the reporting and planning system. One should remember, however, that the whole is not always optimised by optimising the parts.

Sizer mentioned that Sorenson, J. and Grove, H. (1977) summarized the objectives and properties of various service performance indicators: availability, awareness, accessibility, extensiveness, appropriateness, efficiency, effectiveness, outcome benefits/impacts and acceptability. Many of these partial indicators are appropriate for university use. More specifically, administrators sought measures to stabilise budget growth over a longer period in the face of major uncertainties about the future course of inflation, endowments and other external economic factors; problems familiar to UK universities. Sizer, J. (1980, p.150) stated that

Such models do not dismiss the uncertainty surrounding university planning but they assist in understanding the nature of the uncertainty. They allow administrators to test the sensitivity of the plans to variations in key

variables to evaluate trade-off and test tactical decisions, to revise plans quickly when variations in key variables do take place, and to identify key future performance indicators relating to the primary planning variables. The availability of such models in British universities would have facilitated the preparation of a response to a request from the University Grants Committee to consider the effect on student and staff numbers of three possible levels of allocation for home students.

Key variables can be called 'strategic factors', 'key success factors', 'key result areas', and 'pulse points'. A key variable is an activity or result which is critical to the success of any plan. Key variables may describe either objectives, or the pre-conditions for their accomplishment (Dermer, J. 1977).

The Steering Committee Report in 1985 recommended the use of a performance indicator approach in UK universities. However, it has been difficult to identify such performance indicators, and while universities have devised their own series, no generally accepted series is in use. Universities commonly divide indicators into three categories.

Internal performance indicators, including

- market share of undergraduate applications
- graduation rate, ability to attract researchers and research funds and teaching quality.

External performance indicators, which include

- acceptability of graduates in employment
- publications, inventions, consultancies
- prizes and conference papers

Finally, operating performance indicators, such as

- unit costs, staff/student ratios, course options available
- staff work loads, etc. (The Report of Steering Committee,

1985, p.53).

After the Jarratt Committee criticised the shortage of means by which to judge the universities, a Green Paper followed this up with a clear request for new indicators. The universities are themselves ideally placed to influence the type of indicators used, but, while the science 'Green Paper' showed the government's determination to find new measurements, it also revealed that there is far to go before achieving satisfactory development.

A problem with the performance indicators approach is that of interpretation. Universities have for many years used sets of statistics to give them information about resources employed, and the levels and results of their various activities - as described in Chapter Six and Appendix No. 3. Since the Steering Committee for Efficiency Studies in Universities (1985) there has been much use of the term 'performance indicators', to describe such data, to the extent that it is sometimes incorrectly applied to a range of management information which may not actually relate to performance at all.

The "University Management Statistics and Performance Indicators", published by CVCP and UGC in Autumn 1987 contains eight tables incorporating 39 indicators. All universities in the UK are covered and follow the sequence presented in the annual "Form 3" - which is the UGC's primary source of financial information about universities. However, it suggested a need for the reader to consider carefully the inferences that can properly and usefully be drawn from the figures. There must be knowledge of the definition of the statistics and data must be seen in the context of the organisation of the relevant part of the university and the range of variation throughout the sector. Sometimes it may be necessary to consider other figures simultaneously. Statistics alone should not be taken to indicate that one university is better than another. In short, the usefulness of such figures and comparisons is to

stimulate questions, not to provide easy answers.

At present, it seems that performance indicators of universities are used for the benefit of the external environment and can be viewed as increasing the power of external influences of the UGC, the CVCP, etc. The approach attempts to increase significantly the power of university administrations and, also, to increase the number of accountable managers responsible for the operation of decentralised budget committees, but this is subject to strong central guidance. However, many of the ideas of the report are not clarified.

The criticism could be made that the categories used are not linked with the sub-goals and objectives of universities, but are broad indicators which give no specific indication of the university's performance. Lastly as there can be no specific focus on resource allocation without attention to these areas, the use of performance indicators can not be considered complete.

Performance indicators cannot be used vigorously because they are too disparate to be summed into a single composite measure and because most of them cannot easily be changed by the managers inside each university (Williams, K. and J. 1987, p.15). Such data are for the use of outside observers, rather than for internal management. Universities could attempt to analyse their performance indicators by schools but the aggregate body of information is presented to and dealt with by external bodies. Nor has the question been addressed of how these data can be used effectively or how they will be linked with accounting procedures.

Although the external environment demands information, e.g. by Form 3, UR and performance indicators there are still real problems related to the university in the organisation of departments as cost centres, which may not correspond to the pattern of external statistics. Thus,

much of the success of the approach would depend upon the university accounting system. The performance indicator approach does not reflect this fact, nor does it show whether individual academic departments are efficient or otherwise in handling their allocation of resources. In all, the performance indicator approach seems to be unable to show the resource management of deans and accountants in practice, e.g. accounting and financial policy in cost centres, relationship of the accounting system with the head of the cost centre, accountability of cost centres, etc. The danger is that performance indicators comprise data without sufficient contextual explanation for interpretation, and should be linked with the characteristics of university organisation, goals and objectives and management control.

7.5.2 University Internal Planning: The major internal balances between integration and devolution, leadership and participation, council and senate should be explicit in a well-defined corporate planning process together with the assurance that academic, financial, social and physical aspects of decisions will interrelate. A formal planning process requires effective management information and monitoring and evaluation system.

Universities have not yet acquired these. Since 1981 they have increasingly recognised that they cannot expect to achieve the highest standards in every academic discipline but the Steering Committee Report, 1985, shows that in some universities there is a strong desire to maintain the traditional distribution of resources. Planning and resource allocation have tended to be incremental rather than dynamic and methods and procedures appropriate in a period of growth have been retained in quite different circumstances.

Large, powerful academic departments, together with individual academics, sometimes believe their discipline to be more important than

the overall, long-term, well-being of their universities. The Report's view is that first and foremost the universities are corporate enterprises to which all units and departments are answerable. If this is not recognized, the institution will be weakened and its long-term vitality undermined.

It is impossible to define an ideal planning structure that is suitable to the circumstances of every university, but the following points contained in the Steering Committee Report are recognised as being universally necessary:

- (a) A corporate planning process must be devised to bring together the functions of planning, resource allocation and accountability.
- (b) A committee strictly limited in size and reporting to the Council and Senate should be formed for planning and resource allocation. This committee should be chaired by the Vice-Chancellor and nominated by the Council. It should be composed of academic and lay personnel, all of whom realise the need to pursue the corporate interest of the university. This committee would bridge the different roles of the Council and Senate and would have the advantage of correlating academic, non-academic, financial and physical planning.
- (c) Sub-committees or officers should be elected to report to the planning and resources committee specifically on staffing, space, equipment and services.
- (d) The best balance between effective central control and leadership should be established and appropriate degrees of virement and incentive at budget centre level given.
- (e) These budget centres should be sizeable enough to ensure flexibility and redeployment so that a degree of virement can be

permitted.

- (f) Budget centres should be made aware of the costs of their activities including overheads. Where in the long term a budget centre will affect the size of the overhead allocated to it the cost should be charged to it.
- (g) Reliable and consistent performance indicators are needed and should be developed urgently for universities as a whole and for individual universities as an integral part of planning and resource allocation.

Although the Steering Committee made broad suggestions, it was unable to offer a precise solution to the problems of the individual university. UCL made its own definition of the external and internal constraints which needed to be tackled. These were:

- (a) The absence of sufficiently clear national guidelines from the DES, UGC and Research Councils concerning their long-term priorities for teaching and research;
- (b) A funding environment in which institutions are only aware of their financial position over a one-year period;
- (c) Tenure; and
- (d) The culture of the college and the need to preserve its cohesion and morale, which inhibit the development of plans which favour the interests of one department over another.

(University College London 1985, p.45)

The Edinburgh Report (1985, p.4) expressed the view that a more flexible system regulating promotion was needed, and asserted that information on retirement patterns should also be made regularly available to faculties and education policy makers to facilitate decisions on resource allocation.

Although these recommendations concentrated on the broad issues of resource allocation and planning, they paid insufficient attention to

the importance of manpower and its effect on efficiency. However, the recommendations are relevant in creating greater flexibility and increasing the ability of universities to adjust to internal and external pressures. Universities must separate operations which are not compatible with their legal status as educational charities and these extra developments must be run on a strictly commercial basis with their own objectives, management styles and staff conditions, divorced from the universities themselves.

Universities have many sources of funds, the most important being the central government, the UGC, the DHSS and the Research Councils. The second main funding source is fees from both home and overseas students. It was found that because of government decisions home students fees were unstable and even though overseas students' fees have been raised the increased revenue is still not enough to equal the government cuts. Despite these circumstances universities still have to plan for the future. Internally, universities need to create the necessary governance structure and procedures to deal with the substantial changes in resources and also deal with the equally important problem of tenure of academic and administrative staff.

Neither students nor staff in social science and economics - including management and accounting - are given enough encouragement to study the university's affairs within their campuses. Students at the postgraduate stage could be useful in studying the universities and their research could be beneficial. Academic staff could use students who are willing to study the financial aspects of universities and could develop research on their universities.

Any organisation which involves bringing together people, buildings and services should be concerned about how it uses these resources to achieve its purposes, but these uses differ from one university to another and between academic departments in the same university. It would be helpful to identify the cost of academic departments separately and accumulatively, so that departments can make suggestions for future improvement. Indeed, the key to efficiency in using resources lies in the academic department as the main unit of productivity of the university.

Moreover, academic accounting and financial departments in many UK universities provide services to the external environment by teaching, training, consultancies and researching, while ignoring the problems within. It would be beneficial if these efforts were to be directed towards the university itself. People from within the universities will be able to bring special knowledge of their requirements to the research, in a way that outside consultancies can not.

The Reports of University College London, 1985, and Edinburgh University, 1985, and the Steering Committee, 1985, each come to different conclusions and this may be because they did not have enough guidelines on tackling the efficiency of universities as a team. A great deal of money was spent on consultancies to study the universities whereas it might have been cheaper and more effective to allow the universities to study themselves in depth.

The government grant was of the order of £350 to £400,000, having been increased slightly during the course of the committee's work; approximately 80 per cent of that money was used to meet the bills of the management consultancy firms. The universities which were the object of the institutional studies and the employing bodies of members

of the committee bore additional cash and opportunity costs of some significance.

(Lockwood, G. THES, Feb. 28, 1986)

7.5.3 The Identification of University Goals and Objectives: In practice, it seems most important for universities and academic departments to define their goals and objectives as a first step. Only then would it be possible to identify possible performance indicators and to evaluate university operation. The Steering Committee, 1985, suggested that it is in the planning and use of resources that universities have the greatest opportunity to improve their efficiency and effectiveness. It claimed that the committee had found no evidence of the consideration of alternative means to arrive at goals and objectives.

Little attempt has been made to study the goals and objectives of UK universities, which are complex, multi-purpose institutions. Any attempt at defining goals tends to be restricted to broad concepts. It is necessary for these to be broken down into sub-goals and sub-objectives relating to specific activities, departments, etc. If UK universities are to be measured and successful, they must set goals and there must be some acceptance as to what these goals and objectives are.

Management by objectives (MBO) can be used as an evaluation technique as well as an instrument for the planning and control in universities and in individual academic departments. It can also be an important component of a planning programming budgeting system. PPBS is defined as a set of procedures used in government agencies to provide for the identification of objectives and goals, the design of programmes to achieve these

goals, and the development of programme budgets in which each programme is treated as an entity.

.... For example, most university budgets classify expenditures by department and by objective, such as salaries, supplies, utilities, travel. The objectives of a university generally include education, research and service; but the budget is not classified in a way that would show the expenditures for each of these functions. With PPBS, separate budgets would be developed for the education, research, and service programmes. Budgets could also be developed for sub-programmes, such as community extension services, undergraduate education, or accounting research.

(Estes, R. 1981, p.101)

In order for this budget concept to be successful, it must be linked to the goals and objectives of the academic department. MBO is a technique by which academic departments jointly identify goals and objectives and coordinate efforts to achieve them.

The application of the MBO concept to academic departments in UK universities to benefit them as budget centres would entail the following:

1. Definition of the goals and objectives derived from the goals and objectives of the university as a whole, and their ranking in order of priority.
2. Deans and heads of academic departments should agree in advance on their goals and set them in order of priority. These should be recorded in writing for reference and monitoring purposes.
3. Monthly, quarterly and annual reviews of departmental goals.
4. Annual review of the academic department's performance in order to see any divergence over the year.

5. There should be a special committee set up to measure the performance of the academic departments.

7.6 THE SCHOOLS COST CENTRE APPROACH

A clear need has been indicated for universities, and particularly academic departments, to increase their efficiency in resource allocation, planning and accountability. A number of possible strategies have been examined via the academic department budget, the creation of large departments, improving the performance of accounting and economic departments, considering the possibility of dividing universities and looking at performance.

It would appear that the Steering Committee Report 1985 has not had any significant effect on the efficiency of universities, and there is still a need for internal measurement and control. Such research as has been done has resulted in broad suggestions only, without detailed argument or solutions to university problems. However, Fielden, J., as long ago as 1969, argued that more research was needed in 1) the unravelling of accounting complexities of research grants and contracts and the methods of claiming reimbursement; 2) whether PPBS would be the answer to the much-needed improvement of the relevance of planning, programming and budgeting systems in UK universities; 3) the exchange of information and the findings of practical experiments are central to all the problems of financial administration and methods must be found to improve this.

Since the 1985 report, the demand for increased efficiency in universities appears to be growing as a result of reduced funds and more recently, frustration over rapidly increasing costs, a lack of confidence in universities and the lack of a coherent method for managing such resources as are available.

Current attempts to create such a method centre on the cost centre approach, linked to the division of the universities into schools. A cost centre is any school or academic department which is recognized by the university, for which costs may be separately identified and collated by the central accounting system of the university.

There are a great many problems with measurement of outcomes and considerable concern that the use or misuse of such an approach might be damaging to universities or academic departments. As one indication, the collection of outcomes consistent with the goals of the university or academic department is important, but it is doubtful whether such outcomes can be identified by researchers.

The university process is complex and often its multiple outcomes are intangible. In addition, because the goals of academic departments and universities are generally vague, it is difficult to translate these goals to specific outcomes. With the development of cost methods, there is concern that outcome will be more easily measurable. Thus, the decision maker will tend to focus on certain data because they are quantifiable. A related concern is whether the benefits of certain goals that are unique to a specific academic department will be measured and evaluated properly. Failure in this respect could lead to the demise of academic department diversity. Even if the goals and objectives could be agreed upon, it is difficult to decide how they should be measured, or if it is even feasible to do so.

Performance evaluation of resource allocation and planning in academic departments is an integral part of university effectiveness. Thus, it requires the establishment of specific goals and objectives and the development of criteria with which success in attaining them can be measured. Therefore the assessment of academic departments' programmes of resource

allocation amongst other things might eventually lead to evaluation of university effectiveness as a whole.

The implications of the cost centre approach as an evaluation method in universities will be examined in the following section.

7.6.1 Financial Accounting at Departmental and School Levels - a viewpoint for discussion*: Academic departments in the United Kingdom have many problems with financial accounting at the departmental or school level, partly because financial accounting at this level is new and partly because it is outside the sphere of academics' normal practice. Academics have always, to some extent, raised extra money for research projects, but otherwise the funding of schools or departments was centralised, only small amounts being given each year for each department's discretionary use for such expenses as travel and stationery.

In the United Kingdom each group of departments or school of a university is a cost centre having an annual budget determined by the university and not by the school itself. The amounts given were already small, but now they have been influenced by government cuts and are smaller still, though the departments are required to maintain standards. Schools are being encouraged to raise even more money, and not only for research projects. They are required to attract a wider range of students, including mature students, occasional students and overseas students. From the new money thus obtained, the university takes an amount for administration, the group of departments in the school takes another portion and the remainder is returned to the individual department. The individual departments may spend that money as they see fit.

* NOTE: Sections 7.6.1 - 7.6.3 are based on information and views expressed to the researcher during interviews with the president of the AUT, and the finance officers and academic staff of the Universities of Edinburgh and Hull.

However, this method highlights enormous inequalities within universities, because some departments by the very nature of their subjects attract more kinds of outside funds than others would do.

Academics were, at one time, researchers and teachers. Now they feel they are being asked to act as public relations' officers; to advertise and sell themselves and their departments to raise funds and fee income by attracting students. This creates problems in itself. Some academics do not enjoy these new tasks and some have little ability in this field. More importantly, from an academic's viewpoint it takes them away from their true vocation of teaching and research.

A further problem, in view of the limited income from central funds received by each department, concerns payment for this advertising when there is no basic resource on which to plan.

Each department keeps its own accounts and relies heavily on central administration supplying accurate information quickly. However, universities are often unable to supply information quickly. The financial year begins on the 1st August, but schools are only told, as cost centres, what their budget will be for the coming year, at the beginning of October. By then the year is two months old. The money is not allocated among the various schools and departments until the second term is well under way. This makes planning almost impossible, especially as the budget expected might well be cut by up to 75%. As there is no proper information flow from central office the departments are totally dependent on receiving accurate information speedily as to where the money has gone and how much there is left. This is haphazard and not conducive to planning. There are approximate forecasts of the government grant for two to three years hence but after that financial planning is based on the notion that there will be a deficit, so that school grants should not be increased.

The proportion of the unearmarked grant that comes from non-government

sources is tiny and the money earned by the university is usually tied to a certain piece of equipment or a certain course. Therefore, there is very little 'free' money which the university can use to fill out the budgets generally.

Academics, then, would not agree that planning is made more efficient by dividing the university financial accounting into schools, without increased funding. If funds were kept too low, all the departments could then do would be to remove from one aspect and give to another or to make someone work twice as hard. Thus there would be no scope for planning for development. Dividing the university into schools might give the academics more incentive to raise money for their own department, but as we have seen, some academics argue that they are purely teachers and researchers and are not suited to raising funds.

Higher education could be classed as a product and, given adequate resources, the academic should be able to mount the courses most beneficial to the students. Certain students were acknowledged as being beneficial financially to the university, i.e. adult education students, mature students, industrial students, business men and trades unions, but academics feel that courses should be mounted on the basis of need and educational justification, not merely because they earn money for the university.

It might make sense for smaller departments of similar subjects of different universities to join together for financial efficiency. National reviews are already taking place, of where subjects are taught, and the size of department, and some small departments have already been closed and the staff transferred to strengthen other departments.

On the question of departmental accountability created by the need for academics to raise funds for their departments themselves, e.g. by gaining overseas students, some academics believe they are more accountable and also believe they should have more information readily available.

One problem is that if a department has a deficit at the end of the year, it is not known until well into the following year and the fear is that the department will be penalised by a reduction in the following budget.

It has been suggested that there is a need for departments to define their goals and objectives. Until now a department has not been asked to define its goals in order to make a bid for more money, or for re-assessment of the grant or allocation, though as soon as the department is given the money a plan must be made to organise its spending.

It could be said, therefore, that there is a lack of defined goals and objectives. There is no pre-planning; no opportunity before the money is allocated for each department to say what it is trying to do. The finance office indicates how much money the school is to receive and it is divided up on an historic basis.

The division is the responsibility of the officers of the university, headed by the Vice Chancellor and then the finance committee (which does not include academics among its members). Division on a historical basis is relatively easy, as the university does not have to face the question of which of a number of bids is the more tenable.

Ordinary staff salaries are paid by central administration so the amount of money received by departments is very small. For example, the economic and social history department of one university received £1500 to cover xeroxing, telephones, etc. This is classed as petty cash. The main accounts are dealt with by central office and are divided into schools for salaries, etc. (Figure No. 7-6)

The division of the university budget between the schools in the attempt to create accountability would require each school to have an administration office to do the work that central office now does. At the present the academics administer the very small sums for which the

Figure No. 7-6DEPARTMENT GRANTS 1987-88 (For Example)

	ECON	E&SH	EMDS
Departmental grant 1987-8			
Contribution to School			
Gross Funds Available 1987-8			
Balance B/F 1986-7			
Net Funds Available 1987-8			
Overseas Student Grant 1986-7			
Offset of Deficit on Earmarked Grants 1986-7			
Correction to Expenditure 1986-7			
Net Funds Available 1987-8 (Revised)			

ECONOMIC AND SOCIAL HISTORY ACCOUNT (For Example)

Expenditure Heading	Grant	Actual Expenditure	Expenditure as % of Grant
General			
Telephones			
Printing			
Demonstrating/ Tutorial Assistance			
Vacation Grants			
TOTAL			

Note: Sample departmental allocation application form as used in the University of Hull

departments are responsible. The accounts unit is a central one and the departments do not have units.

However, this is not to say that central office is always efficient in passing information to the departments. Information may arrive too late, or not at all. In some universities where departments have been grouped into faculties there is an administrator based in the faculty building and whose assistant is responsible for calling meetings, forming the agendas and either keeping the accounts or collecting the information for central office. In effect, all that has happened is that the constitution of the university has changed to call each faculty a cost centre which has a budget. The only budget given to this department publicly, for which it has responsibility, is the tiny amount of money already given, but at the same time the university argues that each school, as a cost centre, could try to earn money by gaining sponsors for lectures or seminars or perhaps by holding Saturday morning seminars for teachers who wish to update their work. Fees would be charged for these activities.

Would each cost centre having its own budget result in schools endeavouring to earn more money? Academics do not feel that their job is to earn money for the university but rather to maintain or raise the standards of teaching. If seminars, etc., did that, it would be all to the good, but academics do not feel that these things should be done with money in mind. Perhaps the university or government, if they want such activities, should finance attempts to promote them. Another suggestion sometimes put forward is that increasing the student-teacher ratio would be cost beneficial to departments. The ratio at the moment is around 15-16 students to each teacher. Popular opinion amongst academics is that, if anything, the ratio ought to be lower, as the fewer students that

teachers have, the more attention can be given to the individual. Ideally it is believed seven or eight students is a realistic number. Above ten students results in deterioration in the educational process.

From the above, it appears that the cost centre approach presents some difficulties in the context of present university procedures. It could also in some senses be viewed as being in conflict with traditional academic roles and values. Whatever its advantages may be, therefore, its use may not be an easy answer to the problems of universities, and may require some compromise or re-thinking of traditionally-held views. The implications of the cost centre approach for academic departments will be considered in more detail in the following section.

7.6.2 Cost Centres and Academic Departments: An important implication of the new budgetary approach is its possible effect on staffing levels and academic staff tenure, though the school will not itself be empowered to hire and fire.

The only budget in the university is the central office budget for the university which is forecast through to July 1990. This is based on government information as to the overall decline in the amounts of money available to the university. Two or three years ago the UGC indicated how the cuts would affect individual universities. All universities would take a cut but some would take a larger cut than others. At the same time universities grouped their departments into schools which became cost centres. Each school is allocated a small amount of money for overheads, this being the only form of budget it has. At one time each department would have received this sum, now the school receives it. The difference is that the school is given a staff base-line. Academics know what that

base-line is and schools have been given a target period in which to achieve the base-line. Most base-lines are below the current staffing levels, but these must be reduced within the next two or three years.

All hiring, firing and paying salaries of academics is done centrally. The only freedom the schools have in matters of staff is to hire part-time or temporary staff with the school's portion of moneys earned by the school from areas like research or overseas student fees. This is the only freedom a school has to go above the base-line and only then if they earn the money. Universities will keenly watch the situation to make sure schools know whether they are above or below the base-line. At the schools level, the term "cost centre" means that the schools will be expected to progressively take a larger role in forming major decisions. If, for example, a school is above base-line the dean of the school may be asked to form an opinion as to which member of staff should be asked to leave.

Eventually, the university will break the budget down and give each school a certain amount of money for secretaries, for example, and then expect each school to work out how best to use the money.

The cut will not necessarily be a measure of each schools spending. There is no prior stage where schools make a bid to say how much money is needed. Schools do not at present have a budget plan. The only plan in existence is the staff base-line.

The creation of schools does carry some advantages. Originally, schools were set up to prevent small departments for small subject areas being in a weak position with regard to the base-line for staffing. So in fact they could hide within the larger school and cuts in staff

might not automatically be directed to them, whereas previously it was relatively simple for universities and outsiders to assume that the solution is to remove the tiny departments. In this way small subject areas were lost. For example if a school has a base-line of 25 staff and contains 5 subject areas it will not say that there are five staff members for each subject but will keep it as a school total.

Different departments were often not allocated to schools according to any specific plan. There was no conscious rational decision made, but rather some heads of department spoke with some others with the intention of amalgamating. Academically there is a group of disciplines called social sciences, a group of disciplines called the arts or humanities and a group of disciplines called management. Those departments left out of the initial choice joined together for protection.

The allocation of budgets to cost centres would not initially bring advantages, as the central budget from the UGC is formed on a discipline basis, for example chemistry is one cost centre, accounting another cost centre, and physics another. Where the university budget is on a school basis, this means that two sets of accounts are in operation, one dealing with the UGC and the other being internal. A possible option would be for finance offices to keep to the discipline basis, those subjects grouped together then pooling their money for the good of the school. However, some Registrars prefer the money to be allocated to the schools.

Another problem is that information is very slow in reaching the schools from central administration. It is very difficult to staff the finance office with professional accountants as they can earn much more in outside industry.

The problem of double sets of accounts is purely an administrative problem, as is getting information to the schools correctly and on time, so it should be relatively simple to double programme a computer to correct this.

A problem with the practice of giving back to each school a portion of the money earned by it to be used in hiring part-time or temporary staff, is that those schools which can earn a lot of money can well afford to pay the staff, while schools that cannot earn so much find it difficult to pay for extra staff. However, schools that have the money may have difficulty in appointing staff, with the result that money remains in the school account, unused. Thus the creation of schools does not necessarily even out the resources.

Central management should rethink the allocation of funds to schools. It could be that they are giving back too high a percentage of funds and that too great an emphasis is placed on temporary staff. It might be preferable for universities to concentrate on utilizing funds to keep the current permanent staff.

In theory, the academic and finance plans should match. However, even if universities get more money, this is not necessarily reflected in an increased staffing level, for example.

Regarding the size of the allocation to schools, it could be argued that the money being allocated to schools as in incentive (special grants) is much too loose in its form of accounting in an institution which is short of money and contracting. A sum of money unspent in one school's account could represent two staff posts for the university as a whole. The presence of an unspent surplus in the

accounts of a particular school which is only responsible to itself, in an institution that is stretched for money and is lowering its staffing levels, would inevitably create dissatisfaction among academic staff, and may mean that some schools suffer unnecessarily. There is an academic feeling that the responsibility of the universities are to their current staff and if they can avoid cutting down on staff this should be the first priority, rather than to allow large sums to be uncontrolled outside the salary bill.

It is not known whether schools will be asked, in the future, to submit financial plans but it is hoped that they will be allowed to make bids and that allocation will be reconsidered on a different formula. Schools know that there is enormous emphasis on accounting for their money, and they are wary of expenditure on items such as xeroxing, telephoning. Again, this seems an unreasonable constraint if some schools have large sums unspent, and is likely to create tensions among academic staff. Schools accept the need for more careful budgeting but staff need to feel that they are the main priority.

One of the most important budgets that a school should have is to provide for contracts with the outside world on a professional basis. If an academic has a consultancy, he may make use of university facilities, e.g. telephone, without charge. Universities need to look into this. A scheme may operate whereby if staff earn fees other than their salaries, the revenue should be divided three ways, between central management, the school and the individual academic.

In practice, this works with larger sums, for example research grants; the university takes a small amount, perhaps 10% and the rest

goes to the cost of the project and if it is fee paying, to those running it.

Although it may not be reasonable to suggest a general increase in the amount taken by central administration, it could be argued that the use of university resources should be carefully monitored. However, this is likely to be unpopular with some academics. It may be, then, that the best solution is in fact to increase the proportion taken back across the board, to ensure that the use of university resources is covered.

There are academics who use the universities' facilities for their own research, particularly in the sciences where use is made of the laboratories, equipment, raw materials and technical staff, perhaps to pursue a project being funded from outside. Again, it could be argued that universities should take back more for this, particularly as scientists may make a discovery, then form private companies in premises outside the university, the costs of the initial 'start-up' phase having been borne by the university. Some academics feel this is improper and that universities would do well to keep a greater check on this.

American universities have a much tighter system whereby when a project is drawn up, a three-part contract is formed between the university, the individual academic and the outside company. There is a case for saying that British universities must have a proper scheme, especially in the industrial field where discoveries might have a market value. The universities must have the right to either market the commodity, alone or in partnership, or to share in the patent rights of that commodity. This could be a good way of raising the allocations to schools. However, some jobs done outside the university are unpaid or paid very little.

The answer to this may be to return to the idea of a threshold, whereby the university claim operates if an academic earns more than a certain percentage - 20% say - of his salary.

An increase in the staff - student ratio might be seen as another way of increasing revenue, but the answer is not found so easily as that. The government decrees how many students there shall be and allocates them to each university. The government grant takes account of the number of students who will be educated within each discipline and there is evidence of movement towards a contract system, which would mean contracts signed with each university on the basis of student numbers, e.g. stating that they want 21 students per year to graduate in German. If a university wanted to attract more students they could but they would have to come from overseas as under this system the number of British students would be more or less fixed.

If a change in staff:student ratio is not the answer, schools could increase their funds by attracting other kinds of student, running weekend schools, summer schools and part-time degrees to raise funds. Consultancy work could also be reviewed to benefit the university.

Publications written by academic staff are dealt with outside the university by publishers and are entirely commercial. They bring in no revenue to the university.

The only other money the school earns is in order to facilitate the work done by the school, in other words, schools must try to get more grants to pay the cost of research.

Greater use of rooms might bring in more money to the schools, but the use of rooms is controlled centrally. Nationally a review has been given to the use of university space, e.g. playing fields, library and teaching space, etc. Rooms may be hired out, but the income from this tends to be kept by central office rather than benefitting the school.

It can be seen that the problem with the cost centre approach from the academic staff viewpoint is that academics are driven by the need to teach and carry out research. If their activities can bring revenue to the school, that is good, but their interest is educational rather than financial.

We shall now examine the cost centre approach from the viewpoint of the accounting system, where its use gives rise to a different set of considerations.

7.6.3 Cost Centres and the Accounting System: The present system poses a number of problems from the accounting point of view. Because the cost centre approach and the introduction of schools are new, accountants are still feeling the way. The basic idea of having cost centres carries the advantage that the school is able to decide how its allocation is broken down between departments. The cost centre is only responsible for the non-payroll allocation as the payroll is managed by central administration, thereby keeping payroll costs distinct from other allocations. The school has a considerable degree of autonomy over its non-payroll allocation for such items as telephones, xeroxing, etc. However, the allocation to departments includes a contribution from the fees of overseas students. Depending on the number of students in the school they receive an extra allocation. They can if they wish appoint staff with that money, but this obviously leaves them less for non-payroll expenses. Fee income from overseas students is part of the school allocation.

The established staffing is controlled centrally. It may be that in the future, schools will be given greater responsibility, being allocated the funds to employ the staff the school feels it needs, though there is no movement towards this at present.

The schools at one time were given 'earmarked' allocations for telephoning, etc., but the movement is away from that idea now towards giving the schools a global allocation to spend as they wish.

Problems arise for the accountants, because of differences in the accounting systems outside and inside the university. Certainly at central, rather than departmental level, there is the problem of giving information to many other people, without a consistent format. For example, the UGC's financial accounts Form 3 requires a great deal of detailed information on expenditure which is removed from the accounts, but the department allocation figure is shown as expenditure in the accounts whereas on Form 3 the actual expenditure incurred by the departments is shown. Therefore, central administration has to re-do the figures for Form 3. In addition a detailed breakdown has to be given for Form 3, on research and services rendered. The central office has to show groupings. Certain departments are given certain grouping numbers and there are approximately 40 groups.

A considerable difficulty is that the burden of this extra accounting comes at a time of staff cutbacks in line with the funds available for staffing. Computerisation may ease the situation as a great deal of manual work goes into the completion of Form 3. Under "services rendered", where a department gains an income, central office has to show, on Form 3, what is called "direct expenditure" incurred in any of that income. If a member of the department's staff is involved in that service, his expenditure will not be shown against "services rendered" because as a

permanent member of staff, his salary will have been shown elsewhere. If, however, a fee was paid for someone doing specific work in connection with that service then that would be a direct charge. Likewise any other additional payroll or non-payroll expenditure incurred additionally to the normal incurrence as a result of that service would have to be recorded, for Form 3, initially under department to get it into grouping. Some groupings might cover a single department while others might incorporate a number of departments. The present university financial coding system is a departmental set-up. Many of these services rendered are ad-hoc and under a separate range of codings. They have to be analysed independantly and grouped independantly. This sometimes creates difficulties because central office is dependent on the departments themselves to get the coding correct as they incur some costs that they code against the service rendered.

The new system is essentially of the same nature as the old, except that whereas before classification was into faculty/departments it is now school/departments. The classification into departments may cause problems in the new system in that departments within various schools are such that the school does not correspond to the grouping in Form 3. A school might have certain departments in one subject group and other departments in another subject group. Central office is faced with the task of analysing schools into different groupings for Form 3. Again, this is a problem which computerisation may alleviate.

It is believed that the cost centre will efficiently control each department's expenses. Central office would look to the school

to see how well it is managing and in turn the school will look to its departments to keep expenditure within the budget. However, in some universities central finance office has very little control over the schools' spending, as schools have their own order books, so if they order and overspend all central office can really do is to raise the matter with them, and request that the overspending is made good from the following year's allocation. Once an order is placed the university is committed to paying the account.

The cost centre looks at what is spent to aid pre-planning. It is possible that even if a school overspends, if the commodity is essential, then the spending may be accepted.

Centralised accounts bring their own problems, but the schools will need some clerical assistance if they are to look after their own budget and are to control their own departments. Ideally there should be liaison between the school boards and the central assistant accountant who deals with departmental accounts, so that while each department will look after its own budget, it will be accountable to the school and the school will look to the central finance office.

Under the departmental approach, budgets and allocations are prepared by the finance office after they have been approved by the policy committee. Overall allocation to departments, services and heads of expenditure is then decided by a departmental committee. The schools system means that the allocation is to each school not department, and the schools decide what the department gets.

The central finance office monitors the schools via central finance records, detailed print-outs of the codes they use, approximately every

4 weeks. This is not a fixed time-table and this in itself can be a problem. In the new system this will change to schools relying on interrogating their own accounts rather than relying on print-outs. It should improve sufficiently not only to say what has been spent but also what is in the pipeline.

It may be argued that the school as a cost centre helps UGC requirements, but this is not the case in view of the lack of correspondence between the grouping of schools and the groupings on the UGC Form 3. With computerisation it is easier to move figures around than by manual methods, so that computerisation could be a key factor in the cost centre approach, helping in the production of accounts, production of Form 3, budgetary control and management information.

Re-classification will be needed in certain areas for figures needed for financial accounts, student house costs, for example. The cost centre may improve allocations to schools. Attempts are being made to determine the allocation based on student numbers, overseas students and research undertaken, etc. Such a formula would encompass many factors and weighting. However, members of the finance office are not always included in such discussions.

School financing is under review. The funds are gained from UGC grants and tuition fees to central funds but departments and schools get extra funding for overseas students, research work and services rendered and there should be an element of surplus as a contribution to overheads. The department would get the greater part of the surplus for its own funding with an element going to central funds for their overheads. The funding of schools depends on the income they can generate within their departments. Where a research grant is awarded there is no element for overheads. The grant meets the direct expenditure. A benefit of the

cost centre is to improve the allocation of the academic department.

The usefulness of applying the cost centre approach in universities is not necessarily negated by the academic and accounting viewpoints discussed here, but they highlight the uncertainties present in the current internal structure of universities. There is a need to reorganize the schools and the departments within them. The organization of schools depends upon a number of factors which affect, directly or indirectly, the academic departments as cost centres, and their resource allocation. The practicalities of organizing schools for the cost centre approach will therefore be considered in the following section.

7.6.4 The Organisation of University Schools: The creation of schools and use of the cost centre approach requires UK universities to review their academic departments because they are main factors in the fulfilment of university goals and objectives, the main consumers of university funds, the cost centres and main sources of accounting and non-accounting information. To operate successfully, universities need to reconcile the traditional academic viewpoint with the new financial considerations. A number of factors are involved in the operation of the school system:

1. The estimated student/staff ratios based on numbers of home students should be included in school plans. Further details concerning student numbers and estimated student loads have to be put before the annual meeting of the university academic planning committee, the policy and resources committee, senate and council.
2. Schools have to be set up and a number of academic departments allocated within each school. The school can be considered as a cost budget unit of the university and each department should then receive an appropriate number of home students each year according to its planned capacity. Each school needs a resources allocation committee and has to

note the changes which are occurring in the organisation of funding programmes and training. Schools would be encouraged to investigate different approaches to training.

3. Schools should have greater autonomy in respect of their staffing levels in their departments and should exercise careful scrutiny of proposals concerning the allocation of the staff within the departments. In some departments, an additional lectureship should be made available to relieve the student/staff ratio and to improve the department's capacity to attract students and to offer consultancy and to publish research. At the same time, they should endeavour to attract more students, e.g. from overseas, or business and adult education, and to use consultancy work to increase the revenue to their department.

4. At the academic department level, there is great difficulty in reconciling the need to establish reasonable student/staff ratios, research selectivity, the numbers of funded students allocated and attraction of overseas students, with academic traditions. Areas of academic concern must be noted and recommendations made. Additional appointments could be made with commercial sponsorship. A university should seek to import staff from other universities, provided satisfactory arrangements concerning funded student numbers can be agreed. If the school and department recognise that the current balance of departments is not ideal, the school could recommend that the proposal to merge the departments into a school should not be pursued. Instead, the department concerned should be established within another school, in which consultations should commence as soon as possible concerning future finance of its projects, and students be transferred. At the earliest opportunity, departments should devise a highly integrated teaching programme and which would investigate the possibility of mounting a wider range of courses.

5. A school may consider it unreasonable to maintain full provision for a declining department: in such a case, the school should seek to maintain a reduced establishment and offer degrees jointly with other departments, and eventually the department would be closed. Thus, its degree courses would be discontinued as soon as feasible, though if possible, staff would be joined with other departments or transferred to another university on terms favourable to the school.

6. An important role might be played by staff transfers between universities in helping universities to strengthen particular academic areas or to reduce their commitment in others. However, the simple transfer of staff with funded student numbers to other universities except on very favourable terms would do little if anything to relieve the overall financial position of the university.

7. Compulsory redundancy should be viewed as a last resort. A preferable alternative would be voluntary severance or early retirement, made as attractive and flexible as finances allow. The university might not be able to offer generous terms of voluntary severance and early retirement indefinitely. Discussions would then have to take place with individuals and groups about their position and plans in relation to the proposed academic structure.

7.6.5 Improvement of School Resource Allocation and Planning: The value of maintaining continuity in university resource allocation and planning is recognised and the proposals which follow seek to develop rather than replace the work which has been undertaken to date. These proposals, therefore, should be read in conjunction with the account of such developments given in previous sections.

1. It is necessary to ensure that the school structure adopted by universities is provided with the means to become fully integrated

academic and budgetary units. This would entail identification of their goals and objectives and the allocation of staff posts and resources depending on their capacity. However, whilst recognising the integrity of schools, discussions with the UGC about academic planning have also confirmed the importance of the university continuing to identify goals within schools planning.

2. Each school has different functions. Therefore, there is very considerable variation between different subjects in staff/student ratios. This variation in ratios reflects considerable variation in schools' comparative costs. Such difference may exist, not merely between one school and another, but between one university and another. Attempts should be made to establish a better distribution of student/staff ratios, and bring the school unit costs to a level appropriate to the university funding base.

3. In school planning documents, the university should identify a portfolio of function areas which, in addition to its traditional strengths, it will hope to be seen as distinctive by the end of the school planning period.

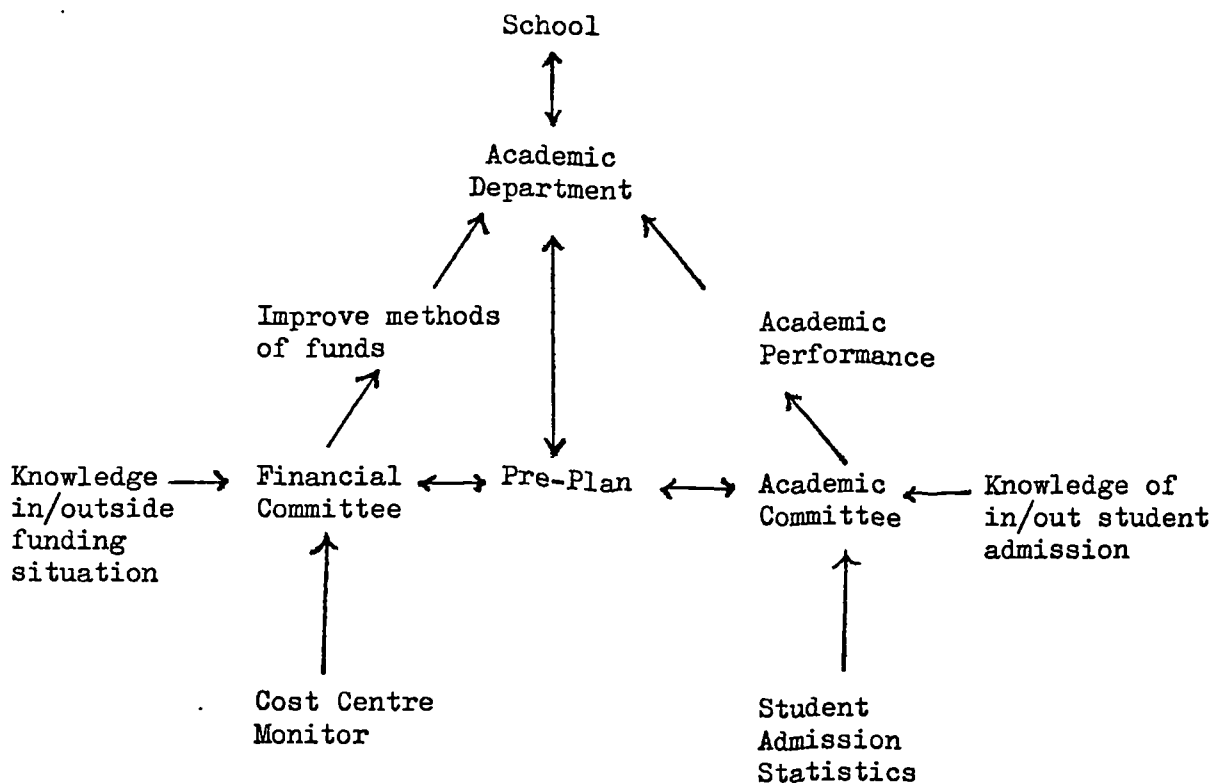
4. In reconciling the various financial and plan considerations schools should accommodate the various goals and objectives within the limits of university funded student numbers and also other UGC requirements and advice and by undertaking a careful review of their range of academic activity.

5. The most significant feature of schools in the new structure is that they will be made budgetary units with allocated resources and financial responsibility for staff as well as for the more traditional equipment and departmental grants. The implications of this school structure may improve their activities and enable them to make decisions on the basis of

their financial allocation.

Universities need to monitor the implementation and the efficiency of their academic planning and the effect on their resource allocation. The responsibility within the university and school for such monitoring lies with the academic planning committee and the policy and resources committee as the co-ordinators at the heart of the monitoring process. These committees can encourage the continuation of the practice whereby the committee seeks annually from schools statements of their goals and objectives and then pursues with those schools the manner in and the extent to which those goals and objectives are being achieved, as in Figure No. (7-7).

Figure No. 7-7. Cost Centre of Academic Department or School



Note: Compiled from the personal experience of the researcher and information obtained in interviews.

7.7 SUMMARY

This chapter has evaluated financial planning, resource allocation and fund monitoring in UK universities in order to identify ways of improving their efficiency in these areas. A major influence on university finance is the source of funds. Universities are multi-funded, but the primary source of funds is central government: these funds have been cut since 1981, so that more than ever before, universities need to make the most efficient use of the resources, and be seen to be doing so,

The multiplicity of sources in itself causes difficulties in actually collecting funds. As far as collection of funds from government is concerned, it seems that organised formal procedures and rules are applied; though the timing and general nature of grant announcements, together with the lengthy student admission system, mean that the relationship between expenditure and university operation is confused and unresponsive to changing needs. The universities face further uncertainty in forward planning created by additional or short-term financial changes. Moreover, there have been clearer indications by government as to expected performance, and pressure to develop certain fields, even though funding is not keeping pace with rising costs.

Universities have faced the difficulty of establishing academic priorities and the fear that financial and academic priorities may be in conflict. The reduction of funding across departments pro-rata to their existing expenditure, and non-replacement of retiring staff, gave no selective protection to subject areas and resulted in deterioration generally in the effectiveness of resource utilization.

Further, payment of fees by LEAs may be considerably delayed, creating problems for the university cash flow. The system of fee collection used in the United Kingdom is inefficient in that it uses

two distinct routes to channel funds from the same source to the universities. It is essential that ways be found to smooth the funding process.

The major internal deficiency of United Kingdom universities is that the council and senate lack an explicit well-defined corporate planning process, together with the assurance that academic, financial, social and physical decision-making will interrelate. A formal planning process requires the existence of effective management information, monitoring and evaluation systems and should structure their use. Planning and resource allocation tends to be incremental rather than dynamic. Methods and procedures suitable to growth have been retained in quite different circumstances. This research has referred to the assessment made in the Steering Committee Report for improved efficiency within United Kingdom universities, which discussed the need of a corporate planning process; there is a need for effective central control and leadership, e.g. budget centres should be sizeable enough to ensure flexibility and made aware of the costs of their activities, and reliable and consistent performance indicators should be developed urgently.

We have seen that objectives and goals in universities are defined only in very broad and ambiguous terms. There is little relationship between universities' long term objectives and the allocation of resources, in view of the short term planning horizons of government and the UGC, and the virtual absence of university strategic planning.

Universities have many methods of resource allocation and procedures for approving allocation and an advanced computerized accounting system. Even so they are still using a historically based incremental approach to financial and manpower estimation. Strategic planning which does take place is a mixture of 'top down' proposals in an effort to give academic leadership and 'bottom up' proposals to coordinate departmental plans

and to adopt the results. The Steering Committee Reports do not show clearly enough whether the universities in the United Kingdom successfully and efficiently apply planning, programming and budgeting systems (PPBS) and universities in the United Kingdom are behind in the application and development of a number of approaches which may help the development of strategic planning in the long term. It is recommended that they pay further attention to the development and application of planning, programming and budgeting system (PPBS), cost benefit analysis (CBA), etc.

Management information is the key to both economic efficiency and the political reality of a university, yet the production of accounting and financial information within universities is extremely fragmented, and not always adequate for efficiency.

Accounting and financial information provided to department managers varies in quality and often arrives too late to be of use; it does not show forward commitments and measurements of output are less developed than measurements of input. The information collected is mainly for the use of administration, not management, and is not effectively analysed. In short, there are many deficiencies in university management information systems, despite recent moves to expand information to the public and unify the financial report.

The committee structures for planning and resource allocation are also ineffective. Different committees perform the functions of allocating funds for staff, running costs, equipment, space, minor works and supporting services, without the necessary coordination. Some planning committees are too large. Further, there is undue reliance on the informal connection. The effectiveness and efficiency of the allocation process could be improved by combining the function of a number of key

committees and formalising the links between committees, in order to combine the allocation process for capital and operating expenditure and thus ensure a more coordinated approach.

In United Kingdom universities, academic departments are the main budgetary units, with the heads of department being seen as the responsible officers. However, their responsibilities and accountabilities are not always clearly defined, e.g. because the academic head might not be kept abreast of the state of the grant.

A further weakness inherent in the budgeting system of the United Kingdom universities is the lack of any direct link between input and output whether in the cost involved or in terms of volume.

A distinction between services over which department have full control and those of which they have not, should also be made.

There is no formal control of university departments through the use of plans and budgetary control reports, thus it is recommended that the accountability of academic departments be formalised by the monitoring of financial performance against budget. A move is recommended towards a structured approach to university budget responsibility, with clear accountability for the use of resource allocation, to the next level in the hierarchy.

The financial and accounting efficiency of departments is constrained by shortage of staff, lack of flexibility in the use of financial resources, and lack of research students and funds to support them. All these problems are related to a shortage of money and inefficient use of available funds.

In summary, reduced funds and increased public interest in university activities, have highlighted the importance of maximising efficiency.

To satisfy this need, there is a requirement for the application of performance indicators and consideration of management information requirements. The competitive feeling between university departments towards planning and the use of resources, creates a significant opportunity to improve efficiency, but in order for this to be achieved, further attention must be paid to the accounting complexities of grants, contracts and methods of claiming reimbursements; the possible benefit of applying PPBS, CBA, etc., to the universities, and methods of defining information needs and improving communication.

The implementation of the university school structure will bring about a significant decentralisation of the decision-making process in the university and increase the opportunities for academic staff to participate in this process. Decentralisation of school management will create an incentive for the academic staff to be involved and knowledgeable about their financial situation, and their judgements will affect the allocation of resources. The schools structure is one which will facilitate selective contraction and academic restructuring for improved performance. In addition, the schools structure offers a fundamental factor in planning and resource allocation. The Jarratt Report 1985 suffered from the weakness of failing to consider schools' internal resource allocation, and did not fully understand the nature and needs of universities. However, the essential aim of restructuring the university budget into schools is to end the planning period in a stronger academic and financial position. The school system may improve the efficiency of the whole university. The goals and objectives of the school budget are, in brief: A. Identification of areas of academic activity within the school. B. Adoption of the principle of selective planning, entailing reassessment of areas of activity. C. Determination in advance of a manpower plan and the future shape of the school. D. Student numbers and loads will be an important

element in determining the shape of the school. In addition, efforts will be made to sustain funded student numbers during the period of the school plan. E. Reviewing school course structures to ensure the necessary flexibility to continue to provide attractive courses.

In view of the shortage of funds for higher education, university expenditure must be restrained. Obtaining value for money has become a matter of acute necessity, and the desirability of improving universities' internal performance in the way of better managing their resource allocation and planning is, therefore, obvious. A possible answer to these problems is the adoption of the school/cost centre approach.

The cost centre approach to academic budgeting is offered as a workable approach for university resource allocation, planning and accountability, which might operate at school and academic department levels. It is one which would help academic departments by introducing regular practical evaluation of their activities and goals. Its application may present difficulties in the early stages, but it is believed that the system is less complex than that operated at present. It would give academic departments freedom to determine their goals and objectives, and they would be accountable for their financial results.

PART THREE

IRAQI UNIVERSITIES

This part is a discussion based on literature and empirical investigation of Iraqi universities' accounting and financial management. It contains four chapters. CHAPTER EIGHT: Higher education in Iraq. CHAPTER NINE: Iraqi accounting in the public sector - Higher Education. CHAPTER TEN: Administrative efficiency of Iraqi universities (a case study). CHAPTER ELEVEN: Accounting and financial efficiency of Iraqi universities. CHAPTER TWELVE is a broad normative analysis of the Iraqi universities' case study.

CHAPTER EIGHTHIGHER EDUCATION IN IRAQ

- 8.1 INTRODUCTION
- 8.2 PROBLEMS AND TRENDS IN ARAB AND IRAQI HIGHER EDUCATION
- HISTORICAL BACKGROUND
- 8.3 IRAQI HIGHER EDUCATION
 - 8.3.1 Development of Higher Education
 - 8.3.2 The Current Reforms of Higher Education
 - 8.3.3 Higher Education Organization
- 8.4 THE GENERAL EDUCATION SYSTEM
- 8.5 STUDENT ADMISSION REQUIREMENTS AND DEVELOPMENT
- 8.6 ACADEMIC STAFF
- 8.7 UNIVERSITIES' DEGREES AND DIPLOMAS
- 8.8 IRAQI UNIVERSITIES' CURRICULA
- 8.9 IRAQI FINANCE AND HIGHER EDUCATION
 - 8.9.1 Financial Allocation and Ordinary Budgets
 - 8.9.2 The Iraqi Universities' Funds and Their Expansion
- 8.10 SUMMARY

CHAPTER EIGHTHIGHER EDUCATION IN IRAQ8.1 INTRODUCTION

This chapter aims to provide background information regarding higher education in Iraq. It reviews historically, problems and trends in Arab and Iraqi higher education, particularly the expansion of the student population with its consequent effect on the finance and administration of higher education. In addition, it describes the development, reforms and organisation of the higher education system in Iraq, with particular reference to student admission requirements, academic staff, universities' degrees and diplomas and curricula. Emphasis is given to trends in the allocation of funds, which is important to an understanding of later chapters concerning accounting and the allocation of resources in universities in Iraq.

8.2 PROBLEMS AND TRENDS IN ARAB AND IRAQI HIGHER EDUCATION - HISTORICAL BACKGROUND

Higher education in developing countries, including Iraq, has met with a variety of problems which have been discussed in previous literature. Some authors such as Knowles, A. (1978), concentrate on the difficulties caused by the rapid increase in student enrolment numbers. This increase and the subsequent lowering of standards, etc., have been discussed by Al-Ebraheem, H. and Stevens, R. (1980), UNESCO (1970) and Alrawi, H. (1985), who investigated the universities' organisational and accounting information requirements.

There have been many significant developments in Arab higher education in the period since World War II: such as the expansive cultural cooperation encouraged by the efforts of industrialized Arab countries in founding and staffing higher education institutions in less developed states, in the

Arabisation of education in countries like Algeria and Morocco, which are still strongly influenced by the West, and by the provision of grants and stipends to students in public universities. There is a growing tendency to train academic staff in Arab universities rather than abroad; and there is an attempt to unify the old Arab-Islamic and the modern institutions of higher education. Not least, there is the opportunity for development afforded by the growth in national income from the oil industry in half the Arab countries.

Nevertheless, whilst these events provide an unprecedented opportunity and challenge to higher education, they have also created a number of problems. There has been a rapid increase in the number of students, the growth of enrolment in Arab higher education running at an average rate of 12.3 percent between 1960 and 1965 and 7.5 percent between 1965 and 1970, the increase in enrolment in Iraq itself being 12.98, while the increase between 1975 and 1983 was 47.2 as shown in UNESCO, 1985, (p.111-253). As a direct result two sets of problems have arisen, first, over-production of university graduates in some countries and in certain fields, raising the spectre of unemployment among university graduates and second, the lowering of academic standards, mainly due to the failure of higher education facilities to keep pace with the growth of enrolment (Knowles, A. 1978, p.372). What Knowles neglected to mention was the different effects of these problems on universities' finance and their administration, which need to be considered in order to give a fuller picture of educational problems.

With respect to employment opportunities for university graduates the total number of students graduating from higher education institutions around 1970 was in excess of 56,000 of whom 32,500 were graduates of Egyptian institutions and some 7,912 graduates from Iraqi institutions (Republic of Iraq, 1978, p.258). The absorptive capacity of the job market varies from country to country according to their developmental needs and

the newness of their higher education institutions. In this context the Arab countries can be grouped into three categories: recipients, donors and both recipient and donors.

The recipient countries have so far been Algeria, Libya and those of the Arabian Peninsula - the North African countries, mainly for assistance in the Arabisation of government services and instruction, which has necessitated the importation of teachers and specialists in Arabic affairs from the eastern Arab countries. Donor countries have been Egypt, Syria, Jordan and the educated Palestinians. Iraq and Lebanon are both donors and recipients. In the early 1960s there was a comparatively large migration of university personnel from Iraq, but with the subsequent expansion of its universities and plans to use the increased oil revenues in development projects, Iraq has - with some success - attracted its migrant talent back and has invited talented and highly-qualified Arabs of other nationalities to accept teaching, research, and other positions in its institutions. Lebanese and foreign entrepreneurial companies, operating mainly in the countries of the Arabian peninsula, as well as governments and native companies of peninsula countries, have recruited large numbers of Lebanese university graduates for service in the peninsula. Conversely, the American University of Beirut, the Universities of Saint Joseph and Beirut Arab University habitually invite professors from the United States, England, France, Egypt and other countries. Likewise, the numerous European and American companies and banks operating in Lebanon and the Middle East continue to import some of their own expert personnel.

Recipient countries will not remain recipient once their universities have developed and their scholarship students return to them.

Real progress in industry, agriculture and health demands a continuous process of education to change the practices and attitudes, not only

of the workforce, but also of those who teach, sell to, or manage them, in effect, that is to say the whole population. Before 1968 Iraq did not lack the means to build schools or to pay teachers to man them, nor did Iraqi parents and children lack the desire for education and in fact, there was and is such intense pressure on secondary school places that many school buildings are still used in shifts for more than one school. In universities many faculties are grossly over-crowded, because no government dares to restrict entries too drastically. Only the faculties of science, engineering and medicine have been able to resist this tendency, largely because their numbers are restricted by the lack of laboratory space and equipment.

Observers have sometimes asserted that Iraqis have a hunger for education but this is only partly true because many hunger only for the paper certificate gained by education. Even a secondary school certificate, let alone a degree, is believed to confer such status on the possessor that it puts him above practical work. The easiest way to pass examinations is to learn whole passages from textbooks off by heart and this fits in with the traditional view of education as the mere acquisition of knowledge; therefore, little attempt is made to develop insight and independent thought. This state of affairs turns out a large number of arts graduates and secondary school leavers who cannot be employed in jobs of a practical nature or at the level to which they feel entitled.

The current major problem in the Iraqi higher education system is the tremendous increase in the number of students who apply for admission to the universities and technical institutes, the large number of students in the humanities and a shortage of teaching staff and facilities in some fields, especially humanities and management. The government plans to emphasise more strongly the technical and applied fields, limit the enrolment in the humanities and encourage graduate studies in the various scientific and technical fields.

Major trends in the Iraqi higher education system include the expansion of polytechnic education, to train technicians for the increasing demands of the industrial sector, and the establishment of specialised universities such as the University of Technology. Expansion of higher graduate programmes in the applied sciences has also been planned in an effort to align the university graduate programme with the government's industrial and agricultural development plan (Knowles, A. 1978, p.2322).

An empirical study of the organisational structure and administration of the Iraqi University of Baghdad, was conducted by Hamami, Y. (1976). Not only did his research highlight problems of student expansion, inadequate quality and shortage of academic staff in Arab and Iraqi universities, it also showed problems of administration, management and allocation of funds: these problems are, in fact, as serious as the problem of student expansion.

In addition, an article by Al-Ebraheem, H. and Stevens, R. (1980) discussed the organisation, management and academic problems in Arab universities.

Despite the proliferation of Arab universities from four (together with four foreign) in 1939 to fifty-six universities in 1979, the need was recognized for Arab universities to contribute to the regional development process, and the marked tendency of many Arab universities in recent years has been to call upon American and other western universities for consultancy, technological and support services, but little attention has been given to the basic obstacles and problems encountered in organising, managing and developing these universities. Notwithstanding the existence of the Association of Arab Universities, scheduled conferences of Arab university presidents and various academic conferences sponsored by the Arab League, inadequate regional infrastructure and follow-up has resulted in little more than general resolutions. An understanding of the environment

of the Arab university, however, with its unique organisational, management and academic constraints is of considerable benefit not only for those involved in practical co-operation and exchange but for those charged with their administration (Al-Ebraheem, H. and Stevens, R. 1980, p.204).

8.3 IRAQI HIGHER EDUCATION

Iraq is bounded on the north by Turkey, on the east by Iran, on the south by Kuwait and the Arabian Gulf, on the south-west by Saudi Arabia and Jordan and on the north-west by Syria. It has an area of 434,924 square kilometres and the population according to UNESCO (1986, p.11) estimated for the mid-year of 1984 was 15,388,000.

Higher education developed in Iraq in the twentieth century, following the creation in 1921 of an Iraqi State from three former Turkish provinces, Basrah, Baghdad and Mosul. Until the mid-nineteenth century, the only education available had been that provided in traditional mosque schools but in 1925 the first higher education institutions were established to meet the needs of the society for administrators, teachers and professionals. The Iraqi government also began to send a few qualified students to universities in Syria, Egypt, Europe and the United States of America.

The first of Iraq's state universities, Baghdad, was established in 1958 by combining several existing institutions and it became symbolic of the development of higher education in Iraq. In 1967 the two branch campuses of Baghdad University located in Basrah and Mosul became separate universities and in 1968 the University of Sulaimaniya was established in north east Iraq.

Several private higher education institutions were established; the first, Al Hikma, founded in 1956 by the Society of Jesus of the United States of America, in 1968 became part of the state university system and

was absorbed into Baghdad University. In 1963 two other private universities, Al Mustansiriyah and the Peoples' University, were combined to form the university college of Al Mustansiriyah, which also became a part of the state university system.

In summary, the recent establishment of the universities has been as follows: the University of Baghdad (1958), the University of Basra (1967), the University of Mosul (1967), the University of Sulaimaniya (1968), the University of Mustansiriyah (1963), the University of Technology (1975), which made in total six universities in Iraq. In addition, there are two further colleges, the Foundation of Technical Institutes (1972) and the Religious College.

8.3.1 Development of Higher Education: 1968 marked the beginning of a new period of reforms and expansion in higher education. A new government gained power in Iraq and its major concern was the development of new policies for science, higher education and technology which were required to strengthen the Iraqi state.

In the 1970s higher education grew according to policies outlined in Article 4 of the Higher Education and Scientific Research Law of 1970. The aim of the government as stated in Article 4 was to modernise and expand science, technology and research programmes to meet the political, military, economic and social needs of the state and to educate citizens about their nation's history and traditions whilst at the same time, providing training in modern sciences and technology.

Regarding the legal basis of the educational system, higher education is regulated under the terms of the Higher Education and Scientific Research Laws No. 132 of 1970 and No. 55 of 1983 which define the activities of the Ministry of Higher Education and Scientific Research. This will be explained in the section on higher education development and organisation.

8.3.2 The Current Reforms of Higher Education: During the past decade higher education faced the need for an increasing number of academic staff graduating from various western universities and this gave them the unique opportunity of developing the institutional environment. There existed under the Ministry of Education a multiplicity of colleges and institutions of different levels and the authorities realised that the complexity of the country's system did not truly meet the needs of national development. Therefore, under the Government Resolution No. 342 of 1969 the Revolutionary Command Council abolished all institutions of higher learning and organised a new higher education structure, a resolution which was seen as one of the most decisive academic and administrative reforms of the higher educational system.

Furthermore, Law No. 132 of 1970 was promulgated to establish the Ministry of Higher Education and Scientific Research. This step was intended, primarily, to solve the confusion of higher education as well as to implement national policy and national planning programmes for higher education. The same law provided for the creation of the Council of Higher Education and Scientific Research. The following are the main duties of the Higher Education Council of the Ministry of Higher Education:

1. Proposing a supreme policy of education, culture, science and technology, considering its co-ordination and integration with the proposed social and economic programmes of the State.
2. Establishing a general policy to encourage co-ordination and development of curricula, publications, theoretical and applied research in universities, higher institutions and centres of scientific research.
3. Preparing the necessary plans to develop the scientific standards of the faculty and discovering the appropriate means for their achievement.
4. Proposing general regulations for university education.

5. Recognising Arab and foreign academic institutions and providing the basis for the equivalence of scientific degrees and diplomas.
6. Specifying scientific and honorary degrees, titles and diplomas in the Republic of Iraq and the conditions for obtaining them.
7. Approving the general curricula for higher education and scientific research.
8. Specifying the general requirements for admission into institutions of higher education.
9. Evaluating the conditions of scientific institutions; supervising their cultural and scientific activities, and providing the necessary recommendations and suggestions to achieve the stated objectives.
10. Proposing the establishment of new higher educational institutions and approving any change in the existing ones.
11. Auditing and providing its opinion on the Ministries' budget for the proposed projects.
12. Presenting suggestions to the Ministry of Higher Education and Scientific Research and evaluating what the Minister submits to the Council
13. Studying annual reports of the formal agencies and establishing a comprehensive annual report concerning scientific activities, their success and accomplishments, as well as their faults and difficulties. In addition the Council will present suggestions to the Ministry.

The institutions of higher education that have become part of the Ministry of Higher Education are as follows; the University of Baghdad, 1958; the University of Al Mustansiriyah, 1963; the Universities of Mosul and Basrah, 1967; the University of Al Sulaimaniyah, 1968; the Foundation of Technical Institutes, 1972; and the University of Technology, 1975.

8.3.3 Higher Education Organisation: The Ministry of Higher Education was founded in 1970 to implement the National Education Policy regarding public and private institutions of higher education; to administer educational missions and studies abroad and to conduct international, educational and cultural relations. However, the Ministry of Higher Education's general functions are:

- Establishing guidelines for long-term planning of higher education in accordance with national policy.
- Assisting and encouraging higher studies and scientific research.
- Planning and training of academic staff, scientists and specialists needed for higher education and research.
- Strengthening cultural relations with other countries.
- Organising exchanges of experts, scientists and university staff.

The fundamental objectives of the Ministry of Higher Education under Law No. 132 of 1970 are as follows:

- The implementation of qualitative change in science and in higher education which would develop their curricula and their organisations to modern scientific and technical levels, taking into consideration the achievement of co-ordination between the scientific movement and the State's general plans.
- Increasing the variety of scientific studies and research in the light of developmental projects to keep pace with accelerating modern scientific and technical progress.
- The generation of qualified scientists and competent specialists, encouraging creative talents and ensuring the scientific cadre of appropriate protection whilst rewarding valuable original work.

The Law of Higher Education No. 55 of 1983 complemented the previous law and its aim was to raise the standard of the scientific movement and to develop higher education whilst protecting the existing scientists and writers and to give a full interpretation of the laws of higher education (Ath-thawra, Tuesday, 7th June, 1983, No. 4768 in Arabic).

Item three of Law No. 55 of 1985 clarified the purpose of the law by which the Ministry executes the government's policy of education, culture and science by the following steps.

- One: Aggregate scientific planning of higher education.
- Two: Development of higher education studies and scientific research, technological studies and preparing changes in the academic ladder and in the administration of training and relevant development.
- Three: Monitoring scientific research and development and protecting experimentation.
- Four: Ensuring scientific research by providing adequate motivation, funds and salaries relative to the value of output.
- Five: Protecting the Arabic language within education and developing it within the national development while giving consideration to the languages of other nationalities.
- Six: Planning the translation and interpretation of publications, textbooks, etc., and promoting the writing of these.
- Seven: Providing scholarships to foreign students to develop national plans.
- Eight: Developing the relationship - scientifically, technologically and educationally - between the various Arabian institutions necessary to achieve unity intellectually and culturally.

- Nine: Organising co-operation with developed countries and their institutions to further national development and world understanding.
- Ten: The endowment of scholarships within the Republic of Iraq to students, academic staff and researchers involving co-operation with Iraqi officers and authorities (Al. thawra, Tuesday 7 June, 1983, No. 4768)*

Figure No. (8-1) illustrates the administrative organisational structure of the Ministry of Higher Education.

The Council of Higher Education and Scientific Research was founded in 1970 to act as the highest administrative academic authority for planning and co-ordinating higher education. This Council is headed by the President or the authorised deputy of the Iraqi Republic.

Other members are the Minister of Higher Education as the Vice-President; the Presidents of public universities; the President of the Foundation of Scientific Research; the Presidents of Scientific Centres in the Ministry of Higher Education; the Presidents of the Teachers' Unions; a representative of the universities' students; the General Secretary of the Council and a specialist member of different disciplines chosen by the President of the Republic.

From this arrangement the national authorities prescribe all higher educational activities. The Ministry of Higher Education in co-ordination with other governmental sectors formulates higher educational plans and delegates the implementation of authority to its sub-units. The control of higher education policies and activities is accomplished through:

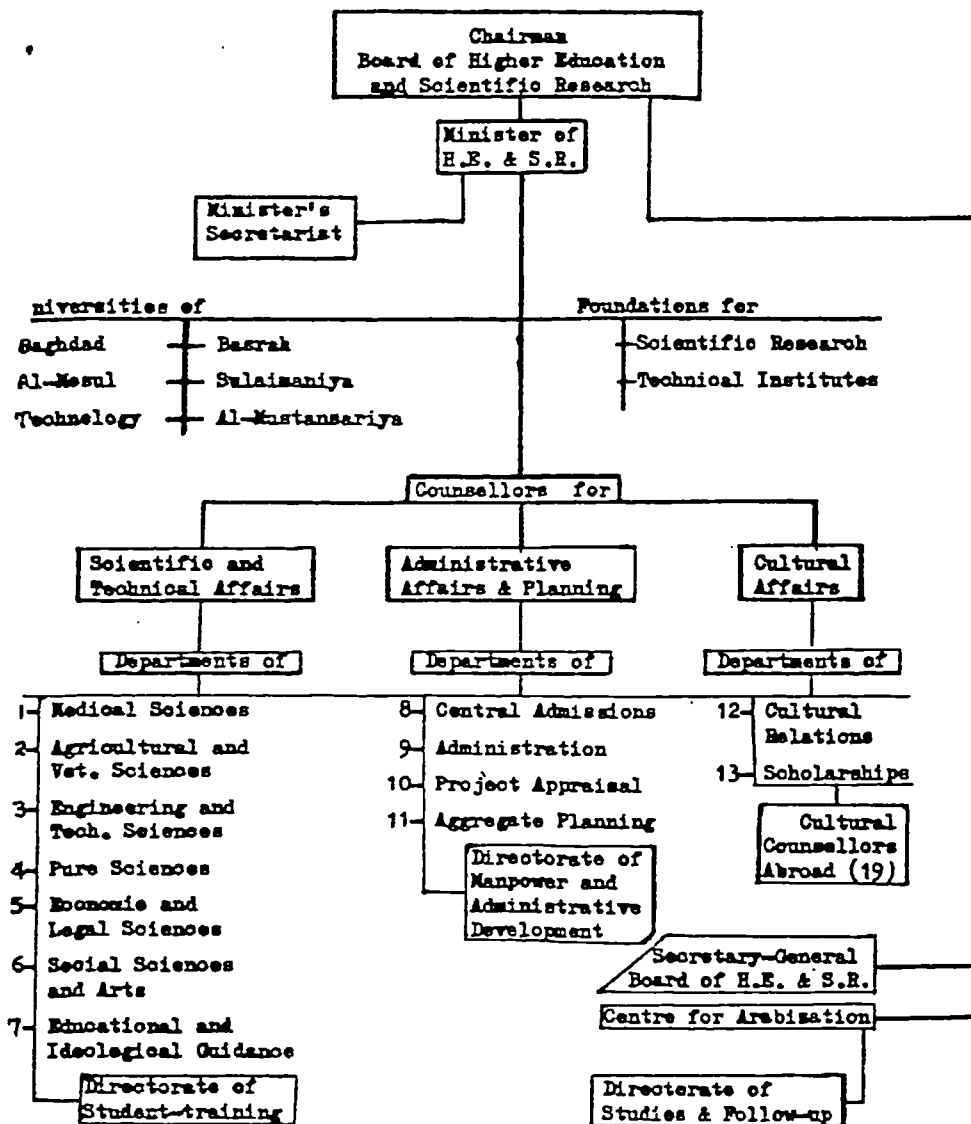
* All Laws and Regulations in this chapter have been translated from the Arabic language by the researcher.

FIGURE NO. 8-1

ORGANIZATION CHART

Ministry of Higher Education
and Scientific Research

(June 1977)

Directorates under the respective Departments

3.1 Central Registration; 8.2 Admissions & Transfers; 8.3 Guidance & Follow-up;
 3.4 Administrative Affairs; 9.1 Accounts; 9.2 Administrative Services & Follow-up;
 9.3 Personnel; 9.4 Legal Affairs; 9.5 Mail & Filing; 9.6 Library & Documentation.
 10.1 Finance & Investment; 10.2 Coordination & Follow-up; 10.3 Appraisal of LayOuts.
 11.1 Plan Aggregation & Coordination; 11.2 Statistics; 11.3 Electronic Computer.
 12.1 Agreements; 12.2 Arab & Foreign Students; 12.3 Exchange of Professors;
 12.4 Information; 12.5 International Organizations and Associations & Scientific
 Unions. 13.1 Scholarships (Homeland & East); 13.2 Scholarships (Europe);
 13.3 Scholarships (America); 13.4 Equating of degrees; 13.5 Administration.

1. The Ministry of Higher Education advice to the universities.
2. The superior-subordinate responsibilities through their chain of command.

Established in each university is a directorate general of higher education and its committee is headed by the Minister of Higher Education and Scientific Research. The committee meets monthly to discuss the higher education plan within the central orientation of university higher education and its co-ordination (Ath-thawra, No. 6113, p.5 February 19, 1987.)

The Iraqi President and the central government are showing concern for the effectiveness and efficiency of the public sector. An example of this trend is seen in reports of a visit by the Iraqi President on Thursday 3 April 1987 to the Ministry of Housing and Construction, during which he met with the Minister of Housing and Construction and ministry under-secretaries and director-generals. The President directed officials to reconsider the organisational structure of the ministry and its authorities and departments in the light of the ministry's new function and new administration and economic programme to overcome red-tape and indeed anything that might impede effective initiatives. He called in addition for the dissolution of the ministry's authorities and the formation of specialised boards or companies according to a new system of incentives, work and power. After discussion between them, the President instructed the Minister to prepare new draft laws aimed at achieving that objective and submit them to the presidential office within thirty days for the final decision to be taken regarding them. (The Baghdad Observer, No. 6136, Friday April 3, 1987, p.1).

The President has visited other ministries for the same purpose, forcing the ministries and their affiliated authorities to reconsider their organisational hierarchy. Soon the Ministry of Higher Education will find

itself required to restructure its organisation and financial structure to improve its activities within central government requirements.

Therefore, this study comes at a time when it is necessary to review the internal efficiency of the public sector, of which the universities are part.

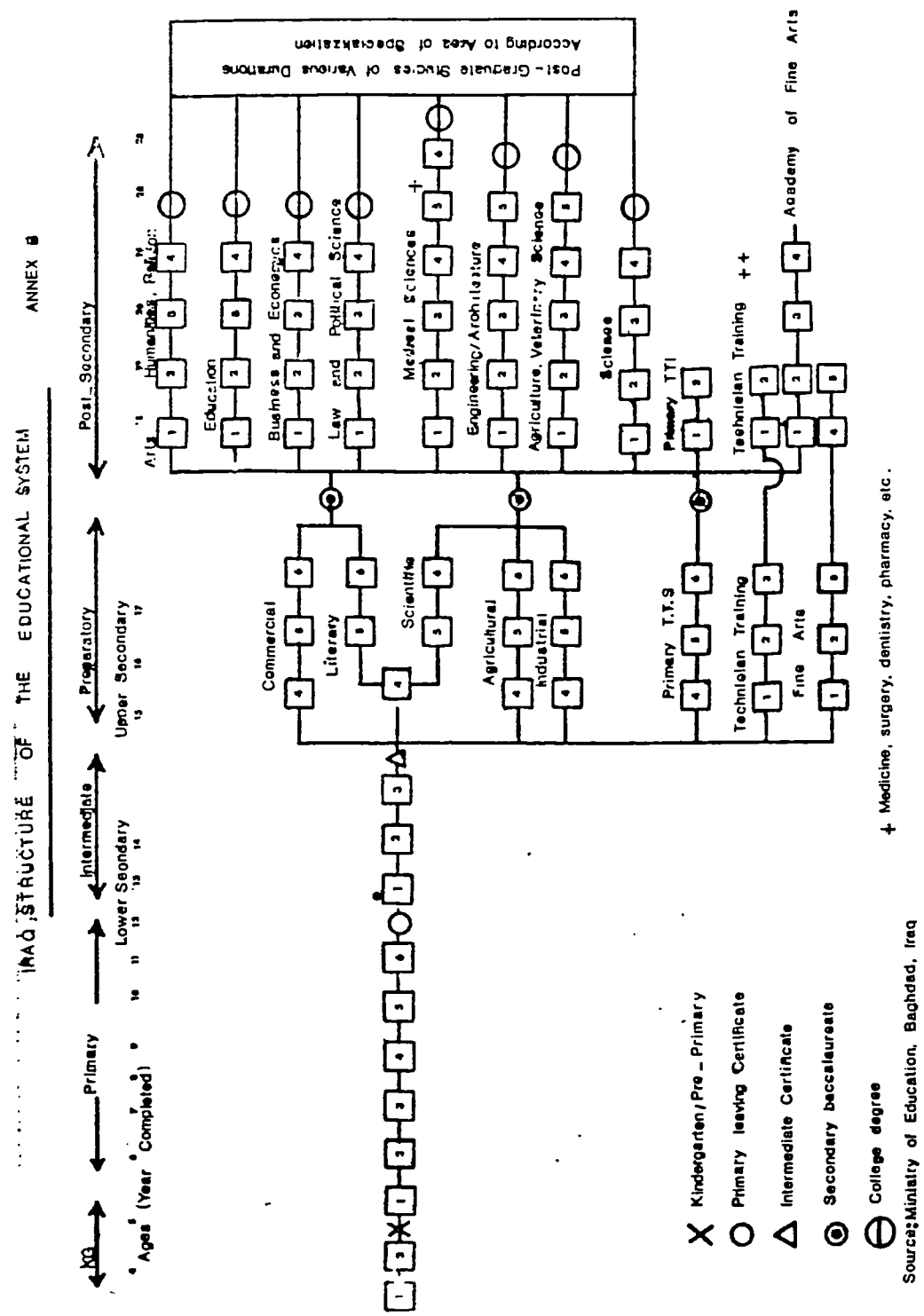
8.4. THE GENERAL EDUCATIONAL SYSTEM

The structure of the educational system shows that pre-school education, based on a two-year kindergarten programme forms the lowest rung of the education ladder in Iraqi education. Primary school is a six year programme; secondary is also a six year period which is divided into two stages - three years intermediate and three years preparatory, providing common and general education courses for all students, and being sufficiently diversified to cater to individual student interests on the one hand and to the demands of the economy on the other. The preparatory stage is divided into two main sections; academic and vocational. The academic section provides one year of general education, at the end of which students may specialise in either literary or scientific subjects for a period of two years. The vocational section includes three streams, agricultural, commercial and industrial.

The Ministry of Higher Education in Iraq provides Higher Technical Institutes, for study of two or three years duration, while colleges and universities offer a four year programme of study, except the College of Medicine where the programme of study is six years, and the Colleges of Dentistry, Pharmacy and Veterinary Medicine which offer five year programmes.

The educational year in Iraq begins in September of one year, ending in June of the following year. This applies to all levels of education though minor variations occur. Figure No. (8-2) shows the levels of the

Figure No. (8-2)
The General Educational System



education system, and specifically higher education - universities and other institutions.

8.5 STUDENT ADMISSION REQUIREMENTS AND DEVELOPMENT

The structure of Iraq's educational system is divided into the elementary and secondary schools, covering a total of twelve years (six elementary, three preparatory and three secondary, Figure No. 8-1). At the end of each stage the student sits a public examination administered by the government, on passing which he is awarded a certificate.

The minimum requirement for admission to any Iraqi institution of higher learning is the certificate which the student receives after passing the public examination administered by the government at the end of secondary school.

Students apply during July to the central admissions office, which is part of the Ministry of Higher Education and acceptance depends on the marks obtained on the Secondary School Certificate. Each college has its own requirements. Science Colleges accept applications only from students of the science section of general secondary schools, who attain prescribed grades in certain subjects, particularly science courses. On the whole, Science Colleges are more selective than others in their admission requirements, and they generally receive the better qualified students.

The required period of attendance for the under-graduate programme is four years, with the exception of five years at the College of Pharmacy, the College of Veterinary Medicine and the Architectural Department at the College of Engineering, and six years at the College of Medicine. The period of attendance for the Master's programme is between one and a half and three years and for the Doctor's programme it is between two and four years.

The academic year runs from September to June. There are two terms, each of approximately fifteen weeks, with a mid-year break taken at the end of February/beginning of March. This system applies to the public sector in higher education at all levels. Student figures in the universities, colleges and technical institutes have expanded and developed rapidly during the past two decades and Article 3 of the Higher Education and Scientific Research Law of 1970 is still applied, whereby every citizen who meets the admission requirements of higher education institutions has a right to education.

The number of students at all levels of higher education rose, according to UNESCO Statistic Yearbook of 1986, to 126,715 (40,915 female) in 1983, compared with 86,111 (28,267 female) in 1975.

Figure No. (8-3)

Growth of Students in the Universities, Colleges and Technical Institutes

<u>Year</u>	<u>Total</u>	<u>Female</u>	<u>Annual Increase Over 1975 (Percentage)</u>
1975	86,111	28,267	-
1980	106,709	33,869	23.9
1981	116,294	36,036	35.1
1982	122,743	38,943	42.5
1983	126,715	40,915	47.2

Source: UNESCO: "Statistical Yearbook", Table 3.11, 1986, pp.111-253.

This trend has continued in recent years. 16,244 students (male and female) were accepted for 1986/87 to different scientific fields as undergraduates, while the University of Baghdad accepted 1,008 post-graduate students (male and female) for diploma, master and Ph.D. The addition of 31 different subjects brought the total to 146 subjects in the University of Baghdad. (Al-Jumhuriya, Tuesday, January 20, 1987, p.5). In the same year, 1986/87, Al Mustansiriyah University accepted 4,025 students (male and female)

divided between the Colleges of Economics and Administration, Medicine, Engineering, Science, Fine Art, Art and Education. An increase of students is new to the University of Basra which accepted 3,062 students (male and female) showing a vast increase over the acceptance of the last academic year (Ibid, 1987, p.5). The University of Basra also accepted 175 students (male and female) to the new doctorate degrees in Chemistry, Biology and Art.

It is still the non-scientific field that has the greatest number of students, for example the University of Baghdad's Department of Education, and the subject of English reached 977 students (male and female) for the year 1986/87. The number of students is the highest in the English department since its establishment, necessitating its division into a morning and evening class to cover academic duties and responsibilities (Al Jumhuriya, Tuesday, March 3, 1987).

8.6 ACADEMIC STAFF

The faculties of the universities of Iraq are divided by rank into professors, assistant professors, instructors or lecturers, and graduate assistants, or demonstrators as they are usually called.

All teaching staff in the Iraqi universities are legally civil servants and are governed essentially by the same rules and regulations as those that apply to employees of government departments, but are controlled by the Ministry of Higher Education.

The number of academic staff in higher education increased with the growth of student enrolment. The academic staff increased, as shown in the UNESCO Statistic Yearbook of 1986, to 7,176 in 1983 (1,341 female) which is about double that of the year 1975 (3,801 academic staff). However, Figure No. (8-4) shows an increase from 76.3 in 1980 to 88.8 in 1983. Although student enrolment doubled between 1980 and 1983 the increase in academic staff was not proportionate (Figures (8-3) and (8-4)).

Figure No. (8-4)Growth of Academic Staff in the Universities, Colleges and Technical Institutes

Year	Total	Female	Annual Increase Over 1975 (Percentage)
1975	3,801	748	
1980	6,703	1,107	76.3
1981	7,058	1,153	85.7
1982	6,893	1,265	81.3
1983	7,176	1,341	88.8

Source: UNESCO "Statistical Yearbook", Table 3.11, 1986, pp.111-253.

Figure No. (8-5)Number of Academic Staff and Students and Total Ratio of Academic Staff to Students in Iraqi Universities for the Academic Year 1987

Universities	No. Teachers	No. Students	Ratio of Total Staff to Students ***
Al Mustansiriyah	328	11,000	1:33.5
Baghdad	1,500	19,300	1:12.9
Technology*	429*	7,384**	1:17.2
Basrah	6.6	13,600	1:22.1
Mosul	1,200	22,000	1:18.3
Sulaimaniya	404	6,300	1:15.6
Total	4,477	79,584	1:17.8

* Full-time 269 and 160 part-time

** 200 post graduates are not included

*** Calculated to the nearest figure

Source: Europa "Iraq" in the World of Learning 1987, the thirty-seventh edition, England, 1987, p.682

Having described the development of higher education in Iraq and given brief figures of students and academic staff it is now time to analyse the number of academic students of recent years. Figure No. (8-5) is, therefore, useful as it shows the total academic staff to total student ratio, for each university in Iraq. The ratio for 1987 is the lowest in Al Mustansiriyah and Technology universities which are 1:33.5 and 1:22.1 correspondingly. Nevertheless, the average for all universities increased to 1:17.8 due to varying admissions and capacities of universities.

8.7 UNIVERSITIES' DEGREES AND DIPLOMAS

Iraqi universities award degrees and diplomas after courses of two to six years duration, leading to the B.A. or B.Sc. in different academic fields; Humanities, Religion, Education, Accounting and Business, Economics, Law and Political Science, Medical Sciences, Engineering, Agriculture, Science and the Fine Arts. Most Iraqi universities offer similar degrees in the various fields of their academic departments (colleges), except the Technology University which specialises in engineering.

Within the last ten years Iraqi universities have begun to award the degrees of Master of Arts, M.A. and Master of Science, M.Sc., two years after the Bachelor degree. The expansion in higher degrees has continued with the support of the Ministry of Higher Education and the M.Sc. and Ph.D have been established in most universities. For instance the University of Mosul began a Ph.D degree in 1987/88 in Arabic Economics (Ath-Thawra, Feb. 26, 1987, p.8).

It was decided by the Technology University to establish Ph.D degrees in three other scientific fields; Electronics, Construction and Chemical Engineering from the following year. The director general of the university announced that 1987/88 will show an expansion in the fields of study from 19 - 25 and that 170 students would be admitted to study for a higher degree

compared with 132 students this year (1987). A total of 875 students (male and female) have been awarded the Masters degree at the university since its establishment (Ath-Thawra, February 19, 1987, p.5).

New fields of study have been indicated by the Ministry of Higher Education and Scientific Research in universities from next year and students will be offered Ph.D degrees in Statistics, Administration and Archaeology in Baghdad University, Oceanography, Administration and Economics in Basra University, and Electronics, Construction and Chemical Engineering in the Technology University.

In addition the University of Al Mustansiriyah and others will offer Masters degrees in Medical Law, Administration, Accounting and Chemical Engineering from the next academic year (Ath Thawra February 9, 1987, p.5).

8.8 IRAQI UNIVERSITIES' CURRICULA

Since 1970 the Ministry of Higher Education and Scientific Research has taken the responsibility of unifying the higher education curriculum. The first conference on university education in Iraq was held on June 14 - 18, 1971, in Baghdad in order to prepare the university's curriculum, and to recruit and prepare university teachers.

One of the priorities of the Ministry of Higher Education and Scientific Research after the establishment of the law of 1970 was to review all previous curricula which had been used in universities in order to make uniform the curricula of all departments and to ensure consistency at all levels of study. In addition it was decided to apply the new curriculum to all the similar academic departments in all universities in Iraq (Ministry of Higher Education and Scientific Research, 1979, p.11).

Furthermore, the University of Technology undertook during 1986 a review of all curricula studies, including comparisons with other world universities and following development achieved in practice in technology and industry (Ath-Thawra, February 19, 1987, p.5).

The curriculum of each university is prepared and sent to the Ministry of Higher Education for approval; it is prescribed and in general there are no elective courses for selection by the students, though there are a few colleges that have variations in their curriculum. The students are not allowed to take courses outside their majors and the methods of university education may produce students with more academic knowledge about their specific major, but lacking a sense of their own identity and creative ability.

The traditional patterns of university education still predominate in Iraqi universities. The academic year, which lasts nine months, is divided into two sections; theoretical and practical (laboratory). Credit points are awarded on hours spent in each and are totalled at the end of the nine months. The hours of attendance each week are normally 15 - 25. For example, in the field of accountancy and business administration, the students must take seven prescribed courses each year, with no opportunity for them to choose courses outside their majors. There are two main examinations during the academic year. The first one is a mid-year examination which is normally taken in January and the final examination is normally taken in June. Students failing one or two courses must resit the examination at the end of the summer. A second failure necessitates repetition of the whole academic year. If a student fails a course again the following year, he is dismissed from the college. Thus, student effort is entirely directed towards passing the first and final examinations. More recently, however, students failing only one course have been allowed to pass to the next year, on condition that they retake the failed course. They will not pass the second year if they fail to pass all the first year courses.

8.9 IRAQI FINANCE AND HIGHER EDUCATION

A new 5-year plan was begun in 1976 and it was expected that oil revenues would suffice to fund investment in capital projects at an increased rate with greater emphasis being placed on education and training. A slight hiatus in the oil revenue of 1977/78 disappeared as the moratorium on oil prices dissolved. ID 1,051 million was allocated to the educational sector for this period, the founding of a technological university and massive investment in technical education at all levels were the principal means by which the government would become independent of foreign expertise and so reach a level in technology that would enable the country to meet the changes anticipated towards the latter part of the century. Industrial growth, the mechanisation and intensification of agriculture and the accompanying expansion of support services (notably transport, road, rail and port facilities) received heavy investment for improvement - necessitating the rapid training of managerial, technological and technician cadres capable of ensuring that targets were reached. Failure to meet the targets set for the previous 5-year plans was attributable largely to the lack of the necessary human resources, particularly at the technician and submanagerial levels. In 1980 it appeared unlikely that the targets set in 1976 would be met by 1981 - again, for the same reasons as in the previous 5-year plans.

Development has taken place within a series of 5-year plans (FYP). The 1981-85 FYP placed emphasis on developing industry, transport and communications, construction, agriculture and education, envisaging expenditure of not less than \$133 billion. However, the priority claims of the war meant a re-evaluation of development expenditure and much of the plan remained unfulfilled. The recently announced FYP for 1986-90 calls for significantly less social spending, more investment in industry and less government control over the economy ("Iraq: An Economic Report" published by the National Westminster Bank, October 1986).

8.9.1 Financial Allocation and Ordinary Budgets: The Iraqi economy enjoyed rapid expansion during the 1970s particularly during the period 1974-80 when oil exports were about 3.3 million barrels per day (bpd) which allowed Iraq to build up some \$35 billion in international reserves. Initially the country's development plans were not affected by the outbreak of war in September 1980 and a high level of economic activity was maintained; by the start of 1982, however, the economy was starting to show signs of fluctuation (Iraq: An Economic Report, National Westminster Bank, October 1986). The same report shows that in 1985 the Iraqi GNP was £1,355 compared to £6,215 of the United Kingdom.

The first reports of the budgetary allocation for the year 1982 suggested that the pace of development would slacken only slightly and that shortages of funds were not the only reasons for the government's desire to pull back the rate of project adoption and implementation. The investment programme would take some ID 1,700 million (\$23,700 million) and the ordinary budget was expected to match this exactly. The investment programme was no less than 32 per cent up on the previous year's allocations, while the ordinary budget was 38 per cent up. The income estimates for the budget were completed before the closure of the oil pipelines through Syria and other problems affecting Iraqi oil exports, perhaps causing some modification of the budget. During the announcement of the budget it was confirmed that priority would be given to completion of those projects already under way and to development that enabled better use to be made of existing plant, with emphasis being placed on schemes designed to increase direct output within Iraq (The Quarterly Economic Reviews Service 1982, p.12).

Since then, however, the capacity of the Turkish pipeline has been expanded through the installation of new pumping stations and other technical modifications. Oil exporting capacity has been raised further by the completion of a link from the country's southern oil fields to Saudi Arabian

pipelines to the Port of Yanbu on the Red Sea, and oil exports at present are reportedly running at approximately 1.6 million bpd. Contracts have been placed for the construction of a 500,000 bpd pipeline from the Kirkuk oil fields to Turkey and this is scheduled for completion early in 1987.

From this brief description of the Iraqi economy it can be seen that the oil industry is still fundamental to the ordinary budgets of Iraq; looking to the overall economy, it shows that financial allocation has fluctuated since September 1980 because of the war situation, a fluctuation which has affected the education sector, specifically higher education and the Iraqi universities.

In several meetings to discuss the new budget for 1983, the First Deputy Prime Minister stressed the significance of future measures to strengthen the economic pillars and social structure of the country. He said such measures would consolidate the war effort as well as the victories realised by Iraq in the battle against the Iranian aggressors (Melcon, J. 1983, p.11). Hence, the budget for the year 1981, excluding the development plan, was ID 5.025 billion compared to ID 4.627 billion in 1980, which showed an increase of nearly 9 per cent. Allocations for annual investment and the development plan amounted to ID 6.743 billion. This figure shows an increase of ID 1.503 billion or 28.7 per cent over the allocations of 1980 which totalled ID 5.24 billion (Melcon, J. 1983, p.11).

Summing up the goals of the expenditure policy in the new budget, the Finance Minister said that it would concentrate on deepening Iraq's economic and social mainstays, avoiding extravagant spending and orienting allocations towards activities that would enhance efficiency and increase production capacity in the state establishments. In this connection, the Iraqis were also urged to limit unnecessary spending and to abandon certain wasteful methods in their daily life (Ibid, 1983, p.12). This appeal was in harmony with the Finance Minister's statement that an appropriate standard of living

should be guaranteed to the citizens - a step which could be attained through continued subsidisation of basic commodities and services whether locally made or imported.

On the other hand, the investment plan, the third phase of the 1981-1985 National Development Plan, was to be implemented as scheduled and naturally the required allocations were set for it (Melcon, J. 1983, p.12).

The Minister of Planning announced to the official newsagency on July 25, 1987, that Iraq had achieved a high level of national economic development and aggregate development, with rapid expansion in many fields.

The development of the national economy can be illustrated by following the changes which have occurred since 1968. Gross domestic product has increased by annual average 1968-1986 of approximately 15.4% or excluding oil 17.6% approximately. The Minister of Planning announced the average development of the main economic sectors as follows:

Distribution of Gross Domestic Product by Economic Sectors

Agriculture	15.3%
Manufacturing Industries	15.3%
Electricity and water	18.4%
Construction	20.2%
Transport, Communication	15.8%
Social and personal service development	17.0%

The Minister of Planning observed that statistics show that national income in Iraq has increased during the period of 1968-1986 by an annual average of 15.9%, per capita income has increased from ID 91 in 1968 to ID 718 in 1986, an annual increase of approximately 12.1%

The value of fixed capital formation due to investment in the national economy was in 1968 approximately ID 142.9 million (in current prices). Due

to increased economic capability and resources it has reached a current level of ID 2727.6 million, an average annual increase of 17.8%

The change in gross domestic fixed capital formation at current prices in the same period 1968/1986 is as follows:

Economic Activities

1. Agriculture	18.9%
2. Manufacturing Industries	10.5%
3. Electricity and water	23.7%
4. Construction	13.0%
5. Transport and communication	19.7%
6. Service Development	16.3%

This development reflects the level of investment in economic activities and direct resources which has contributed to the expansion of the Iraqi economy.

Future expansion is expected with development projects undertaken in various sectors to maximise production activities (Ath-Thawra, July 25, 1987, No. 6269, p.4).

8.9.2 The Iraqi Universities' Funds and their Expansion: All levels of higher education are free, and free room and board are available to all students. Free textbooks are provided, and though library and laboratory fees are charged at some educational institutions, they are refundable. In February 1974, the Revolutionary Command Council passed a resolution making education at all levels and of all types totally free of charge (Republic of Iraq, Ministry of Education, 1979, p.7). This step has enabled students of both sexes in all institutions of higher education to obtain free education, although students at some colleges are required to sign contracts to serve the government in return, especially at the higher degree level.

Iraqi higher education is administered and financed by the Higher Education Ministry throughout the central government's budget. As student numbers have risen, necessitating increased academic and administrative staff, expenditure has risen dramatically. Universities and their affiliated academic departments estimated their own budgets within a structure established by the Ministry of Higher Education and the Council of Higher Education, Article 19, Law No. 132 - 1970.

The official organisations have their integral entities, the administrative and financial independence and their own budgets. For the attainment of their objectives as specified in this Law they are entitled to possess transferable funds and assets and accept trusteeships, contributions, donations and bequeathments, if their sources come from within Iraq. In cases where the source is from outside Iraq they are not entitled to accept them unless they get the approval of the Minister.

Article 20 Law No. 132 - 1970

Financial orders in official organisations as well as all financial measures and transactions are subject to inspection and auditing by the department of financial supervision.

At present universities follow the law of 1970 and the amended law 55 of 1983 in estimating their financial fund from the university level to Ministry of Higher Education, as will be discussed in the following chapters.

It would seem useful, therefore, to elaborate Figure No. (8-6) which shows the allocations of National Development plans from 1965 to 1982, in particular the percentage of change in allocation to education and scientific research over these years.

Although there is a shortage of very recent publications and official data concerning actual expenditure on higher education, the Figure (8-6) shows increased allocations to higher education.

Public expenditure on education in Iraq as given by UNESCO, 1986, showed increases until 1980, when it reached 298,000, after which it started

Figure No. (8-6)Allocations of National Development Plans 1965-1982

(ID 000)

<u>Plan of Programme</u>	<u>Year</u>	<u>Grand Total</u>	<u>Education Scientific Research</u>	<u>Percentage Increase over 1978</u>
Allocation of the five year economic plan 1965/69	65/69	631757		
National development plan 1970/74	70/74	1169000		
Investment programme	1977	2377055	79900	
Annual Plan	1978	2800000	119000	4.29
Annual Plan	1979	3282000	185000	6.60
Annual Plan	1980	5240000	298000	10.64
Annual Plan	1981	1360000	272125	9.71
Annual Plan	1982	2393489	182171	7.60

Source: The Republic of Iraq, Ministry of Planning, Central Statistical Organization, Annual Abstract of Statistics, 1982 (Table 612) (in Arabic).

Figure No. (8-7)Public Expenditure on Education

YEAR	TOTAL EDUCATIONAL EXPENDITURE			CURRENT EDUCATIONAL EXPENDITURE			
	AMOUNT	AS % OF GROSS NATIONAL PRODUCT	AS % OF TOTAL GOVERNMENT EXPENDITURE	AMOUNT	AS % OF THE TOTAL	AS % OF GROSS NATIONAL PRODUCT	AS % OF CURRENT GOVERNMENT EXPENDITURE
1976	204,493	4.3	6.9	166,763	76.2	3.3	10.5
1980	298,000	-	-	-	-	-	-
1981	272,100	-	-	-	-	-	-
1982	-	-	-	457,378	-	-	8.5

Source: UNESCO, "Statistical Year Book", 1986, p.iv-12.

to decrease. Figure No. (8-7) gives the latest figures on total education expenditure and current education expenditure.

Iraqi universities face a continuing increase in student numbers because of government expansion policies but the financial situation is unsettled and funds to universities fluctuate; therefore, as universities totally depend on government funds their micro planning and decision making can also be expected to be unsettled.

Later this research will investigate how universities use their allocation of funds and the related accounting system.

8.10 SUMMARY

This chapter reviews Iraq's education system, especially its higher educational provision with particular reference to student admission requirements, academic staff and university degrees. Some emphasis is given to economic trends and the allocation of resources.

Numbers of students in higher education are increasing, and a wider range of degrees is being offered. Those factors have led to increased staff and administrative burdens.

Degrees and curricula are uniform throughout Iraqi universities because they are regulated by law.

Financial planning is on a quinquennial basis. Resources have fluctuated since 1980, although considerable achievements in the economy as a whole have been claimed. Recently, allocations to higher education have decreased.

With the expansion of higher education in an unsettled financial situation, it is likely that education will shortly be the subject of government demands for reorganisation. A review of university administration and finance is therefore imperative.

CHAPTER NINEIRAQI ACCOUNTING IN THE PUBLIC SECTOR - HIGHER EDUCATIONContents

- 9.1 INTRODUCTION
- 9.2 THE PROBLEMS OF ACCOUNTING IN DEVELOPING COUNTRIES - A LITERATURE REVIEW
- 9.3 ACCOUNTING SYSTEMS IN IRAQI HIGHER EDUCATION
- 9.4 IRAQI GOVERNMENT ACCOUNTING AND ITS CONSTRAINTS
 - 9.4.1 The Classification of the Government Budget
 - 9.4.2 The Roles of the Ministry of Finance in the Development of Accounting Systems
 - 9.4.3 Government General Treasury
 - 9.4.4 Problems in Government Accounting
- 9.5 UNIFORM ACCOUNTING SYSTEMS
 - 9.5.1 The Uniform Accounting System in Iraq
 - 9.5.2 The Uniform Accounting System of the Universities
 - 9.5.3 The Budget Process in the Universities
 - 9.5.4 University Journals and Records
 - 9.5.5 Reporting System in Higher Education
- 9.6 THE ACCOUNTING SYSTEM IN THE PRIVATE SECTOR AND ITS RELATION TO HIGHER EDUCATION
- 9.7 SUMMARY

CHAPTER NINEIRAQI ACCOUNTING IN THE PUBLIC SECTOR - HIGHER EDUCATION9.1 INTRODUCTION

This chapter discusses the Iraqi public sector accounting system with particular reference to higher education. Firstly it reviews literature on developing countries' accounting systems and their problems. The remainder of the chapter is devoted to an account of the public sector accounting system and its application to Iraqi higher education.

9.2 THE PROBLEMS OF ACCOUNTING IN DEVELOPING COUNTRIES - ALITERATURE REVIEW

Accounting serves many functions. At one level it is a recording instrument which enables corporations to arrive at measures of profit or loss. It can then be used for reporting information to others and enables corporations to be subject to a financial audit. With the upward and downward expansion of its scope, it can be applied to the activities of public authorities and to national government accounting, and can be used to measure the efficiency of corporations and as a management tool may be incorporated into the accounting system of even the smallest business (Murray, G. 1981, p.17).

Accounting contributes directly to the process of making more effective use of an organisation's resources, by a number of means:

1. Providing external financial reports to creditors and investors to enable them to compare alternative investment opportunities.
2. Providing accounting and non-accounting information to the government to enable it to manage and plan for the public sector, e.g. tax collection.

3. Providing accounting and non-accounting information internally as a basis for management decision-making.

These benefits are not always recognised in developing countries. The comparatively low status formerly accorded to accounting was discussed by Seiler, R. (1966, p.654) who argued:

The level of business education and training in the non-industrialised nations frequently is such that few managers recognize the central purpose of accounting as an information-gathering methodology. It is more frequently viewed as a legally required nuisance, or a means of deceiving the tax authorities. Consequently, the accountant does not enjoy a prestigious position, and his work is considered a low-level, clerical task.

The attempt to build a sound accounting system and practices necessitates that public investors, governmental administrators and management should be educated to use accounting information as a tool for planning and as a basis for rational decision-making and not only for control purposes. If this role is not understood, accounting tools and techniques cannot be effective in the economic development process. Seiler emphasised that the probability of making distorted economic decisions is intensified without an adequate accounting system. He says (p.653):

Each time a production, pricing or investment decision is made without adequate knowledge of its consequences, the probability of misdirected effort, wasted resources and economic loss is increased. Thus, economic stability is heavily dependent upon the aggregate managerial ability available within the economic structure.

Developing countries' professional institutes generally tend to be weak, yet there is a need for a professional institute to set standards for accounting and auditing, codes of conduct, training, qualifications and examining, dissemination of information etc. The institutes may suffer from insufficient professional interest, inadequate governmental

encouragement and lack of support by private and public institutions. Enthoven, A. (1980, p.76), in his article "Statements in Quotes", categorised developing countries' problems in many branches of accounting; enterprise accounting and auditing, government accounting, macro accounting and education, training and research. He argues the significance of good micro and macro accounting for economic development and the scope for accountants at all levels - practising or in education - to play a more effective role. Accounting should be viewed as a broad measurement, communication and control framework, composed of various interacting elements which serve private and public sector operations. Accounting in many developing countries is still very narrow in concept, improvements being hindered by ineffective professional institutes and related activities, poor regulation, inadequately trained accountants and lack of appreciation of good accounting planning and control in all sectors of the economy. Many different remedies of an internal and external professional and educational nature are available to correct existing deficiencies. Enthoven concluded with the belief that a vast programme of a coordinated effort by developing and developed countries' accounting bodies should be executed to improve accounting procedures, systems and education (Enthoven, A. 1980, p.78).

The same writer in 1973 discussed, in his book "Accountancy and Economic Development Policy", the need to tailor an accounting profession to the local conditions of accounting. He focused more specifically on the economic development process and called for:

1. An expanded role for the auditing profession,
2. Use of current value accounting and
3. Greater standardisation of accounting policies.

Nevertheless, he wrote from a broad perspective. Geographically he was familiar with accounting in Europe and developing nations as well

as in North America. Historically, he presented a concise but lucid summary of the early development of accounting. Moreover, he argued and discussed government accounting and economic or, as he called it, social accounting (Scott, W. and Belaoui, A. 1977, p.270).

Academic literature on economic development theory has in the past been sadly deficient in dealing with the accounting discipline as a major issue in the economic development of developing countries (Scott, W. and Belkaoui, A. 1977, p.272). Therefore, Scott, G. (1970), in "Accounting and Developing Nations" began to fill this gap by focusing on enterprise accounting as a useful aid to economic development in emerging nations. His primary concern was with the relationship between certain accounting dimensions and economic development; this, in turn led him to formulate different recommendations about the role of accounting in developing countries. In addition, he suggested different rules of conduct for governments, companies and accounting bodies that would help promote accounting in their countries. He felt that accounting information in the organisations of these nations was deficient, irrelevant, unreliable and often lacking credibility. This rudimentary level of accounting was, he argued, the result of some of the environmental factors of each particular country, eg the presence of a class elite, controlling most major domestic organisations, may have an adverse effect on accounting development because it inhibits the growth of private capital markets.

Although Scott, G. (1970) focused on the relationship between the various dimensions of accounting and economic development, he also made recommendations aimed at furthering the development of the accounting discipline and profession in emerging countries. Ross, J. (1977, p.267) discussed similar points in relation to developing countries' need for

accounting information, which is used:

1. By the Government as it makes decisions relating to the development process.
2. By other countries and international financial institutions who provided finances and capital equipment.
3. For feasibility and priority studies for capital formation and
4. For comparisons within the international monetary and financial communities.

He defined the problems facing developing countries as:

.... a high percentage of illiterates; a brand new constitution, but a lack of stability in government; few people knowledgeable or experienced enough to handle the public affairs of a modern nation; a lack of capital; and a lack of exports by which to obtain or import the equipment needed to build public transportation systems and basic industries. To these seemingly insurmountable difficulties can be added the grave problem of burgeoning the starving populations.

(Ross, J. 1977, p.268)

Accounting in developing countries had, he argued, a relationship to these problems. Ross, J. examined some of the major aspects of developing countries in which progress was virtually impossible without the direct involvement of accounting; these are:

First: that government plays a major role in the development process,
 Second: a large area requiring trained accounting personnel is that involving feasibility and priority studies for capital formation,
 Third: that all countries belong to an international community involving trade, balance of payments, capital measurements and imports and exports of a great variety of items.

Universities and accounting bodies have taken a hand in the education and training of accountants in developing countries. Even so, many countries have very few qualified accountants in a population of several

millions. There is still a drastic shortage of financial experts capable of helping these new governments to carry out their policies for economic development.

It is a challenge for the accounting profession and the universities of the advanced nations, not only to find people to serve in developing countries, but also to plant the foundation of the profession so that nations can develop accountants to serve the particular needs of their countries. High priority should be given to supplying accountants to the newly developing countries (Ross, J. 1977, p.209).

In 1977 it was argued that within the next decade higher education needed to improve its programmes and institutions should give priority to the better preparation of students to meet the demands placed on accounting personnel. Research by the American Accounting Association (AAA) Committee on Accounting in Developing Countries classified the major educational problems according to importance. Those listed as considered to be extremely important were:

1. Inadequacy of locally authored textbooks; local accountants, most qualified to write, are too busy so to do.
2. Inadequate teaching of accounting subjects at the college level. Accounting instructors must hold several jobs to supplement their teaching salaries.
3. Lack of qualified instructors at the college level. There is a general shortage of accountants and educators.
4. Lack of professional development opportunities for accounting educators and practitioners.
5. Inadequate accounting education for managers and prospective managers. (Lelievre, C. and Lelievre, T. 1977, p.5).

A need was identified in Asia and Africa, for example, for a highly qualified group of accountants, in the skills summarised by Enthoven, A.

(1976, p.138), as follows:

- information measurement techniques at the enterprise level, for accounting systems in state and private enterprises, whereby the application of uniform accounting will be significant;
- Accountancy aspects of the design of performance budget, tax administration, accounting and other public finance requirements at government levels;
- accountancy measurement systems and procedures in connection with macro accounts;
- The accountancy measurement tasks of economic analysis, policy and planning, such as the effective use of accounting techniques for economic programming, including model building, data for economic projects, cost-benefit analysis and systems analysis - this should cover measurement area in both micro and macro economic evaluation.

Economic-oriented accountants could be efficiently trained at the regional level, possibly in conjunction with international or regional organisations.

Briston, R. (1979, p.105) in his article on "The Evolution of Accounting in Developing Countries" discussed the serious shortage of academic staff and low pass rates in accounting. Most accountancy training was based on British correspondence courses and was aimed at the qualifications of British professional bodies. There was virtually no training available at the post experience and postgraduate levels, and those accountants available tended to be concentrated in the private sector. The Companies Act governing the private sector was often derived from the UK 1948 Act. Few accountants had been attracted to government accounting and national accounting (Briston, R. 1979, p.108). In his summary, Briston likened the situation to that in many of the countries which had adopted British methods and likewise suffered from many defects attributable to that system; these, he argued, included:

1. An accounting profession which is biased towards British attitudes. This implies examinations which concentrate upon legal and professional subjects, often in a British rather than a native form, the use of the articles system, a dominant emphasis upon auditing, and an abhorrence of sub-professional grades of accountants.
2. Financial control of the private sector based upon accounting concepts laid down by the UK Companies Acts which may have been relevant to a British capitalist system a hundred years ago, but are hardly calculated to provide the information necessary for government regulation of industry in a newly independent developing country.
3. A complete lack of interest on the part of most accountants in problems of providing information within the spheres of government, administration and economic planning. This deficiency is especially crucial when the major part of the industrial sector has been nationalised or the government has a controlling interest therein.

Briston's criticism of the evolution of accountancy in developing countries, which have adopted the British system almost entirely, was that due to a mixture of habit, inertia and vested interests, these countries had adopted accounting principles and systems of accountancy training originally developed to meet the needs of the United Kingdom. Formed for an earlier age of capitalism, those principles and systems were already showing signs of being outdated for the needs of the UK economy and were most unlikely to be appropriate for the entirely different social and economic environment of the developing world. Developing countries should have concentrated upon an assessment of their information needs in the enterprise, government and national accounting sectors and should have tried to establish training programmes to produce the staff for the provision and use of that information rather than blindly following the colonial system.

Abdeen, A. (1980, p.143) in his article "The Role of Accounting in Project Evaluation and Control: The Syrian Experience" focused on the role of accounting techniques and practices in the evaluation of capital

investment decisions, introducing the reader to the evaluation and decision-making process used to select industrial projects as practices in the developing country of Syria. The extent of involvement of accountants and accounting techniques in the planning and control of industrial projects included in the Syrian economic plan was also discussed.

Once a decision was reached on the projects, another issue was important to the economic development, namely control of expenditure for completing the projects as well as future operations. Without this control, there was no way to assess the efficiency of planning and the professional quality of the officials who made the decisions. Abdeen claimed that it was apparent, from his interview with officials in the Syrian state planning organisation, that studies to compare the estimated data of the appraised projects with the actual data were not made. Such studies were essential to determine the profitability of the operations and to assess the quality and efficiency of management. Two reasons given for the lack of such studies were:

1. The lack of a uniform system of reporting the financial data and inadequate financial information.
2. The absence of qualified personnel to carry out the task of reliable reporting, including analysis and interpretation of the financial results of the operations.

However, it was found that the officials had great hopes of remedying this deficiency by the adoption of a standardised accounting system. They felt that uniform reporting would produce dependable information and would enable them to improve their planning and decision-making function.

Further, Abdeen discovered a hope among the officials that accounting education would improve at the university and college level, so

that more qualified graduates in the fields of economics and business, especially accounting, would fill the shortage of qualified personnel needed for economic planning and control at all levels and in all areas of economic activities (Abdeen, A. 1980, p.158).

Alhashim, D. (1982) wrote about the variety of accounting practices found throughout the world, and explored the benefits that developing countries could gain by studying these accounting practices. He proposed that a thorough study of developing countries' requirements be undertaken, and that this be followed by accounting and business education related to those needs. This would eventually generate the need for an exchange of ideas between scholars and practising accountants in developing nations. However, he argued (p.10) that:

From there, a business education curriculum would have to be built which would respond better to the present and future needs of this society. It would not be wrong at this point to emphasize how dangerous it is to borrow ideas, concepts and systems from developed nations when applying them to a developing nation. What must be tapped is the creativity to modify what was learned abroad in order to fit the home environment.

Parker, L. (1984) set out to identify factors which influenced the maintenance of effective accounting practice in developing countries and to incorporate them in a contingency-based model. Based on the largely descriptive accounting literature of the 1970s, the article identified and classified the major accounting system characteristics of fifteen developing countries. Rather than attempting to provide a separate critique of the "state of the art" in each country, the paper identified those characteristics which appeared to be common to a substantial proportion of the sample. These characteristics were then integrated in a contingent model of accounting practice representing their supposed inter-relationships. This offered a contingency-based approach to the examination and strategies evaluation of accounting

infrastructure in developing countries.

Education and training deficiencies have exacerbated both the inadequate supply of trained accountants and the inability to produce locally relevant accounting standards as well as the substandard quality of general accounting practices. For many years aspiring accountants in developing countries studied for examinations of overseas professional bodies by correspondence and indeed continued so to do even when local institutions and professional courses became available. Education by correspondence was beset by problems such as the high failure rate and the irrelevance of some of the course content, e.g. law and taxation to the developing country (Parker, L. 1984, p.26), (Briston, R. 1978, pp. 108-109).

Criticism could be made of the tendency of some western literature to mix public and government accounting practices with private accounting practices. These are two different things, particularly in the case of socialist countries, where the government aims to redistribute the wealth by the nationalisation of their industries, oil fields, etc., in order to protect the majority of poor people, unemployed etc. As we have seen, this highlights the problems of accounting practice and techniques as well as current and future trends of government accounting.

In summary, the authors discussed have given a broad emphasis on macro accounting, such as economic planning and environment, government affairs and demand, the private sector and its relation with government taxation, in addition to accounting professional institutions and accounting curricula.

It can also be seen that the literature almost ignores government accounting systems, failing to consider in depth the problems and evaluations of central government affairs. This might give the impression

that it is less important than the private sector, but in socialist countries it is most important and worthy of attention by researchers. In general, accounting literature has so far paid insufficient attention to the accounting needs of developing countries.

9.3 ACCOUNTING SYSTEMS IN IRAQI HIGHER EDUCATION

This chapter concentrates on the main accounting systems in Iraq but at the same time it shows where the Uniform Accounting System of the Ministry of Higher Education, and specifically the universities, fits into the accounting systems of Iraq. The Government Sector, in view of its importance, will be the main focus of the discussion of Iraqi accounting, while accounting in the private sector will be discussed only briefly, in order to show its relevance to higher education.

As there are many distinctly different accounting systems in the Iraqi government sector, this chapter will not describe all of them, but will focus on the main systems used in higher education as follows:

1. The Government Accounting System.
2. The Uniform Accounting System.
3. The Private Sector Accounting System.

These systems illustrate the main features of accounting in Iraq, taking into consideration that there is no significant difference among the objectives and goals of the systems as they are all useful in budget planning, controlling and for decision-making.

The most important of the systems is the Government Accounting System as it is widely applied to non-profit making organisations.

The Uniform Accounting System was formerly applied mainly in the Ministry of Industry and its affiliated offices and used profit to measure the efficiency of enterprises; but in recent years, it has been applied in non-profit making organisations. The Uniform Accounting

System of the Ministry of Higher Education was applied only in universities and their affiliated decentralised centres, e.g. the University of Baghdad, which together formed the organisation of the Ministry of Higher Education (previous chapter). This system is not used in its entirety, for example the cost accounting system is still not applied, and the Ministry is trying to co-ordinate the system with the help of consultants and administration development centres.

9.4 IRAQI GOVERNMENT ACCOUNTING AND ITS CONSTRAINTS

As an introduction to the following parts, it is necessary to give a brief description of the Government Accounting System. Although the Government Accounting System has been modified and the Uniform Accounting System has been gradually applied in many public sectors, the rules and procedures of the Government Accounting System are still dominant in the Ministry of Higher Education and in universities.

Until 1975, the General Accounting Regulation, Act No. 28 of 1940 and its modifications controlled the government's activities through the Government Accounting System, but during the past two decades, as a result of the nationalisation of many large companies in 1964 and 1968, it became necessary in 1975 for the Ministry of Finance to create a total system for all areas of government accounting, and this was put into effect at the beginning of 1976. The Ministry of Finance formulated a total accounting system, which was originally intended for the public sector covered by the Iraqi Ordinary Budget. The conventional classification of the Ordinary Budget in Iraq - the current budget - was based on the administrative classification of expenditures, called Chapters, each of which was sub-divided into a number of divisions representing specialised administrations within the Chapter. The expenditures of each division are then classified into three main accounts

called sections; 1. Salaries, allowances and wages. 2. Administration expenses and 3. Other expenses. (Razuki, 1978, pp.68-69).

The government system was also applied in a modified form to state organisations, though they operated independently of central government.

The main characteristics of the system are as follows:

1. Each Ministry administration and each affiliated state organisation should have a complete set of accounting double-entry books, journals, ledgers and asset books.
2. Current accounts at the nearest bank were opened in the name of each state organisation, and funded by the Treasury.
3. An auditing department link was directly established by the head of state, following the rules and procedures of government audit.
4. Each state organisation was to present monthly a cumulative trial balance.
5. On the first day of the new year, each state organisation was to submit closing accounts at the end of the fiscal year and open the accounts of the new fiscal year.

The universities, as state organisations, are covered by the general government budget. This decentralisation in government accounting created many difficulties.

1. The increased number of trial balances provided.
2. The increase in transactions between each state organisation and the banks.
3. State organisations were given increased financial responsibilities for matters which had formerly been dealt with by the Treasury.
4. The state organisations have an increased number of accounting and financial units, required more manpower and greater knowledge of the accounting and auditing field.

The expansion of block general expenditure and the types and complexity of financial relations multiplied the obligations.

In Iraq, the central ordinary and investment budget increased from 3.2 million I.D. in 1922 to more than 10.0 billion I.D. in 1980, while the total personal debit accounts increased from less than half a million I.D. in 1940 to more than 3.00 billion I.D. in 1980 (Razouki, H. 1981, p.11).

The total system for the government accounting units provides the prerequisites for a unified accounting system applicable to all service agencies of the state, whether accounts are incorporated in the ordinary budget, as in the case of Ministries, or financially independent, as for state organisations. The main responsibilities of this system are defined as follows:

1. Each accounting unit should have a complete set of double-entry books (journals, ledgers and assets books).
2. The unit is to present monthly and cumulative trial balances.
3. The unit is to submit closing accounts at the end of the fiscal year.
4. The unit is to carry the unpaid balance of pending accounts at the end of any fiscal year as an opening entry in the accounts of the new fiscal year. These responsibilities should not deter the central accounting body from carrying out the same procedure for the state as one unit.

The classification of accounts in the government budget is the same whether applied to its Ministries or to state organisations. The budget is issued in a government ordinance by the general directorate budget within the Ministry of Finance. In it, information is classified into gross items (chapters) and sections (items) especially with regard to expenses (Ministry of Finance, 1981).

9.4.1 The Classification of the Government Budget: The general framework of the budget consists of the integration of the accounting unit (any unit) in terms of expenditure and resources, according to the hierarchical analysis of the activity of the main units. This implies that the budget of each Ministry consists of all gross and subsidiary accounts (section, items and categories). These accounts are to be used in each Ministry according to its own requirements. This type of classification applies wholly to units affiliated with the Ministry, etc., directorates general - and even to units of lesser degrees in the organisation. The decimal system is used in the organisational structure of accounts.

The classification of expenditures in each accounting unit; Ministry or directorate general of a subsidiary administration, contains two divisions, namely

1. The economic classification.
2. The functional classification.

Cases that are inconsistent with the concepts and application of the administrative classification are put aside and incorporated, with their specialised gross accounts, within the context of the homogeneous tabulation of the exemplary unit. Special projects are given an independent account, or a programme capable of analysis into cost elements within the same analytical context.

Within the economic division, expenditures are classified into nine main sections, namely:

- 1st Account (Section One); Human services, salaries, allowances and wages.
- 2nd Account (Section Two); Service requirements.
- 3rd Account (Section Three); Consumer goods.
- 4th Account (Section Four); Assets maintenance.

5th Account (Section Five); Price of fixed assets.

6th Account (Section Six); External conversion expenditures.

7th Account (Section Seven); Internal conversion expenditures.

8th Account (Section Eight); Special programmes.

9th Account (Section Nine); Pensions, salaries and awards.

Each gross account (section) is then divided into a number of subsidiary accounts, or items; each item, if necessary, is divided into a number of subsidiary accounts, or categories, to analyse further the accounting unit's activity. The economic classification at this level covers the analysis of cost elements. It also contains extensive analysis in fulfillment of the requirements of accounting control, including statistical control.

The function classification of expenditures breaks down the state activities into ten main functions, which in turn may be broken down into a number of subsidiary functions:

<u>Section No.</u>	<u>Sector Name</u>
1.	Public authorities and public administrations
2.	National security
3.	Education and culture sector
4.	Social sector
5.	Health sector
6.	Agricultural sector
7.	Industrial sector
8.	Transport and communication sector
9.	Foreign relations
10.	Unclassified expenses

Classification of resources (revenue) at the level of budget and of each accounting unit is as follows:

- 1st Account, Number one, Income and property taxes.
- 2nd Account, Number two, Consumer goods taxes.
- 3rd Account, Number three, Other taxes and excises.
- 4th Account, Number four, Government share of the public sector profit.
- 5th Account, Number five, Capital revenue.
- 6th Account, Number six, Lease of state properties.
- 7th Account, Number seven, Conventional revenues.
- 8th Account, Number eight, Services offered by government agencies to
others.
- 9th Account, Number nine, Unclassified revenues.

Because of its simplicity and the possibility of mechanizing state accounting, the decimal system is used in notation.

Capital expenditure projects and development projects are not incorporated into this classification, because they are covered by a special budget.

This budget structure contains three-way classification because computerization would enable this system to establish multiple trends in the analysis of unit activity (Razouki, H. 1975, pp.35-39) and (Al Obaidy, M. 1984, pp.23-182).

The government plan outlines government expenditure and funds and determines the relationship between them. It is oriented towards a specific goal to be achieved in a set period of time (origin law of General Accounts, No. 28 of 1940 and its amendment, 1976 and 1981). From analysis of the government estimation annual plan as published in the official newspapers the following points can be seen:

1. The recurrent plan is classified according to the various administrations concerned - ministries and other central administrations. These classifications are called chapters.

2. The budget for state organisations is classified according to economic sectors; trade, industries, etc., though the classifications of sectors are not in exact accordance with the classifications applied by the Ministry of Planning. This creates difficulties in using the aggregated and accumulated accounting information for economic purposes.

3. Recurrent fund is classified into types according to the ministries or central department concerned.

4. Funds and expenditure are not classified by function, creating difficulties in obtaining appropriate information for economic purposes. It would be preferable to classify the recurrent plan in the same way as the aggregate national economy to simplify the collection and unification of accounting data and information for statistical planning, at the same time simplifying job classification and the production of accurate government accounts. Accordingly, top offices of government; planning and statistics would be enabled to collect adequate and specific information on performance and results (Al. Obaidy, M. 1984, p.33).

9.4.2 The Roles of the Ministry of Finance in the Development of

Accounting Systems: It would appear that the Ministry of Finance has a number of roles in drawing up the country's financial policy. It is responsible for preparing the annual plan which specifies funds and expenditure on agriculture, mining, manufacturing industries, construction, electricity and water, etc. In addition it directs the plans of state organisations where these affect the economy and trade. It also has the sole responsibility for collecting and administering the general government fund and administering the treasury fund. It influences, both directly and indirectly, Iraqi banking practices and deals with expenditure and the organisation of the accounting system for the national development plan. These multiple responsibilities give the Ministry of Finance the central role in the economic policy of the

country.

There is emphasis on its role in studying and negotiating the estimation plan for all the government units, as set out in General Accounting Law No. 40 - 1928 and its modifications.

The classification of the annual plan is functional, allocating a portion of the fund to each Ministry or central administration. It shows the aggregate allocation to each Ministry or central administration, while government funds are classified according to type. Each Ministry is subdivided into units, e.g. universities are a sub-division of the Ministry of Higher Education. The plan is announced in an annual ordinance and published in aggregated form.

9.4.3 Government General Treasury: The implementation of the government plan necessitates the establishment of a General Treasury which holds all funds collected by the government and pays all expenses in accordance with the annual plan. The General Treasury comprises:

1. The Department of Financial Affairs: This is in charge of the financial dealings of cultural departments within Iraq's embassies abroad, and withdraws any surplus from them.
2. The Central Treasury Department: This is in charge of the accounting operations of the main administrations, i.e. Ministries and state organisations. In essence this Treasury is no different from the other except in the size of the units it controls. It has two subdivisions:
 - 1) Central Treasury Directorate for Budget Affairs, which is responsible for the financial transactions related to the annual plan, and 2) the Central Treasury Directorate for Planning Affairs which deals with financial transactions relating to the execution of the national development plan.

3. Treasury Provincial Directorate. There are eighteen treasuries, each dealing with a specific region. Each one is linked both to the Ministry of Finance and to the local authority of the province. In addition, it is responsible to apply government accounting in provisions units.

In brief, the responsibilities of these treasuries are: 1) to receive the funds collected by Ministries and affiliated general departments in accordance with the annual plan. 2) To administer expenses according to the annual plan. 3) To pre-audit all transactions. 4) To record all transactions according to government accounting regulations. 5) To issue the trial balance monthly, quarterly and annually in accordance with government accounting regulations. 6) The application of government accounting regulations. 7) To operate in such a way as to minimise the amount of money kept in the treasuries (Abdul Rhman, A. 1985, p.2).

The Ministry of Higher Education and hence its university subdivision, is linked to the Central Treasury of the Ministry of Finance. Universities are funded by it, and report to it.

9.4.4 Problems in Government Accounting: For the last two decades, the Government Accounting System has been operated to serve government affairs. During this period a number of problems have hampered its application.

1. Primitive knowledge of accounting and lack of professionals to develop accounting in general and in particular to meet the accounting requirements of government administration, e.g. links between administrative offices and the appropriate treasuries.
2. Inefficient resource allocation to government units due to the limited scope of the government plan.

3. The limitations of the banking network which have forced the Treasuries to take on a banking role. Thus these treasuries are faced with the task of collecting and issuing government funds.

4. Inadequate administrative systems, only a limited number of accounting departments being linked with the Treasury in such a way as to make control possible (Abdul Rhman, A. 1985, p.12).

At the same time, the expansion of government activities in 1972 made possible by nationalization of oil had its effect on government units and accounting, which were unable to deal with the added burden. The problems were as follows:.

1. The increased revenue led to a huge increase in resource allocation and to a transfer of resources to national development projects.

2. This expansion of government activity required for its execution the establishment of further administrative units, and hence an increase in the number of accounting units linked to the Treasuries. Thus, the number and variety of transactions between accounting units and Treasuries increased. The Government Accounting System, designed when government activities and objectives were different, was inadequate to meet the demands of the new situation.

Alkaissy, M. (1977, p.224) in his article, "Accounting Systems situation in the government in Iraq and its development to serve national development planning" outlined the history of government accounting and investigated its adequacy. The following points emerged:

1. Commercial education is undeveloped. Higher education in administration and commerce was established for the first time in 1946. At that time accounting was limited because of staff shortages and the curriculum was, also, undeveloped. Accounting, as a social science, is affected by its environment. A need for improved accounting has been created by changes in national development.

2. Government accounting legislation in Law No. 28 of 1942 and its amendments was expanded from the Government Accounting System of 1922 when government activities were fewer, and the plan was limited to a few million I.D. The Government Accounting law was established on two principles: 1) Simplicity of operation by people whose education did not extend beyond the acquisition of literacy, and, 2) Centralization, with responsibility concentrated in the Diwan (Supreme) Ministry of Finance until 1976. The application of government accounting to the socialist sectors of industry, agriculture and trade presented difficulties as these had formerly used different accounting principles, e.g. government accounting uses the cash basis whereby revenue and expenses are recorded on the books of accounts when received and paid, irrespective of the period to which they apply, instead of the accrual basis which is applied by scientific accounting, etc.

3. Most of the laws and regulations governing commerce and administration are inherited and inadequate. They are not related to the scope of present-day government accounting, but limited to general terms and broad statements of obligation. As a result of these inadequacies, the Government Accounting System yields confused and conflicting information which leads to poor planning and decision-making, and hence is detrimental to the financial situation of the country as a whole.

4. A multiplicity of accounting systems is used in state organizations and government departments. Government service administrations, e.g. Ministries apply the Government Accounting System. State organizations, e.g. the General Organization of Trade, General Organization of Industry have their own systems. The Ministry of Higher Education uses the Government Accounting System, which was applied in a decentralized form by the universities until the adoption of the present system. Within universities, commercial accounting is used as this chapter will discuss later. This multiplicity of accounting systems creates a division between government services and productive administrations. As a result each

one has different rules and goals.

Having explained the inadequacy of government accounting systems with reference to the historical background of government accounting, the numerous rules and regulations and difficulties of application of the Government Accounting System to government services, commerce and government industries, he suggested the use of the Uniform Accounting System Project by the Ministry of Finance.

Fraih, A. (1978) contested Al-Kaissy's view, accepting that there was a lack of a government accounting system in Iraq, but expressing concern that a Uniform Accounting System for all government units might prove unsuccessful in application (Fraih, A. 1978, p.256).

Regarding the lack of commercial education, in recent years, with the government emphasis on colleges of accounting and administration in Iraq universities, the number of students entering universities and colleges each academic year has gradually increased, i.e. 1978/1979: 18,662; 1981/1982: 21,378 male and female (Annual Abstract of Statistics, 1978 and 1982, p.263 and Table 25/11 respectively). Nevertheless, it could be that the root of the problem is the curriculum and the extent to which it is relevant to the real world in government offices in Iraq.

Alshama, K. 1980, p.190 discussed the same characteristics of administration problems facing the government. Considering performance in planning and control in relation to management information requirements, he asserted that management and accounting systems suffer from insufficient information for the requirements of government central planning; information is often out of date, and its preparation excessively time-consuming, yet it is usually basic and without clear indicators. Then, when the information does reach the decision-making level, there are no clear procedures for its use.

Some information was still in preparation up to two years after work was begun; this occurring in particular in the case of the statistics system, the accounting system, finance, inventories and executive indicators for national planning, etc. In addition, there was a lack of information concerning the activities and performance of the government sector because of the difficulties of planning and control with inadequate information (Alshama, K. 1980, p.202).

9.5 UNIFORM ACCOUNTING SYSTEMS

The most widely applied system in higher education and universities is the Uniform Accounting System, but there is still room for more research to further its development. The uniform accounting system has an important role to play in the economic development process, for it can stimulate and accelerate the economic development of the country by collecting, processing, evaluating and reporting accounting and non-accounting information for the purpose of economic, hierarchical decision-making. A number of writers, among them Mueller, G. (1967) and Enthoven, A. (1973) have discussed the uniform accounting system and argued in its favour. The following is a brief review of these arguments.

Divergence among accounting standards, principles, techniques and statements, makes the task of "eco-development accounting" difficult. What is required is standardised and unified input and output information. Uniform accounting arises from studying and analysing socio-economic problems, defining objectives and then establishing comprehensive and scientific accounting systems.

The importance of uniform accounting comes from the need for "reliable information upon which to base comparisons and interpretations of accounting and economic reports; and greater consistency in the application

- e.g. classification and valuation - of accounting information for planning decision making, and control purposes." (Enthoven, A. 1973, p.220).

Uniform accounting provides more efficiency since it does not require highly skilled accountants, permits the transfer of skills without difficulty from one unit to another and can readily be computerised when funds permit. However, accounts with a high level of interdisciplinary training may be required to study, analyse and design the uniform accounting systems.

The importance of uniform accounting comes from the simplicity it affords: simplicity in "recording and classifying financial data, manipulation of the data toward financial reports, and, finally, understanding and interpreting financial reports". (Mueller, G. 1967, p.90).

Mueller, G. (1967, p.93) defined uniform accounting as follows:

The uniform treatment of all accounting methods, procedures, and concepts (i.e. a single inventory method for department stores and a single method of research and development accounting for the petroleum industry). It includes standardisation of valuation applicable to accounting and specified treatment of accountable events like business combinations, inception of private pension plans, or receipt of governmental subsidies or tax concessions.

In other words, uniform accounting was to unify and standardise the input and output of accounting information, but it is possible to achieve different levels of uniformity:

1. The uniform application of accounting standards, principles, and procedures, Generally Accepted Accounting Principles (GAAP) being the best example.

The uniformity of general accepted accounting principles is, due to its evolutionary nature too slow to adapt to the needs of the whole socio-economic system. Furthermore, its valuation methods, comparability and type of information are inadequate in planning and measuring economic

development.

2. The Uniform Chart of Accounts is "a classification device . . . It assigns classes and subclasses to account categories and provides general guidelines on how appropriate account classification is to be achieved for each account appearing in a given system of accounts" (Mueller, G. 1967, p.92). The classification can be on national, sectoral, or ministerial levels. Austria, Germany and Switzerland are examples of its application on a national level, while an example of its use at the sectoral level is the Swedish M-chart, which applies to the metal working industries in Sweden.

3. The Uniform Plan of Accounts "stipulates procedures relevant to a complete process of accounting, i.e. the initial recording of transactions to be accounted for, the classification and summarization of these transactions, and finally the reporting of accounting data to users of financial information". (Mueller, G. 1967, p.92). The uniform plan of accounts can be applied at sectoral or national levels and combines the three major branches of accounting into one framework in order to coordinate efforts to achieve a national economic policy. Several countries, including France, Egypt and the USSR have applied a uniform plan of accounts.

The Egyptian Uniform Accounting System Law of 1966 was an example of uniformity typical in Arab countries; this uniform system of accounts, incorporating Gross National Product and other statistical data, was used to analyse the economy and to control its direction. Thus the uniform accounting system represents a major tool for analysis, control and decision-making. Alhashim, D. (1982, p.7) stated that:

The Uniform System of Accounts, however, is not peculiar to the socialist countries alone. In France, for example, accounting standards and methods used by enterprises are

also based on a uniform system of accounts called "Plan Comptable General". This plan, which has been adopted by virtually all enterprises in the country, contains a detailed chart of accounts and a series of model financial and statistical reports needed for micro- and macro-accounting purposes.

9.5.1 The Uniform Accounting System in Iraq: In 1940, the Iraqi government issued Law No. 28, 'The Principles of Public Accounting Law' to be applied to Iraqi Ministries and to bodies financed by the government budget. This law was Iraq's first step towards uniformity in accounting procedures, records and financial reporting.

The Iraqi government nationalised, in 1964, thirty-four industrial companies, all banking institutions, insurance companies and commercial trading agencies, thus changing the economic structure by increasing the new public sector. However, the administration of governmental nationalisation and public sector accounting created many managerial problems, among them being:

1. The variability of techniques and procedures of accounting as used by different state organisations.
2. Government accounting was operated with varying degrees of efficiency, causing non-uniformity in the accounts presented for decision-making in top management and in the Ministries.

The Uniform Accounting System was an attempt to solve these problems. In 1970, the public organisation for commerce implemented in commercial companies the first Iraqi Uniform Accounting System.

Public sector industry implemented the Uniform Accounting System in two stages. The first stage was in 1972 when the textile and spinning industries tested the system and then other industrial state organisations followed.

The Uniform Accounting System has four major parts; the accounting code, classification and description of the accounts, the accounting books and records of transactions and the budgeting system. A brief definition of the Uniform Accounting Code, by Saleem, M. (1976, p.44) said that it gave:

.... the framework of the accounting coding to be used for analysis and classification of the economic transaction in the economic units, to achieve the general goals set by the Uniform Accounting System and then to lead to obtaining society's goals.

9.5.2 The Uniform Accounting System of Universities: The Ministry of Higher Education applies the Government Accounting System while the universities apply the Uniform Accounting System, which was prepared by the Ministry of Higher Education, Financial Auditing Committee and National Administration Development Centre for the Ministry of Higher Education and the universities.

The Uniform Accounting System was applied for a time in 1980 in the University of Technology and after its successful application in this university, the Ministry of Higher Education decided to apply it in all of its affiliated organisations as of 1981. Eventually, after many seminars to discuss the computerisation of the system, it was accepted as the Uniform System of Accounts for the Ministry of Higher Education.

The general framework of the system is a division into groups as laid down by the accounts manual of the Uniform Accounting System. The first, assets and the second, liabilities, are the two major accounts known as the 'Balance Sheet Accounts'. The third account is called 'Uses' and is sometimes also known as 'Expenses', and the fourth is called 'Earnings'. These are the 'Profit and Loss' accounts - operation and Revenue Accounts or Result Accounts. The coding system in each major group is divided into sub-classes and further sub-classes.

The Uniform Accounting System also includes groups 5 and 6; the cost accounting centres. This is still under study by the Ministry of Higher Education and the National Development and Administrative Centre. Each group is divided into sub-groups in order to supply financial information. Appendix 5 shows that the code system in each major group is divided into sub-systems. This is the method by which accounting information is provided for financial statements, a numerical code system being used to assist the mechanical processing of accounting data.

The universities uniform accounting system established groups of accounts and a numbering system as follows:

<u>Account Number</u>	<u>Account Name</u>
1	Assets Group
2	Liabilities Group
3	Manufacture and Services Centres Group
4	Cost of Goods Sold Group (Trading Accounts)
5	Revenues and Expenses Group (Profit and Loss Accounts)
6	Retained Earnings Group

Each of these groups is divided into several sub-accounts. The coding system in each major group above is divided into six levels. The following example illustrates the numbering process;

1	Assets
11	Fixed Assets
113	Equipment and Tools
1131	Manufacturing Equipment (For Laboratories)
11311	Equipment Purchased from Domestic Market
113119	Cost of Purchase

However, universities use only four of these sub-divisions, ignoring the others because the additional detail would require additional

manpower.

The Uniform Accounting System has been linked with cost accounting centres in order to support the financial information. The cost centres and the associated code numbers are shown in Figure No. 9-1 "Analysis of Uses of Resources". The following may be taken as an example:

<u>Code No.</u>	<u>Cost Centre</u>
5	Academic Departments
6	Laboratories, training centre and maintenance
7	Social and culture activities
8	Administration and finance services
9	Capital transaction

Moreover, actual practice in the universities reveals that code No. 5 "Academic Departments" does not distinguish between various colleges or academic departments, but shows an aggregation of all academic departments.

Accountants report that the application of the full accounting system is difficult because manual recording of every transaction is complex and time-consuming. They recommend the computerization of the system in order to speed up the process, produce accurate results, and to simplify access to information and reporting.

A number of other problems face the application of the uniform system of accounts in universities. Personal experience in applying the system has drawn attention to the following areas:

Inventory is an important aspect of the accounting process. However in Technology and Al Mustansiriya universities, difficulties are created by the fact that various resources are stored in different warehouses, which are not centrally located, and each of which has its own separate control system. Furthermore the control system for all inventories is

Figure No. 9-1 Universities Uniform Chart of Accounts

Balance Sheet Accounts		Result Accounts		Analysis of Uses of Resources				
1	2	3	4	5	6	7	8	9
Assets	Liabilities	Uses	Earnings	Academic Depts	Laboratories, training centre and maintenance	Social and culture activities	Administration and finance services	Capital trans-action
11 Fixed Assets	21 Capital	31 Wages	41 Revenues from current activities	531 Wages	631 Wages	731 Wages	831 Wages	931 Wages
12 Incompleted Projects	22 University Reserves	32 Commodity Requirements	42 Subsidies	532 Commodity Requirement	632 Commodity Requirement	732 Commodity Requirement	832 Commodity Requirement	932 Commodity Requirement
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 Lending	24 Loan	34 Finished goods purchased for sale, books, etc.	44 Transferred revenues	534 Finished goods purchased for sale	634 Finished goods purchased for sale	734 Finished goods purchased for sale	834 Finished goods purchased for sale	934 Finished goods purchased for sale

15 Financial Investment	25 Credit Banks	35 Current transferred expenses	535 Current transfer expenses	635 Current transfer expenses	735 Current transfer expenses	835 Current transfer expenses	935 Current transfer expenses
16 Debitors	26 Creditors	36 Current transfer	536 Current transfer	636 Current transfer	736 Current transfer	836 Current transfer	936 Current transfer
17 Misc. Debtor Accounts	27 Misc. Creditor Accounts						
18 Cash in hand and at bank	28 Results of the year						

Source: Ministry of Higher Education, Final Report of Duty in Setting Up the Uniform Accounting System to University of Technology, Administrative and Consultancy National Centre, February 1978, p.21, 22, 23 (in arabic)
Al Mustansirya University "Uniform Accounting Code", 1981. (In arabic)

badly organised and inadequate to serve the uniform accounting system, nor do they actually apply the system, having had a choice whether or not to do so.

It is the policy of Iraqi universities to make annual loans to students in need on the basis that they will be repaid when the recipients graduate and find employment. Universities have a special accounting unit within the financial department, which keeps records of students and collects the loan repayments. However, although the uniform accounting system was introduced to Iraqi universities in 1980, they are still waiting to extend its application to this unit. These units are still using the private accounting system, so that the problem arises of changing from one system to the other.

It seems that it will be a long time before the Uniform Accounting System can be applied in all units and become truly effective.

9.5.3 The Budget Process in the Universities: The higher education and universities' budgets are made up of two distinct parts, as follows:

1. The Ordinary Budget,
2. The Annual Investment Programme.

Thus the universities receive allocations from both the Ordinary Budget and the Annual Investment Programme (both called State Budgets).

Higher Education budgets operate as follows:

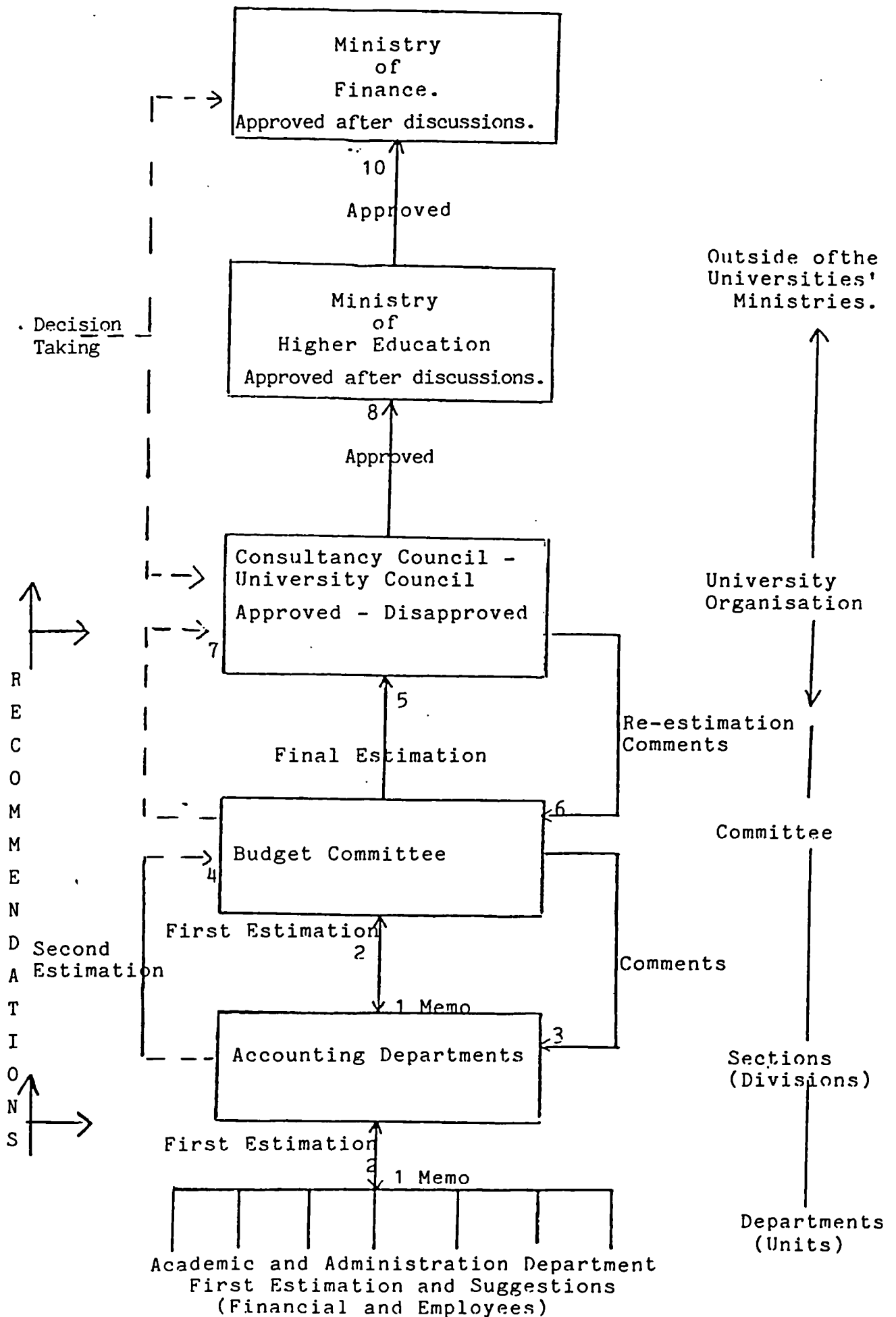
1. The higher education budgets, in a similar way to the state budgets, are classified into chapter, sections, vote and items for expenditure and into numbers and items for revenue in the Ordinary Budget. The Uniform Accounting System budget in the universities is classified according to the codes shown in Appendix 5. The process of the higher

education budget is shown in Figure 9-2.* These points will be discussed in more detail later.

2. Comparisons with the previous year are made, to show increases or decreases in expenditure, and revenue and expenses are compared.
3. The budget preparations start from the smallest units and departments. A university forms a committee consisting of the President of the University, the Head of the Accounting and Financial Department, the Head of the Personnel Departments and other selected members. This committee sends a memo round to all departments and colleges, requesting that they report their needs to the committee.
4. The committee produces a draft budget according to the regulations and accounting rules of the Ministry of Finance and the Ministry of Higher Education. Universities' budgets are of a traditional type, being mathematical exercises that largely are confined to credit and debit balances.
5. Allocations for the current fiscal year and actual expenditure for the previous year are used by the committee as guidelines for the new budget estimates. The University Council then discusses the draft budget which is submitted by the committee. The University Council might then return to the committee for further discussion.
6. The university's draft of the higher education budget is integrated into the overall draft of the state budget (the Ministry of Higher Education forms committees annually for this purpose) which in turn is presented to the Council of the Ministry of Higher Education for further discussion.
7. The drafts of the higher education budgets are then pooled. After many discussions, the comprehensive draft of the higher education budget is prepared.

* Deduced by the researcher from documentary evidence and information obtained from university administrative and accounting staff.

Figure No. 9.2.
The Process of the Higher Education Budgets.



8. The Ministry of Higher Education and Ministry of Finance then discuss the comprehensive draft with the Minister of Higher Education.

9. The Ministry of Finance administers the expenditure of all the Ministries and their affected units. The Council prepares the final government plan which is approved first by the National Assembly (Congress) and then by the Revolutionary Command Council (RCC).

The Ordinary Budget and Annual Investment Programme is presented to central government for discussion and approval and is sent back to the Ministry of Finance and then all the way back to the universities.

After approval by central government, the budgets become authorised for execution at the beginning of the fiscal year (1.1.19-- of the year). This budget process will be discussed in more detail in Chapter 10.

The classifications of the budget represent the Expenditures of the Ordinary Budget classified into chapters, sections, votes and items. The chapters represent the Ministry of Higher Education. Within the chapter, each section represents a specified administration, which is then sub-divided into main accounts called votes, which are divided as follows:

1. Salaries, allowances and wages.
2. Administration Expenses.
3. Other Expenses.

The rules and principles of the government accounting system are contained in the Ministry of Finance Law No. 28 of 1940 which regulates the Ordinary Budgets, prescribing the ministerial budget period as one year (1.1.19-- to 31.12.19--) and ruling the conditions under which allocations may be disbursed and disbursement made accordingly. The Law also specifies which persons are empowered to make payments, collect funds and keep records, and also defined their responsibilities. The

Law incorporates detailed rules regarding the accounting system, most of which have been issued by the Department General of Accounts within the Ministry of Finance.

9.5.4 University Journals and Records: From the different colleges, departments or units within the universities, basic accounting information is sent to the treasuries in the accounting department where the book-keeping is carried out. These send reports (monthly in the case of the Ordinary Budget and quarterly in the case of the Annual Budget Programme) to the Ministry of Higher Education and to the Ministry of Finance.

At the Ministry of Higher Education the universities' banking deposits and receipts are recorded daily in a cash journal. Entry forms for payments, receipts and adjustment orders are also prepared and expenditures are recorded in the final expenditure record. Salaries and wages are entered in a salaries and wages record (Government Accounting System Form No. 8). In universities, schedules of final expenditures and final receipts, representing the monthly expense amounts, are also produced according to the computer system.

Within financial departments in the universities, transactions are recorded in a general journal which contains columns for banking, cash, final expenditures, final funds, advances, deposits and current accounts. These columns are further detailed in other journals according to classification of the budget. The expenditure is recorded in the final expenditure record and as in the revenue journal, the advances and deposits are recorded in the deposit journal.

A monthly balance is produced by the financial department, containing the monthly figures in accordance with the general journal. These figures are correct when the trial balance equals the accumulated totals of all the ledgers and journals. The monthly trial balance figures are classified down to the last detail in the Ordinary Budget.

Copies of the monthly trial balance figures are sent to the Ministry of Higher Education and to the Ministry of Finance and show expenditure and revenue, specified according to the classification of the Ordinary Budget or Annual investment budget.

A monthly trial balance in the de-centralised Uniform Accounting System - as in Baghdad University - is produced for the whole university. This is the sum of the trial balances of the different financial departments of the Colleges and Centres and is sent to the Ministry of Higher Education, Ministry of Finance, the Ministry of Planning and to the Diwan of Financial Control with a summary of expenditure, funds, advances and deposits attached.

The yearly figures for the Ordinary Budget and the Annual Budget Programme are produced in two separate accounting books, one for each budget. Each budget also has its own records.

9.5.5: The Reporting System in Higher Education: The Ministry of Higher Education still applies the government accounting system. Thus the Ministry sends the trial balance to the Ministry of Finance monthly, in order to be refunded.

Reporting in universities is different because they apply the Uniform Accounting System and the executive plan; the ordinary plan. Universities are required to send to the Ministry of Higher Education accounting information including monthly reports; operation and result accounts, and trial balances according to the Uniform Accounting System and consolidated bank statement. A copy of this report is also sent to the Ministry of Finance for their records and for them to approve recurrent monthly funding.

At the end of the fiscal year the universities have to submit to the Ministry of Higher Education, Ministry of Finance and Supreme (Diwan) of Financial Control, the reports containing the Balance Sheet Accounts, Result Account and Analysis of Uses of Resources.

Disclosure Reports to the public are not necessary in Iraq because universities are fully funded by government. Industry does not invest in universities so there is no public sector involvement or interest in their financial position. Reporting is therefore restricted to that required by government.

As regards the estimation plan, universities are also required to send to the Ministries of Higher Education and Finance - in accordance with the budget process described previously - the following reports.

1. An estimated balance sheet according to the code laid down in the accounting system.
2. An estimate of the number of employees, e.g. academic staff, technicians, etc.

The Investment Programme Budget system is required to send to the Ministries of Higher Education, Finance and Planning, containing the following reports:

- Monthly Trial Balance, consolidated bank statement.
- Quarterly Trial Balance, consolidated bank statement.
- Annual Balance Sheet, Trial Balance, consolidated bank statements.

An annual estimation Investment Programme plan represents required construction and covers a long period of time - usually more than one year. This plan is considered part of national development plan. It follows the same budget procedures and approval process, but it is issued in a separate government ordinance.

Because the universities are government funded and their main objective is to meet the country's needs, it is necessary to find out

how the universities are performing. It will help considerably to evaluate the performance of each university beside the Ministry of Higher Education and Ministry of Finance.

Since all the universities provide similar services, and use the same uniform system of accounts (though with some variations) the presentation of uniform financial statements for all universities should be readily achievable, according to these definitions. Uniformity is important, because there is no relevant standard of comparison, especially since in most of the universities, application of the uniform accounting system is quite recent. University budgets can be used as a basis of comparison. Financial reports can be the logical source of information for comparison. By comparing a university's results as shown in its financial reports, with similar data from other universities, an analyst can get some indication of how much "better" or "worse" the university is operating.

9.6 THE ACCOUNTING SYSTEM IN THE PRIVATE SECTOR AND ITS RELATION TO HIGHER EDUCATION

From the 1960s onwards, the impact of the private sector on the economic life of Iraq has become less than it was in the previous decade, the main reason being the government's involvement in controlling the national economy and running it according to socialist ideology. An extensive nationalisation programme began, which was implemented in two phases. In the first period, 1964, the government nationalised 34 private industrial companies. When the Decrees of Nationalisation were issued during the second period, 1968, the largest commercial companies were nationalised and the private sector's power was reduced. The accounting system and importance of accounting in the private sector diminished gradually over the years.

The private sector accounting system is, in general, the double-entry method of recording accounting data from ledgers, journals and asset books.

At the same time, the government indirectly oversees the accounts of private sector companies through a state organisation for registering and supervising private companies. This requires them to hold book-keeping ledgers, journals and asset books which must be stamped on each page by the courts. The law determines that these official reports be used in the arbitration between private companies. In addition, it requires each private company to have certified external auditors to approve its accounts and income taxation. The law stipulates that a number of items, e.g. the depreciation rate, should be used without change for a limited period.

Even though the universities in general use the Uniform Accounting System, within this system is a separate section dealing with student loans, which uses the private sector accounting system. The balance of this debit and credit account is then entered in the overall university budget. This is an example of the failure of the Uniform Accounting System to meet the needs of university accounting.

The private sector accounting system is of less importance than either the government accounting system, which is widely applied in all governmental organisations, or the uniform accounting system of the Ministry of Higher Education, as applied in all the universities.

9.7 SUMMARY

This chapter has discussed accounting problems in developing countries in general, as a preliminary to its focus on Iraqi public sector accounting systems and their application in higher education.

The Iraqi public sector applies many accounting systems; the General Accounting System, the Uniform Accounting System and the Private Sector Accounting System. The oldest of these, the Government Accounting System holds many constraints in a situation of expansion of government organisations.

The Uniform Accounting System has been successfully applied in the public sectors in Iraq. It was begun to be applied in universities where it has an increasingly important role to play. However, although the Uniform Accounting System has been used since 1980, its use in higher education has not yet been fully developed. Some universities are still applying the Private Sector Accounting System, and complete harmonisation of accounting and administrative procedures has not yet been achieved. Computerisation has been introduced to the universities and this also needs to be developed and integrated with the Uniform Accounting System.

This description of the Iraqi public sector accounting systems, forms the background to further investigation of accounting and resource allocation efficiency in Iraqi universities.

CHAPTER TENIRAQI UNIVERSITY ADMINISTRATION AND EFFICIENCY IN THE USE OF RESOURCES

- 10.1 INTRODUCTION
- 10.2 THE EXTERNAL INFLUENCES ON THE EFFICIENCY OF UNIVERSITIES
 - 10.2.1 The Effect of Iraqi Ministries on University Finance after 1970
 - 10.2.2 University Accounting and Financial Efficiency
- 10.3 THE INTERNAL INFLUENCES ON UNIVERSITIES IN IRAQ
 - 10.3.1 The Objectives of Iraqi Universities
 - 10.3.2 The Function of Iraqi Universities
 - 10.3.2.1 Range of Academic Activities
 - 10.3.2.2 Professional Loyalties
 - 10.3.2.3 Participation and the Tenure Issue
- 10.4 THE GOVERNANCE OF UNIVERSITIES AND THEIR EFFICIENCY IN THE USE OF THEIR RESOURCES
 - 10.4.1 The Council and the President of the University
 - 10.4.2 Committee Systems and Informal Processes
 - 10.4.3 The Councils of Colleges
 - 10.4.4 University Administrative Affairs
- 10.5 SUMMARY

CHAPTER TENIRAQI UNIVERSITY ADMINISTRATION AND EFFICIENCY IN THE USE OF RESOURCES10.1 INTRODUCTION

Chapters Eight and Nine have presented the background to the current chapter on the "Iraqi University Administration and Efficiency in the Use of Resources". In Chapter Eight the emphasis is on the historical and recent development of higher education in Iraq as a background to the administrative and financial organisation of the universities. In Chapter Nine, a literature review showed the obstacles facing accounting in developing countries, as a preliminary to describing the accounting systems in higher education in Iraq. This material formed the background to an investigation of the administrative and financial efficiency of Iraqi universities.

To the knowledge of the researcher no public study has ever been made of university administration and financial efficiency in Iraq, and therefore no comprehensive information on this subject exists.

To overcome the lack of such data a questionnaire (Appendix No. 1) was circulated and government documents, laws and regulations were examined. The researcher has drawn on his experiences in accounting and research in the public sector and numerical estimates have been adduced from various fragmentary information with the following objectives:

- To investigate the influences of central government ministries on the efficiency of the universities in accounting and allocation of resources.
- To consider the role of university internal management in relation to the objectives and functions of the universities.

- To examine the governance of Iraqi universities and its efficiency. The normal elements composing the universities' system of governance are examined and changes needed for efficient planning and resource allocation are recommended.

10.2 THE EXTERNAL INFLUENCES ON THE EFFICIENCY OF UNIVERSITIES

Much literature on developing countries, for example Rodman, P. (1967), Guruge, A. (1967) and El-Ghannam, H. (1970), has pointed out that universities in developing countries have been affected economically, demographically, ideologically, politically, legally, culturally and technologically by many external bodies. Thus, Guruge, A. (1967, p.60) in his introductory chapter to the study of university administrations, argued that external pressures are: a. political ideology; b. politicians; c. lobbies, internal agencies and movements; and d. foreign aid. Rodman, P. (1967, p.24) cited similar factors in discussing the development of administration. Administrative and financial affairs follow government rules and regulations. Most of the education expenditure in almost all Arab countries is in the form of general government consumption from the public treasury. Government revenues to this treasury come from different sources, one of which may be external aid. There are differences among the Arab countries in their broad tax base and in the major sources of their public revenue (El. Ghannam, H. 1970, p.35).

As stated in the two previous chapters, Iraq is a socialist country where the government rules trade, industries, agriculture and education. Recently the government's major concern has been the development of new policies for scientific projects, higher education and technology which are required to strengthen the Iraqi states. Accordingly, Iraqi higher education, universities and colleges are subject to a great deal of

influence from central government and its ministries.

10.2.1 The Effect of Iraqi Ministries on University Finance after 1970:

There are a number of ministries which influence Iraqi universities, each one affecting that part of the university which is related to its activities. In the 1970s, higher education grew according to policies outlined in Article 4 of the Higher Education and Scientific Research Law of 1970. The aim of the government as stated in the article was to modernise and expand science, technology and research programmes to meet the political, military, economic and social needs of the state and to educate citizens in modern sciences and technology as well as their national tradition and history.

The legal basis of the education system is arranged and regulated according to the terms of the Higher Education and Research Laws 132 of 1970 and 55 of 1983.

The Ministry of Higher Education's impact is most noticeable on the public universities' educational administrations. The ministry and its affiliated universities and research centres are governed by laws, decrees and ordinances which constitute the basic legislation on public educational institutions in Iraq. On the 5th August, 1969, the Revolutionary Command Council (R.C.C.) issued a resolution to reorganise Iraqi universities according to the needs of the public and to avoid duplication in the university programmes.

The year 1970 marked the beginning of a new era with the enactment of Law No. 132, which established the Ministry of Higher Education and founded the Council of Higher Education in order to outline the educational, cultural, scientific and technological policies of the country. Continuing development called for a new law to be passed, Law No. 55 of 1983, as an amendment to Law No. 132 of 1970. This defined in greater

detail the responsibilities and aims of the Ministry of Higher Education, which were discussed in Chapter 8.

The effect of the Ministry of Higher Education is on student admissions and the rules governing them, student examinations, general memoranda on student transfers between universities, establishing new universities, their curricula and policies and the increases in academic staff to provide scholarships, as discussed in Chapter Nine.

The Ministry of Finance also has considerable impact on the universities, via the Ministry of Higher Education. The Ministry of Finance is the central treasury of the Iraqi state and is therefore in charge of issuing the annual budgetary regulations which every government-controlled organisation must follow in estimating its ordinary budgets (financial and manpower) and in expending the same.

The Ministry of Finance collects and discusses all the public sector budgets and submits them to the national committee which, in turn, submits them to the Revolutionary Command Council. If the budgets are approved they are returned to the universities for implementation.

From this brief introduction to the rules of the Ministry of Finance it can be seen that it has a powerful influence on all aspects of the Ministry of Higher Education and its affiliated institutions.

This influence derives from central government financial laws, resolutions, the universities' estimates of the annual finance and manpower budgets, and the budget policy of the development planning programme.

In Iraq, as in any developing country, the Ministry of Finance is interested in the financial activities of the universities because they are within the public sector. The data is therefore centralized for the use of the government. The ministry is in charge of the collection, processing and analysis of this data for national use. In the final

analysis a university's financial plan depends on bargaining between the university and the Ministry of Higher Education. It is understandable that the university practice is to inflate the estimate in the belief that it is going to be the subject of bargaining.

Financial approval in Iraqi universities is dependent upon the limited resources which have been previously imposed or suggested by the ministries and universities; for example if the Ministry of Finance allocates a specific sum for a particular university, (1) the university cannot exceed that limit, (2) the university can transfer sums from one account to another, (3) the university can increase or decrease within the accounts provided they follow the suggestion of the Ministry of Higher Education and Finance. The intention behind such a link between Ministries and university accounting is to promote effective co-ordination, high accountability between them in reorganisation of fund allocation and budget responsibility, efficient performance and planning, and the collection of adequate information for performance evaluation. It remains to be seen whether or not these advantages are in fact derived from the operation of the Ministry of Finance in Iraq, and its impact upon university finance.

The Ministry of Planning influences the universities through the investment budget programme. It controls and follows a budgetary programme which is separate from the ordinary budget, i.e. erection of buildings, new colleges and accommodation, etc.

The Diwan of Financial Control - an office in the Central Iraqi Government - is the professional auditor for the government and controls finance and the application of the accounting systems. The Diwan has helped universities to apply the Uniform Accounting System and has the power to audit their finances and to act on its findings. It would

appear that the Diwan's role in higher education is as follows:

1. It controls and directs the Uniform Accounting System and alternative systems in the universities and other public sectors.
2. It has a committee office in the Ministry of Higher Education. It acts as external auditor with the duty to audit the Ministry of Higher Education and its affiliated universities and research centres.
3. Each university has a direct link to the Diwan through its President for auditing purposes.
4. Members of the Diwan help the universities to find ways to speed up the implementation of the full Uniform Accounting System as required by the Ministry of Higher Education.

Further, as Enthoven, A.J. (1977) explained, there is the general function whereby:

The government audit must help verify the propriety of transactions to trace the funds to their destination and to check on the authority, efficiency and legality of the funds spent.

The impact of the ministries on the universities can be summarised thus:-

1. The Ministry of Higher Education - student admissions, curriculum approval, student training policy, increasing the range of academic affairs by providing scholarships.
2. The Ministry of Finance - financial policy resolutions, annual budget estimates (accounts planning, ordinary budget, loan budgets), annual estimates of manpower (laboratory technicians, academic staff).
3. The Ministry of Planning - accounts and budget policy, annual estimates, planning budgets.

4. The Diwan of Financial Control - auditing the financial and accounting systems.

Much university planning in Iraq is on a quinquennial basis, but not financial planning. Chapter Eight explains the quinquennial system which is used, for example, to estimate undergraduate admissions. Quinquennial planning has now been established in higher education for Masters and Doctorate degrees. The first quinquennium covers the period 1986-1990. The year 1985-1986 was spent in discussion, after which was appointed a general directorate for higher education responsible for planning and execution, in order to answer all the questions raised by such a plan before its execution. The five year plan is set up on three levels. The first is the establishment of higher degrees (Masters and Doctorate) within Iraqi universities. The second level is the creation of scientific relations between Iraq and foreign countries according to cultural treaties. Thirdly, there is a foreign level which involves sending students abroad to gain Masters and Doctorate degrees. An essential component of the plan is an increase in acceptance of students at Masters and Doctorate levels. In 1986/87 this was four times that of the previous year and a greater increase in acceptances is expected in 1987/88 (Ath-thawra 19 March, 1987, p.8).

Unfortunately, the effectiveness of quinquennial planning is currently weakened, serious problems being created by the fact that funding has not kept pace with increased admissions. Financial cuts for the universities have necessitated limitation of the number of students, whereas in fact, enrollments are expanding rapidly. A number of factors have contributed to the present situation.

1. Previously there was no link between estimates of student admissions and financial planning. Colleges reported on admission capacity

individually and at different times from the financial allocation.

2. As it is not obligatory for student admissions to agree with the estimates, difficulties are created for financial planning of colleges and universities, e.g. in providing manpower such as academic staff adequate for the number of students, besides providing adequate facilities, rooms, textbooks, laboratories and equipment.

3. Not only are financial and student admission estimates prepared without reference to each other, but there has also been a tendency for academic staff to over-estimate the financial position and to underestimate student numbers.

4. Although Iraqi higher education policy is broadly centralized, there is a tendency in some colleges to by-pass the centralized system of admissions. For example in Baghdad University, the physical education college accepts students directly. In 1986/87 the capacity was increased to 600 students (male and female) to give a total of 1664 students. Because of this high capacity the college had to divide its activities into day and evening studies. In addition the college established a degree in higher education and accepted eight students for 1985/86 increasing to fifteen students for 1986/87 (Al-Jumhuriya, Tuesday, March 24, 1987, p.4).

These increases, the growing tendency to by-pass the centralized system of admission, and attempts to set up an annual financial plan and quinquennial budget distinct from the financial estimates have weakened the quinquennial plan. Together with the Iraqi policy of totally free tuition, these developments have posed a number of problems in university accounting, resource allocation and administration. A further problem created by the changing pattern of enrolments and the failure to link the annual and quinquennial plans at micro and macro level has been the low quality of curricula and excessive burdens on

academic staff, creating much discontent among the students. Since the services provided by the universities are all free, when government funds are reduced, the students end up following whatever is offered. The universities are then not given enough incentive to reform their financial and accounting systems.

The total dependence of Iraqi universities on government funding gives them little flexibility. In the current situation, two main issues arise. The first is the need for efficiency in the allocation of resources. For example, the various university colleges differ in the resources allocated to them, e.g. the college of geography receives less than the science college on the basis that chemistry or physics departments require more money for equipment than does a geography department. It can be seen that it is of importance to define accurately the roles and needs of each department in order to allocate resources in a manner conducive to effectiveness.

The second issue is the desirability of more open funding, with resources derived from links with, for example, industry, agriculture, the civil service, etc. Universities and colleges also need increased autonomy in accounting and financial procedures.

However, for these measures to be truly effective it is necessary for the increase in student admissions to be stabilised, so that the colleges and academic departments can organise their teaching more effectively and link the student increase with their capabilities to improve their financial management and resource allocation. This can be done when the Ministry of Higher Education promulgates a clear policy of student admission according to university capacity.

10.2.2 University Accounting and Financial Efficiency: Iraqi universities' administration and resource allocation is subject to much external influence from many ministries, including those of Higher Education, Finance and the Diwan of Financial Control, but the greatest influence on resource allocation is the Ministry of Finance. However, this influence appears to operate inefficiently where the planning of the annual budget is concerned. The channels for resource allocation and accounting information are shown in Figure (10-1) which illustrates the ministries' impact on university budgets and accounting information. Thus, universities, through their financial departments, provide the Ministries of Higher Education, Finance and Planning and the Diwan of Financial Control, with accounting information.

It appears that these ministries generally receive inadequate financial and accounting information from the universities related to the annual budgets. This may be attributed to the inadequacy of university accountants, who need more training in the Uniform Accounting System, budgeting and public sector procedures. However, the Diwan of Financial Control makes many recommendations on the final budgets, records, and end of year budgets produced by the financial department.

To enable the central government to prepare adequate estimates and maintain efficient control, the Ministry of Higher Education has identified a number of requirements which may be divided into two areas: a) technical matters which include deficiencies in the flow of information between the Ministry of Higher Education and the universities, which require attention by universities; b) administrative steps to be taken in order to maintain efficient control and strengthen the relation between the Ministry of Higher Education and universities. It would seem useful, therefore, to set out these points in Figure (10-2) which summarises the views of the Ministry on the technical and administrative links between itself and the universities.

Figure No. (10-1)

The Relationship Between Central Government and University Accounting
and Financial Efficiency

Characteristics of organisational inter-relationship	Central Government Ministries, Diwan, etc.	Universities Organization			
General aspects of government accounting and financial system	Government rules and regulations	Government accounting and financial efficiency			
Impact of Ministry of Higher Education	X	/			
Impact of Ministry of Finance	X				
Impact of Ministry of Planning	X				
Impact of Ministry of Diwan of Financial Control	X				
1. Fund Report of the Government	X	X	X	X	X
2. Long Term Planning		X	X	X	X
3. The Annual Budget	X		X	X	X
4. The Annual Manpower Budget	X		X	X	X
5. Final Financial Plan	X				X
6. Monthly Accounts Trial Balance		X	X	X	X
7. Bank Consolidation		X	X	X	X
8. Quarterly Accounts Trial Balance		X			X
9. Reports of increases in accounts allowance or transfers between accounts annually	X				X

Note: Condensed by the researcher from university documents and responses to questionnaires administered in Iraqi universities.

Figure No. (10-2)

The Ministry of Higher Education's views on Efficiency in Accounting and Financial Systems

A. Technical: (There are many technical points that should be raised here on financial and accounting systems).

1. The universities' trial balances should show the balance between the accounts (credits and debits).

2. Accounting information should follow the format laid down in the Uniform Accounting System. This is not always done.

3. The accounting information recently produced, with suggestions and recommendations, has just become numbers on special forms.

4. The Ministry has noticed that, recently, it has been receiving only details of the universities' expenses and not the whole trial balance.

B. Administrative: (There are many administrative viewpoints that should be taken for better efficiency control.

1. The Ministry should visit the accounting department of the universities to co-ordinate with them and to encourage their activities.

2. The Ministry of Higher Education should continuously monitor the budgetary information which is received from the universities at monthly intervals.

3. The Ministry aims to facilitate continuity and control throughout the higher education sector and to maintain efficient internal control.

4. Internal auditors from the Ministry of Higher Education should visit the Auditing Department of the universities for the purpose of directing auditing activities.

Note: Views expressed during interviews with administrative and accounting staff at the Ministry
(Summarized by the researcher)

The Ministry of Finance (directorate general budget) issues annually formal regulations which are related to the execution of the annual current budget of the government. These summarise plans for the simplification of expenditure and collection procedures and set out goals for efficiency and performance. The Ministry of Finance requests the universities operate effectively in the use of their resources (Figure No. 10-3).

Despite the situation created by financial cuts, increased student numbers and the free tuition policy, the Ministry of Finance regulations on the allocation of resources still emphasise government fund collection. The constraints of financial cuts and restricted regulations on efficiency suggest that it may be desirable to review existing policies. Two areas which merit investigation are:

1. A review of the policy of free education, especially in regard to the cost of textbooks, etc., which is a heavy burden on university finance and the Ministry of Higher Education. Textbooks and annual publications of universities are free to all levels and departments and, as they are not returned to the university, the high cost of their provision recurs annually.
2. With the limited availability of funds from the Ministry of Finance, universities are moving towards alternative sources of assistance by opening their doors to outside influences. Services to other public sectors may earn subsidies to supplement government funds. For example, the medical college could serve hospitals, scientific colleges could serve industries, the arts college could be used for translation, continuing education, etc. Each university also has a publishing unit which could offer its facilities and services for external use.

Figure No. (10-3)

Annual Regulations Concerning Allocation of Resources*

	Area of Influence	Points Covered
Part 1	Government Fund Collections	<p>The funds allocated under the planning estimate must be collected and used each year.</p> <p>Need to define and eliminate obstacles to efficiency.</p> <p>Monthly schedules to Minister of Finance.</p> <p>Formulation of plans for tax collection.</p> <p>Report to Ministry.</p>
Part 2	Expenses	<p>Increased use of performance indicators.</p> <p>Recipients of government funds must show that they are wisely used.</p> <p>Authorization to execute budget plan flexibly.</p> <p>Efficiency of expenditure.</p> <p>a) Services: rent, advertising b) Electricity, telephone c) Assets: furniture, machinery buildings, vehicles.</p>
Part 3	Public Service	<p>Administrative staff turnover</p> <p>Employment</p> <p>Tenure</p> <p>Salaries</p> <p>Worker schedules</p>
Part 4	Socialist State Sectors	<p>Production in public sector</p> <p>Performance indicators, etc.</p>

Source: Republic of Iraq - Ministry of Finance 1982

* Summary constructed by the researcher.

Al-Khashab, A. 1982, investigated the developing interaction among Baghdad University (Colleges of Administration) and the socialist sector of the country. His research revealed a number of deficiencies, the most important being:

1. Interaction between the college administration and economy and the organisations of the socialist sector is weak in the fields of training and application of studies.
2. Colleges' participation in the interaction process bears no relationship to college priorities or to the number of its academic staff. The accumulation of experience within these colleges could help them to raise their levels of participation in this process.
3. The communication process on both sides is weak. Dependency upon indirect official communication without personal follow-up results in a great volume of communication for comparatively little result.
4. There is insufficient trust between the parties.
5. There is no adequate system for the process of interaction.

In short, universities do not seem to have the full monetary means with which to deal with other public sectors, such as industry, agriculture and the economy, despite the training of students in this respect. Iraqi universities need to increase research links with outside sectors as a way of benefitting the funds of the university, and to define and achieve appropriate academic goals. Inefficient methods of finance and cost accounting were mentioned by Al-Khashab, A. (1982), but he did not elaborate in his conclusions what could be done to increase the efficiency of administrative relations between the University of Baghdad and society as a whole. Thiab, T. et al (1980) mentioned that the Technology University served the outsider but did not discuss financial details or

how to develop efficient accounting methods and procedures to serve industries, agriculture, etc. The National Centre of Consultancies and Administration Development studied in 1984 the role of administration education in administration development. The study made many suggestions for increasing the efficiency of research and studies, strengthening the relationship between universities and public and government sectors. However, eight of these recommendations were made without details of their financial basis. Recommendations and suggestions without monetary bases and adequate accounting application are unlikely to achieve the desired results. More research, therefore, is needed into the development of the relationship between Iraqi universities and public and government sectors.

10.3 THE INTERNAL INFLUENCES ON UNIVERSITIES IN IRAQ

Very little has been written about Iraqi higher education and its administration, and it is hard to find empirical studies in this field except those of Al-Rahim, S. (1978) and Al-Shakhly, F. (1974) who investigated educational development in Iraq with an emphasis on higher education. Ghazoui, R. (1977) investigated the application of cost-benefit analysis to selected academic disciplines and professional specialization as an aid to the planning of higher education in Iraq. Latterly, Alrawi, H. (1985) has studied the situation of management accounting in Iraqi universities and its implications. Moreover, there is a complete lack of literature on accounting and financial efficiency.

Law No. 55 of 1983 was designed to lay the foundations of higher education and to set out its organizational structure, as well as to formalize the executive framework of higher education in the colleges, academic departments and technical institutions. Administrative methods aimed at democratic decentralization of the education process were

developed. The principle was established that there should be administrative centres for higher education, universities and technical institutions, centres for planning, control, direction, co-ordination, drawing policy suggestions and providing sufficient flexibility to cope with the varied organisational requirements of scientific education and to bring the organisation of all Iraqi universities within the framework laid down in Law No. 55 of 1983. (Ath- Thawra No. 4768, Tuesday, 7 June, 1983, p.6).

Iraqi universities have autonomy in the sense that they conduct their own administration and have decision-making power. This basic independence was given to the universities in items nine and ten of Law 55, 1983.

Item No. 9 states that:-

The university is a safe site and it is the most sublime resource of the society who have accredited to it its most sublime needs. The university undertakes the responsibility to realize the goals of higher education which are decided in this constitution.

Item No. 10 states that:

To the university, college, the scientific research centre, and higher institutes related with the university, are given the moral obligation, financial and administrative independence and the necessary legal capacity to realize its goals. It is run by a council.

The university council is composed of sixteen members including representatives of academic staff and the National Student Union and Youth (Al Mustansiriya Guide 1987, p.30), and has unlimited power of operating university activities.

The degree of autonomy in university administration is laid down in the law of 1983. However, financial freedom is limited in practice because of the total dependence on annual funding from central government

and the need for universities to operate within the annual resource allocation. The major channel by which this system operates is the annual financial estimates committee, which is discussed later in this chapter.

10.3.1 The Objectives of Iraqi Universities: Since 1968, when the present government took full command, the structure of the educational system has been designed to achieve two fundamental aims:

- (1) The socialisation of society according to the pan-Arab socialist philosophy of the party, and
- (2) Rapid economic development.

In 1969, a committee of the Revolutionary Command Council, after the study of the educational situation, recommended that university goals and objectives be implicitly shaped within the definition of the following factors.

1. Research in the dissemination of human culture and its development, with emphasis on the Islamic culture, and to support scientific research in all fields.
2. Cadre preparation from specialists and technicians to meet the need of the country for specialist manpower in different fields of higher education.
3. Orientation towards social development with the emphasis on democracy, unity and socialist principles and concepts.
4. Emphasis on a type of university study which builds the personality of the student so that he may be continually creative within his individual, social and national responsibilities (Ministry of Higher Education, 1979, p.4).

These aims are encapsulated in legislation, presidential directives and national plans. Resistance to the objectives of this policy was effectively removed in 1974 when the remaining private educational sector was abolished. The extent of divergence between declared and actual objectives has been narrowed to such a degree that only indifference and the occasional uncertainty prevent complete alignment (The British Council, 1980, p.17).

It would seem useful to examine the constitution of individual universities to identify broad university goals and objectives. An example would be the first article of the decree of Al Mustansiriya University issued by the Revolutionary Command Council on 15th August, 1969, which defines their goal as:-

To train people who are already in service to improve their standards and skills, in different fields of knowledge, and to meet the growing demands of the country for skilled and professional personnel.

The Technology University was established as the first specialist university in Iraq. Its goals are identified as follows:-

1. Graduating engineers, with special emphasis on engineering applications and responding to the needs of the national development plans.
2. Graduating technical teachers according to the needs of the national development plans.
3. Conducting applied research and providing engineering consultancy to the industries.
4. Giving special attention to postgraduate studies and the very specialized disciplines, and developing them according to national needs.
5. Creating new methods of engineering education and training in phase with technological developments and the country's needs. (Al.

Naimi, T. and Al-Nassri, S. 1981, p.663).

Therefore, Iraqi universities have multiple and complex objectives and functions. A similar complexity has been found in the functions of other Arab universities (Al-Ebraheem, H. and Stevens, R. 1980, p.206).

10.3.2 The Function of Iraqi Universities: Universities' functions

are to effect changes in people, research publications, etc. The process of input and output operates as follows.

<u>Input Variables</u>	<u>Process Variables</u>	<u>Output Variables</u>
1. Assets; land, buildings, machines, transportation, furniture and clerical equipment, plants, animals, etc.	- Annual planning policy - Annual budget achievement, etc.	- Benefit to university, central government, society. - Increase national wealth and growth, etc.
2. Inventories; crudes, oil, spare parts.		
3. Funds		
4. Manpower; Academic, administration staff and labour	- Ratio of academic, administrative, labour to students - Research development and policy	- Developing creativity - Increase research publication, books - Increase in skills - earning ability - etc.
5. Students	- Size of lecture rooms	- Increase knowledge skill, abilities,

of increasing efficiency therefore becomes paramount.

10.3.2.1 Range of Academic Activities: Iraqi universities differ in their range of academic activities. Baghdad University has steadily increased the number of its academic departments and research centres with a variety of educational and training activities. It now has twenty-two colleges and research centres. Basrah, Mosul and Salah Al-Deen have over five colleges. However, Al Mustansiriya has nine colleges and two institutions (Al Mustansiriya University Guide, 1986/87, p.20) and the University of Technology consists of nine departments. This university is different in that it specialises in the engineering field. An indication of the range of activity of Iraqi universities can be obtained from the following list of departments of Al Mustansiriya University and the University of Technology.

The number of academic departments affiliated to the colleges and institutions of Al Mustansiriya University is fifty-eight. Not only are these departments increasing in size, but the number of students at post-graduate level is also increasing (Al Mustansiriya University Guide of 1986/87, pp.51-63). The division of Iraqi universities into so many colleges and academic departments naturally increases the complexity of administration.

Al Mustansiriya Activities	Technology Activities
<ol style="list-style-type: none"> 1. College of Science 2. College of Arts 3. College of Administration and Economics 4. College of Medicine (in Baghdad) 5. College of Education 6. College of Medicine (in Kufa) 7. College of Fine Art 8. College of Engineering 9. College of Theology 10. Institute for National and Social Studies 11. Institute of Asian and African Studies 	<ol style="list-style-type: none"> 1. Mechanical Engineering 2. Electrical Engineering 3. Building and Construction 4. Production and Metallurgy 5. Control and Systems 6. Chemical Engineering 7. Education Technology 8. Architecture 9. Applied Sciences

Sources: The World of Learning "Iraq", Europa, 1986, (p.663)
Al Mustansiriya University Guide, 1986/87, p.20

10.3.2.2 Professional Loyalties: The university staff and faculty are considered to be state employees, and their salaries, promotions and allowances are regulated by the civil service code. The teaching staff is nominated by university departments, and appointments are made by the president of the university with the approval of the Ministry of Higher Education. Academic promotions are decided by the University Council or an academic body on recommendations made by specialised committees formed for this purpose.

The academic staff at the university is divided by rank into professors, assistant professors, instructors or lecturers and graduate assistants or demonstrators.

Instructors are appointed by the University Council on the recommendation of the appropriate College Council. They must hold a recognized Ph.D degree or Masters degree and must have practised their profession for at least three years; or, if they have a Bachelors degree, they

must have practised their profession for at least five years. Where necessary, a degree from a higher technical institute or a vocational degree, with 5+ years practice could gain an appointment. Assistant professors are appointed by the University Council on the recommendation of the appropriate College Council. Assistant professors must have the qualifications prescribed for the instructor and must have taught for at least four years in a recognized college or higher institute if they hold a Ph.D degree, or at least five years if they do not. Professors are appointed by a Republican decree, through a decision of the University Council, on the recommendation of the appropriate College Council. They must have all the qualifications prescribed for an assistant professor and must have held the rank of assistant professor in a recognized institution of higher learning for at least four years if holding a Ph.D degree, or five years if not. They must have shown exceptional teaching ability as assistant professor, published valuable studies, or carried out constructive undertakings that qualify for the professorship. Graduate assistants may be appointed by nomination of the appropriate department and a decision of the College Council. Non-Iraqis may be appointed as faculty members, but they have no tenure. They are appointed by decision of the University Council, on the recommendation of the appropriate College Council, for a period of time specified in the contract.

Civil service academic law governs academic staff and includes financial incentives. However, dissatisfaction has arisen from the fact that non-professionals gain more financial incentive from the law than do members of the professions. For example, although doctors or medical staff have been given more financial incentive than others, dissatisfaction was created by their lack of freedom to practice privately, thus increasing their income.

The old civil service law for academics was based on the number of teaching hours, i.e. assistant 14, lecturer 12, assistant professor 10, professor 6, etc. In addition, academic staff were awarded other financial incentives. However, the law does not prescribe how many students there should be per class or divide the number of students by group or classes in order to estimate the hours worked by academic staff. To reduce the complications of interpretation, therefore, a new law was enacted awarding 120% of actual salary on the basis that academic staff work the same teaching hours, attending from 9 a.m. to 5 p.m. In theory, the non-teaching time was to be spent on research. However, inadequate facilities made it difficult for staff to fulfill the requirement for writing and research.

While for a time it was mandatory for all academic staff to receive financial incentive and consequently devote their time to research and university activities, a recent change allows staff the option of receiving the basic salary only, teaching only the minimum stipulated hours, leaving time to devote to professional interests.

Even with the recent tendency towards linking academic work with professional interests outside the university, in both public and private sectors, the relationship is unsatisfactory. Inefficiency has resulted from lack of personnel, finance and other requirements for interaction. In addition, there is a shortage of some of the specialisms needed for this interaction, e.g. accounting and auditing. At the practical level, the absence of contracts between the universities and external bodies resulted in ambiguity in rights and obligations which in turn led to unsatisfactory execution of joint projects. There is a clear need for improved communication and the employment of a method of contracting the participating academic staff of universities for the benefit of the socialist sector organisations, specifying the duties, responsibilities

and obligations of each side and with guaranteed rights in sharing the research results and rewards, in addition to the penalties resulting from the breach of any obligations.

No accounting data is available regarding professional services performed by academic staff to the public sector because this is regarded as public service and no fee is received, either by the individual, or the university. The idea that these activities might be made a source of revenue has not occurred and the accounting system therefore does not record transactions of this type. In addition, literature and interviews give no indication of how much the academic staff earn from their contribution to such consultancies or how much the university benefits from such services, even though the goals of the University of Technology, for example, are to be useful to society and to contribute to national policy.

10.3.2.3 Participation and the Tenure Issue: In general, there are three laws which govern the tenure issue; these are the academic law, the civil service law and the labour law. In March 1987, central government announced a major decision concerning the labour force in the public sector (Ath-Thawra, March, 19, 1987, p.5), namely, that workers were to be classed as civil servants. The decision was made in an effort to reduce the number of laws governing the public sector and the number of employees within the sector and also to review the salaries paid to them.

Accordingly the staff - academic, administrative or labour of the Iraqi public sector - are paid according to regulations and scales which are common to all universities attached to the Ministry of Higher Education, and which are somewhat more favourable than those of traditional governmental establishments and departments. Salaries are normally based on academic qualifications and the number of years of experience

or service, irrespective, in most cases of the work actually done, but within the salary limit of the position. The salary limits themselves can be adjusted during the annual manpower review (as discussed in Chapter Nine). The level of pay within the government sector, particularly the traditional civil servant, in the traditional government department, has been the subject of adverse comment, often with justification. Even civil service laws reflect this by their emphasis on legal rights, guarantees and penalties rather than responsibilities. There are a number of important general problems associated with government and public sector employment and those highlighted in one study were: the existence of unemployed graduates brought about by poor planning of higher education; excess employment in many government organisations; poor distribution of manpower, poor planning of manpower numbers and skills, and poor allocation and emplacement.

The university resource allocation plan is formulated solely by administrative staff. Academic staff in Iraqi universities have little participation in university accounting and financial planning simply because the annual plan is not yet divided by departments and colleges. Moreover, their contribution in the financial committee is so limited, that it could be said to be almost non-existent. Academic staff are not in control of those aspects of resource allocation which affect them, keeping to their traditional roles of teaching and writing and failing to contribute effectively to university finance and planning.

Because academic staff are important in the activities of the university, their effective participation in university accounting, resource allocation and planning could be important for its efficiency. This would be facilitated if the plan were to be classified by departments or colleges with the staff involved in resource allocation and their activities monitored. Another restriction on academic participation

in financial matters is the lack of benefit to the university from consultancy and similar activities. If such activities were to bring financial benefit to the staff or university as a whole, the interest of academic staff in planning and financial affairs would be greater.

Iraqi universities are typical of any state organisation in Iraq. The basic hierarchical structures and staff positions were designed according to the laws of the Ministry of Higher Education Number 132 of 1970, and 55 of 1983.

The levels of appointment, promotion and retirement were set according to the Ministry of Finance law called the "government civil service law" which defines the hierarchy of government employees and their corresponding salaries. All the administrative staff of universities are covered under this law. There is another law which is distinguished from those covering other state organizations in Iraq, called "the law of education service". This covers the academic staff of universities and runs parallel in description to the government civil service law.

Whilst both these laws cover grades and salaries, conditions of employment and other points such as pensions, the "law of education service" is different in that academics enter employment on a different salary scale, and the law also regulates the financial incentive for academics concentrating their service within the university in preference to undertaking private sector work.

Some of the main points of the "government civil service law" are as follows:

Grades and salaries: Nine grades of employment were specified, and a list prescribed the salary limits (spanning one or more grade) for each type of post. The director general is assigned a "special

grade" by the government. Annual increments are granted within the salary limits of a post ostensibly on the condition that the incumbent has good performance reports from his superiors, but in reality more or less automatically. Beyond these limits the incumbent has to be promoted to another post, given a higher title, or his job upgraded; a somewhat less automatic task. The board of directors can grant an employee, as a reward, more than one increment a year.

Conditions of employment: An applicant has to be an Iraqi or the citizen of an Arab country, over 18 years of age, with an unblemished record, and must have completed or been exempted from national service. He can only be appointed at the lowest limit of the grade for which he educationally qualifies. The new applicant usually has to qualify for a post, not only on the basis of merit, but also by having a "calculated salary" (based on educational qualifications or in "technical" professions, years of experience) which falls within the limits specified for the post; this seriously restricts professional and salary advancement by merit alone. The board of directors may, in exceptional cases of dire need for some technical expertise, grant an applicant up to two grades higher than his "calculated salary". There is a trial period of 12 months, renewable for another six, during which time he can be discharged.

Other items such as penalties, leave, promotions and retirement, etc., are regulated by the same law. The regulations applied to universities' administrative staff are similar to those applied to the academic staff except that the academic staff member has an incentive equal to 120% of his actual salary - the government civil servant's salary is divided into two parts; the first part is called "the actual salary" determined by the employee's grade in the hierarchy, the second part, called "the living expense" is designed as an incentive to the

employee to stay in the public sector rather than to work in the private sector.

Employment of foreign academic staff creates certain disadvantages. Most are temporary appointments who serve for a limited number of years then leave. They do not develop a real interest in the university or students. As many of these teachers are not recruited on a private basis but are assigned by their respective governments they tend to introduce international political rivalry into academic life. However, on balance, until Iraq has trained sufficient academic staff, the advantages outweigh the disadvantages.

10.4 THE GOVERNANCE OF UNIVERSITIES AND THEIR EFFICIENCY IN THE USE OF THEIR RESOURCES

This section investigates formal elements in the universities' systems of administration and collates information derived from interviews, documents and literature regarding the efficiency or otherwise of the present system of administrative control, planning and resource allocation. An attempt is made to assess the involvement of different bodies within the university on the internal decision-making process, for example the university council, university administration, individual faculty professors and students.

The main features of university governance in Iraq can be broadly described as follows:

10.4.1 The Council and the President of the University: The Council of the university is the highest academic administrative body within the university, academic affairs being controlled solely by its administration and regulations. It is composed of the university president, two vice presidents (one academic and one administrative), deans of colleges and institutions and representatives of the teaching staff

and Students Union, i.e. a total of sixteen members (Al Mustansiriya Guide of 1986/87, p.31).

Although the Council may select two experts from outside the university to serve for a period of two years in an advisory capacity, and may also delegate some of its authority to the presidents or to certain committees, it has been found that formal membership of the Council is closed to them because of single-source funding and centralized decision-making. The University Council does not include representatives of industry, commerce or the professions, who might be able to contribute valuable suggestions based on experience of the demands of the outside world, as well as provide a link with sources of additional funding.

The main authority and responsibilities of the University Council are the programming of study, degree requirements and granting of same, the organisation of scientific research, the promotion of teaching staff and the proposal of the annual budget. The head of the University Council is a member of the Ministry of Higher Education as previously stated.

University Law - item 15 - states that each public institution should be accorded with independent administrative and financial status and its statements submitted for inspection by their financial supervisor.

The Higher Education Law No. 55 of 1983 defines, in item 9, the university as a safe site which has "the most sublime resources of the society which accredits it with its sublime needs". In turn, the university undertakes the responsibility of realizing the goals of higher education which have been decided in the constitution. Item No. 10 of the same law gave the universities their financial and administrative independence necessary to realise their goals, and stated that they would be run by Councils.

The position regarding Committees of Council in Iraqi universities differs. Technology University has set up a fixed committee structure linked with Council, with committees for staff and technicians affairs, for curricula and programmes, for postgraduate students and for the support of research and publication (Alnaimi, T. et al, 1980). In contrast, the University of Al Mustansiriya has no such formal committee hierarchy.

The University President serves as Chairman of the Council, and the laws of higher education which defined the autonomy of the university also place the entire decision-making authority in the hands of the Council and the President of the university. However, university decision-making mainly affects the financial budget - quinquennial and annual student admission, establishing higher studies, curricula and manpower. The Iraqi universities are autonomous in the sense that they plan their funds within the regulations of the Ministry of Finance.

A notable weakness in the Council's decision-making capability is in the role of the Dean. Although they take part in the discussion of the financial estimates at the aggregate level, they are unable to do so to any great effect. The reasons for this are twofold. Firstly, the planning format is not conducive to effective participation by the deans, because at this level, the financial plan is set up in very broad terms. It is not divided by College, nor does it show comprehensive details of college accounts or itemized expenses according to the classification of the Uniform Accounting System. Secondly, the academic background of the deans does not prepare them for an active role in financial planning. They tend to take the view that as the financial budget and its allocation of resources are prepared by a specialist committee, all requirements will have been taken into account, and further involvement in the details of the estimates is unnecessary,

particularly as they have little knowledge of financial and accounting rules and practices. The dean's role on the University Council is therefore largely confined to academic and student affairs.

In order to improve matters, a number of possibilities present themselves. One suggestion is to appoint accounting officers throughout, but this may lead to decentralization which the university does not favour. Another possibility may be for accountants from the financial department to go down to the deans and academic departments to help them in the preparation of their financial plan, but this would depend upon the financial department's experience in accounting and finance related to university processes. The third alternative would be the formation of a committee of accountants and the academic departments to follow the execution of the annual plan of the colleges. This might be the most efficient way to benefit both the college and the quality and efficiency of accounting, resource allocation and spending. However, first it would be necessary to divide the university plan by college as well as according to the classification of accounts, thus making clear the responsibility and accountability of each college in following the annual plan.

The time spent by Council in discussing the estimates for the aggregated budget is insufficient. The University Council does not discuss the performance of the fiscal budget at the end of year because of the delay in the preparation of the auditing report by the Diwan team. Thus the Council approves the budget without reference to the previous year's performance and auditing report. When the auditing report is finally prepared, it reveals many inconsistencies, e.g. accounting inventory books are not consistent with the actual inventory of the university, then the Council delays and does not give any decision as to how it may resolve these problems.

Investigation has suggested that one method of improving administrative efficiency related to accounting and the allocation of resources of colleges is to make continuous training available to the top management of the university administration. In fact, an announcement was recently made that special training was to be given to the top levels and their assistants to develop their skills. A national centre for consultancy and the execution of administrative development was set up in Baghdad University (Ath-Thawra, March 5, 1987, p.8).

The training will be useful but as the course is only of seven days' duration it is doubtful whether it can cover all administration requirements of the colleges.

A further suggestion is that a senior academic from each academic department should contribute to the allocation of resources. If it is not possible for an academic from each department to take part simultaneously, then they should be able to participate by rota. This would serve a number of purposes.

1. It would share the burden of academic administration over all the academic departments and in the end reflect their efficiency.
2. Academic staff would be trained in the process of administering the allocation of resources and accounting.
3. Academic staff would contribute to decisions taken involving their departments and would contribute to the setting up of democratic administration of departments, colleges and the university as a whole.
4. All academic staff would have influence on and interaction with the allocation of resources and the accounting efficiency of academic departments, especially if each department were to become a budget centre. This would also create competition for efficiency within departments to be aggregated in the university budget.

10.4.2 Committee Systems and Informal Processes: The University of Technology has four committees linked to the University Council.

1. Committee for staff and technicians' affairs. 2. Committee for curricula and programmes. 3. Committee for postgraduate students, and, 4. Committee for the support of research and publications (Ministry of Higher Education and Scientific Research, 1982, p.6). Since the University of Technology's establishment, it has contributed, through these committees, to the fields of mechanics, electronics and chemistry. In the first the committee has completed a broad survey of industry and has begun research to improve production and development. These committees consist of over four members. Not only do their activities strengthen the links between the university and society at large, but the increased theoretical and practical experience of the staff involved in such projects, is likely to be reflected in the teaching at the university. However, no attempt has been made to link accounting, planning and allocation of resources to the Council of the university. The accounting and resource allocation committees are not linked with Council, and unlike other committees, are not headed by a council member.

Many accounting and administrative committees are set up, for example those responsible for inventory, annual budget, annual development plan, purchasing, sales, contracts, auditing, pricing, discipline, promotion and appointments. Often committees are formed to achieve a very specific purpose within the broad areas indicated above, and, that purpose achieved, the committee is dissolved and accountability ends.

Of these committees, the committee for the annual budget is the most important in estimating the allocation of funds to the university. Its importance is also derived from its membership which is drawn from the highest level of the university hierarchy, the President or Assistant President, the head of finance and administration and the accountant of the university.

It could be argued that committees should exist, not just to make a report, but to follow-up and control the results of that report. Accordingly, accounting, finance and administrative committees need to define their purposes and performance more clearly.

The common deficiency of these committees appears to be that they operate ambiguously for a specific financial purpose. The guidelines on authority and responsibility within the university do not deal with the duties and financial authority of these committees. In addition, problems are created by the many rules and regulations to which they are subject, and which cause difficulties in application of the accounting system. A further deficiency is that academic staff are not represented on these committees, though they may be able to play a useful role in resource allocation and budgeting.

In summary, then, it can be suggested that committee tasks and responsibilities need to be more carefully defined, that the rules and regulations applicable need to be clarified and that it should be recognized that academic staff may be able to make a valuable contribution to the activities of these committees.

Other improvements might be the introduction of incentives, moral or material, to encourage members of committees to fulfil their roles effectively, and the requirement that the committees for inventory, auditing and purchasing should meet with deans and heads of academic departments to notify them in detail of the requirements of effective management of laboratories and expensive equipment and the condition of classrooms, buildings, etc.

10.4.3 The Councils of Colleges: The university is divided into colleges and research centres, each being governed by a dean and a college council. The dean is appointed by government ordinance and must hold the rank of

assistant professor or above. He also serves as the president of the college council which is the chief scientific and administrative body in the college. Its members include the heads of departments or branches of the college, and representatives of the teaching staff and students.

The academic staff form a very important part of the university not only in their teaching roles, but also because they act as administrators, on the university councils as presidents, on the college councils as heads of department, and on committees.

The dean of the college of art and the assistant dean of the college of economics and administration were in agreement as to how the academic staff participated. Their interest lay in student affairs, including passes and failures, attendance and absences, expulsions and discipline, examinations and awarding of degrees. In the field of study, they are involved with curriculum development, choosing textbooks, assessment of research, nomination of academic staff and suggestions for study facilities. Increasing student admission is another of their spheres of activity. Therefore, deans as academic leaders play a very important role in college activities relating to student and academic staff, but their importance in accounting and resource allocation is much less, for reasons which were discussed in section 10.4.1 above.

Deans of colleges who administer academic staff, financial and student affairs have no experience of accounting and the allocation of the resources of colleges other than their operational experience of budgeting. They are not accounting and financial experts, and they have conflicting dual duties: (1) they mostly concentrate on academic, administrative and student affairs, (2) they are less capable in accounting, planning and resource allocation because they feel these are not their sphere of interest, and they are uneasy with the complexity of accounting information. Therefore, they answer the queries of the

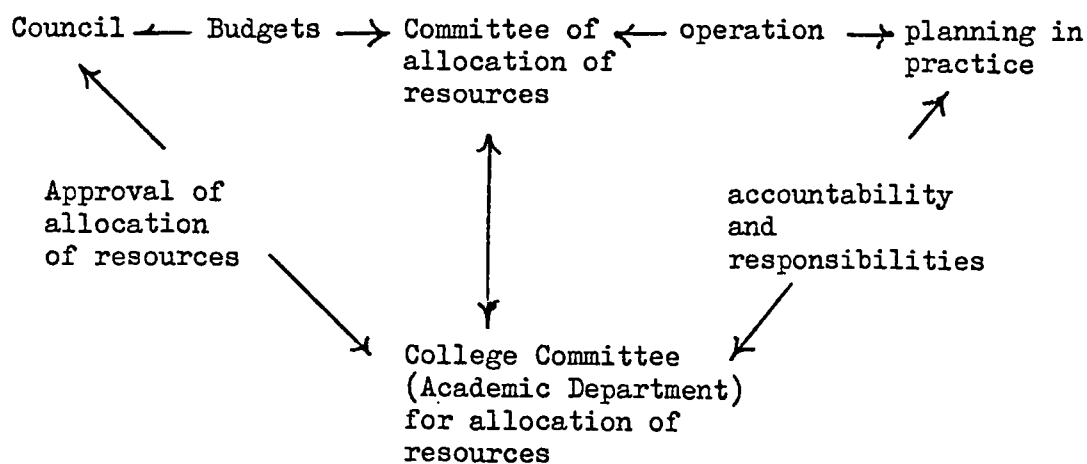
financial committee for the budget on the basis of a percentage increase over the previous year's figure.

Deans have, in name at least, control over petty cash, but in practice, these expenses are disbursed by the college administration. The problems at this level appear to be (1) actual spending on services or social activities may not agree with the rules and regulations given by central government, (2) the Uniform accounting information system does not have the answer to classifying these expenses, (3) expenditure is checked against petty cash on each occasion money is required.

It is felt that the obstacles to efficiency of the financial department and its relationship to academic departments would be improved by the following measures.

1. Increase and improvement of the accounting cadre with specialist training of accountants, financial and economic staff.
2. Definition and simplification of the channels of communication between the accounting and finance department and colleges and academic departments.
3. Providing direction to the accounting and financial department and giving it credibility among the academic departments by nominating as its leader one of the academic staff with a background in accounting, finance or planning and providing the staff with incentives.
4. Reviewing the accounting and financial structure and related manpower in universities and colleges and re-adjusting the procedures for accounting and financial transactions to suit the particular needs of the university.
5. The resource allocation committee of the colleges should be required annually to make a detailed estimate of proposed expenditure and submit their financial budget to the committee of financial estimates - which

is set up from the council and head of finance and administration to unify the university plan and discuss it with council. Monthly, and quarterly reports should be sent to all colleges in order to follow-up their responsibilities. The process may be illustrated by the following diagram.



Note: Simplified process of interaction between Council Committee and College Committee, suggested by the researcher.

Universities in Iraq are co-ordinated with the national centre of administration development. However in 1987 there was a move to organise joint training programmes between Baghdad University and the National Centre for the administrative development of deans and assistants of colleges. The programme covers administration and decision-making, organization, planning and accountability, etc. (Ath-Thawra, 26 Feb. 1987, p.8).

Administrative and academic staff with responsibility (i.e. those holding the positions of deans, heads of department, etc.) should be conversant with management accounting and resource allocation methods and procedures, theoretically and practically by means of courses on planning and accounting procedures, resource allocation, management and other fields which would improve their awareness of the needs of university finance and administration.

Administrative staff of universities should be provided with continuing education and training in management and financial accounting, because of their involvement with external accounting and financial matters, e.g. rules, regulations and civil law. Internally the staff need to understand the accounting system, the system of planning and plan implementation and the allocation of resources. To this end they need more intensive training both theoretically and in practice.

Heads of department make limited decisions in the allocation of resources of the colleges within their authority and also provide the necessary accounting information to the assistants of the president, the councils and external bodies, as annual reports on allocation of resources and other matters are requested.

Academic departments are ignorant of the details of accounting and non-accounting information, financial rules and planning and resource allocation, despite the vital importance of these to departmental operation. It was found that heads of department tend to shy away from involvement in finance and resource allocation, afraid that their ignorance will lead to miscalculation, and all too aware that under Iraqi law, the penalties for financial mismanagement are heavy. Instead, they concentrate on academic activities.

In all colleges, the position was the same; (1) lack of co-ordination between academic heads of department and the financial committee and financial department, (2) underdevelopment of academic heads of department in the administrative and financial aspects of the university, (3) lack of co-operation between colleges and departments - for example, one college had videos which another did not have, but a request to borrow a video did not meet with co-operation, (4) heads of department are not asked for information or opinions on manpower, whether academic, administrative or labour staff, because it is central university's

responsibility to estimate university demand.

Further difficulties are created by the decentralization and sub division of the accounting and finance staff in Iraqi universities. Administrative staff are responsible to the deans, while the financial staff are responsible to the head of the financial department. The operation of these dual influences on accountants is awkward in practice.

There is a common conflict phenomenon in all levels of the university structure between the administrative team and the hierarchy of academic staff who run the educational operation.

An administrator has widespread duties, and his skills must include planning, organisation, co-ordination, leadership and control, a broader spectrum than is obtained from an academic degree. The academic administrator has the crucial task of making a decision from the many alternatives which are presented to him, and must also take responsibility for overseeing the implementation of his decisions.

Academic staff on the other hand work in a narrow, specialized field and operate within that field only, they do not take part in decision-making and execution. The efficiency of cooperation between the administrative and academic fields depends upon the quality of the staff. It will not be enough to introduce methods to improve the planning and resource allocation processes of universities without a corresponding increase in the development of the administrative staff through training and research.

10.4.4 University Administrative Affairs: Each Iraqi university has its own administration, though the departments are similar in structure. Their authority as delegated is written into documents called the 'University Authorities'. The structure may be understood by taking Al Mustansiriya University as an example. The highest authority is divided

between the assistant to the president for administrative and student affairs and the assistant to the president for scientific and higher education. Below them are the directorate of student training, student affairs, law, provision, finance, registration, personnel, textbooks, library, culture, higher education, physical education and army training, auditing, planning and follow-up, engineering and the secretary to the president (Al Mustansiriya University Guide, 1986/87, p.33).

These administrative departments are different in their structure because of the complexity of their tasks, e.g. the financial, registration and personnel departments are centralized, though the personnel department has units in the colleges because of the complexity of the civil service laws which govern the academic, administrative and ancillary staff in universities. The university administrative structure highlights the importance of reporting and coordination, both vertically and horizontally.

Figure No. (10-9) summarizes the governance of universities and its effectiveness and efficiency in the two Universities of Technology and Al Mustansiriya, and shows the role of the council and president in strategic planning, as given in Chapter Nine. Their accounting and non-accounting information needs are both internal and external, accurate, specific, aggregate and objective.

Administration Departments and sections of the university represent management and operation control. They deal with key resources and aim for high efficiency in monitoring and controlling their financial affairs. Their information mostly involves accounting. It is both internal and external, concerned with specific detail, and objective in character.

This research discovered internal administration deficiencies which affect university efficiency and which may be summarized as follows.

Figure No. (10-9)

Governance of Universities in Iraqi Universities and its Effectiveness and Efficiency

Universities Positions	Universities Control Systems	Effectiveness and Efficiency	Allocation Resources	Accounting and Non-Accounting Information
Council/ President	Strategic Level	Effectiveness	-less specific -formal process	-internal, external -accurate -specific -aggregate -objective -accounting and non-accounting
President	Strategic Level (dual job)	-Effectiveness -Efficiency	-specific -formal process	-internal, external -accurate -specific -aggregate -objective -accounting and non-accounting
Deans/Council of Colleges	 (dual job)		-reporting on requesting allocation resources. -suggestion on increase amount of resources	
Head of Department and Academic Staff			-reporting on requesting allocation resources. -suggestion on increase amount of resources	
-Administration Department -Sections	-Management Control -Operational Control	-High efficiency -Highly efficient (in monitoring and controlling, etc.	-key resources -very specific -informal process	-internal, external -absolutely accurate -very specific -very detailed -very objective -accounting mostly

Note: Analysed by the researcher from documentary evidence and information obtained from interviewees and questionnaire respondents.

1. Iraqi universities have become multi-administrative structures whereby various departments, committees and individuals are concerned with the same duties. This results from dual operation and specialization and the conflicting patterns of executive authority. Added to this are difficulties of administrative confusion due to the complexity of the relations between university administration, society and the government. It has been the tendency of the authorities in expanding the administrative structure, to establish offices first and then look for tasks for them to deal with, rather than first analysing the work to be done, then establishing the appropriate administrative structure.
2. University administrative committees, which are in charge of university planning, resource allocation and control are so large and unwieldy as to make the achievement of different accounting and financial management decisions virtually impossible.
3. As discussed earlier, the university committees are given executive duties but are also continually drawn into the procedures and discussions of day to day routine so time is not available for major tactics of operation; planning and direction. This conflict between the actual requirements and committee duties has led to some accounting sections falling behind in their tasks.
4. Administrative staff are not up-to-date with developments in financial administration due to lack of in-service training at all levels.
5. The Universities of Technology and Al Mustansiriya are both short of employees in accounting, auditing and registration. This shortage has been exacerbated by failure to increase staff to keep pace with university expansion. Further, there is a shortage of management consultants in higher education to investigate work processes, division of labour, use of systems, etc.

6. The administration complains of lack of cooperation between the accounting section and the academic departments or colleges. This seems to arise from the fact that neither side understands how the other functions and how each complements the other. A further cause may be deficiency in the financial planning system and accountability process.

It is necessary to improve the financial department as a whole for better performance results, bearing in mind that universities are unique institutions, different from other public sector organisations, as they must serve the needs of both teaching and research. It is recommended that these academic staff, economists, administrative and accounting and finance improve the level of accounting, planning and resource allocation efficiency by appointing one of their number as head of the financial department of the university, and by a programme of in-service training and further research.

10.5 SUMMARY

As we have seen, universities in Iraq have faced administrative and financial change in recent years.

The most dramatic change in Iraqi universities occurred in 1970 when universities became a public sector. Accordingly, the resources of the universities came solely from the central government. Moreover, the change has unified university administration: academic and administrative departments are similar in all universities.

Interaction between Iraqi universities and the government is strong and direct because of the government's direct interest in national affairs and the centralised conduct of the economy.

There has been little research into the administrative relationship between universities and government, but problems have been found,

arising from the fact that the laws governing external administration and financial relations are numerous, complex and formulated with insufficient clarity.

Further, while academic policies, admissions, etc., are planned on a quinquennial basis, financial planning is annual. There is complete dependence on government funding, which is failing to keep pace with admissions. It may be desirable for Iraq to review its free education policy, and to consider the possibility of more open funding, including developing links with other sectors, in order to give the universities greater flexibility in their financial and administrative affairs.

A further deficiency at this level lies in the flow of information between universities and ministries, which is inadequate and inefficient due to staff shortages and lack of experience and training.

There are also internal factors influencing administrative efficiency. Iraqi universities are complex institutions with multiple goals, creating difficulties in decision-making and in evaluating efficiency of performance. Literature on Iraq has paid little or no attention to administrative efficiency in universities, whether of academic staff, use of resources, or financial and accounting affairs.

There are a number of issues which complicate the managerial, administrative and financial processes, and thus affect the efficiency of universities as a whole.

The wide range of activities in Iraqi universities is reflected in the number of academic departments set up with the approval of the Ministry of Higher Education. There is scope for investigating the size and complexity of the administrative and academic structure, and its effect on efficiency.

Regarding professional loyalties, the university staff and faculty in Iraq are considered state employees and their salaries, promotions, allowances and retirement pensions are regulated by the civil service code.

Socialist policies have tried to eliminate the dilemma of staff dissatisfaction and conflicting loyalties by awarding subsidies to academics for not working outside the university. Professional work is only undertaken with the approval of the university. However, there is a shortage of some specialists, i.e. accounting and auditing, and a lack of interaction between universities and the outside environment.

Tenure in Iraqi universities is governed by academic, civil service and labour laws which have retained a number of shortcomings. In particular, there is a need for consideration of the academic law and its effect on university goals and academic motivation.

The governance of a university affects its efficiency in using its resources. Iraqi universities are governed by a simple hierarchy from the President and Council to the Deans and heads of department. In theory, the Council is the most important central body, though as we have seen, Iraqi university councils are small, and limited in composition. None of its members are truly involved with funding.

Iraqi law rigidly defines financial and administrative responsibilities. It attaches more importance to the Council though since the annual financial plan is drawn according to the resolution and legal requirements of the Ministry of Finance, administrative involvement in resource allocation is reduced, with fewer members and less comprehensive discussion at the strategic planning level.

The President has authority and responsibility in financial matters, and has some influence over the external environment. His Administrative

Assistant is involved in financial and accounting matters. He or the President heads the budget estimation committee, and operationally he has greater authority over spending approval and long term planning of manpower than the head of finance. He could play an effective role in university financial policy if he has the right financial and administrative background. His role is an essential aspect of university efficiency in Iraq.

The committee systems in Iraqi universities are unsuited to their administrative and financial tasks. Often they exist only to make a report and there is no follow-up. Regulations governing the committees are complex and difficult to apply. Finally, academic staff are not represented, so that they lack financial experience, and decision-making may be divorced from their needs.

A particular weakness is in the role of the dean. Deans have a limited decision-making role in university finance, and provide the necessary accounting information to the Assistant to the President, the Councils and external bodies. They are bound by government regulations. The petty cash is their only regular source of money as they have no internal budget, nor do they have any real influence on the planning of the budget. Deans tend to be interested in academic and student affairs rather than accounting, and they lack financial experience and training.

Similarly, Heads of Department tend to shy away from involvement in financial affairs. They also lack a monetary basis other than the petty cash. Lack of coordination between Heads of Department and the Finance Committee is a major deficiency at this level.

Although the chapter has revealed many areas of administrative difficulty and inefficiency, arising from the conflicting patterns of authority, the complex influences of central government, and from

university structures and procedures, a number of recommendations have been made which might improve the situation, including staff development and training, a review of funding, and altered committee structures.

However, the next chapter will examine in more detail the crucial issues of financial planning, resource allocation and fund monitoring.

CHAPTER ELEVENACCOUNTING AND FINANCIAL EFFICIENCY OF IRAQI UNIVERSITIES

- 11.1 INTRODUCTION
- 11.2 THE BACKGROUND TO UNIVERSITY PLANNING AND INTERNAL EFFICIENCY
- 11.3 IRAQI UNIVERSITIES' PLANNING, RESOURCE ALLOCATION AND ACCOUNTABILITY IN PRACTICE
 - 11.3.1 Strategic and Long-Term Planning
 - 11.3.2 Resource Allocation Criteria
 - 11.3.3 Resource Allocation
 - 11.3.4 Management Accounting Information
 - 11.3.5 Responsibility for the Resource Allocation Process
 - 11.3.6 Budgetary Control
 - 11.3.7 Resource Allocation Accountability Process
- 11.4 THE ACADEMIC DEPARTMENT AND MANAGEMENT OF ITS RESOURCES
 - 11.4.1 Authority of Colleges
 - 11.4.2 Accountability of Colleges and Departments
 - 11.4.3 Colleges' Management Styles
- 11.5 PLANNING AND RESOURCE ALLOCATION IN IRAQI UNIVERSITIES AND PPBS
 - 11.5.1 A Consideration of Deficiencies in the Current Planning, Resource Allocation and Accounting System
 - 11.5.2 Brief Definition of Planning Programming Budgeting System (PPBS)
 - 11.5.3 Annual Planning and PPBS
 - 11.5.4 The Uniform Accounting System
 - 11.5.5 Brief Comparison Between Current Auditing Practices and the Application of PPBS
 - 11.5.6 Comparison Between the Universities' Present System and PPBS.
- 11.6 THE APPLICATION OF PPBS IN UNIVERSITIES
 - 11.6.1 The Application of PPBS in Colleges and Departments
 - 11.6.2 Funding to Academic Departments
- 11.7 SUMMARY

CHAPTER ELEVENACCOUNTING AND FINANCIAL EFFICIENCY OF IRAQI UNIVERSITIES11.1 INTRODUCTION

Chapter Eight, "The Higher Education of Iraq" gave a brief general history of the education system and, in particular, higher education and the role of universities in Iraq. In addition to giving statistical information on students and financial affairs in higher education and the expansion of the system, the chapter outlined the central government's influence on universities: student admission, teaching staff, appointments, salary scales, etc., Ministry of Higher Education and University funding, together with the implications of the expansion of student numbers over the years.

Since this research is concerned with the accounting and finance of higher education, Chapter Nine reviewed problems of accounting in developing countries and Iraqi public sector accounting and finance. The chapter gave the history and a brief description of the main accounting systems, Government, Uniform and Private, in addition to outlining the financial regulations governing Iraqi higher education.

These chapters, eight and nine, provide the background information necessary for a consideration of the administrative and financial efficiency of Iraqi universities. Chapter Ten then investigated in depth the efficiency of university administration.

This chapter is devoted to an investigation of financial planning, the allocation of resources and monitoring of funds and how to improve efficiency in long-term planning, resource allocation, quality of management information, responsibility for the allocation process, budgetary

control and the process of accountability. The chapter also reviews literature concerning university accounting and allocation of resources in Iraq.

11.2 THE BACKGROUND TO UNIVERSITY PLANNING AND INTERNAL EFFICIENCY

Previous chapters have discussed university administration in relation to administrative efficiency and, to some degree, to the accounting and financial affairs of universities. The relationship of universities to central government has also been discussed. Investigation revealed that universities in Iraq are funded totally by central government, by an annual plan submitted by the universities to the Ministry of Higher Education.

The budget is estimated six months in advance, e.g. the budget for 1987 (1st Jan - 31st Dec) is estimated in 1986, according to information on the actual expenses of the previous year, 1985, and for the first six months of the year 1986.

Planning for general and higher education is incorporated into quinquennial development plans. The principal planning organisation is the Planning Board of the Revolutionary Command Council, which determines policy and shapes long term objectives. The Ministry of Planning is the executive arm of the Board. Whilst all major decisions concerning educational development emanate from the Board, responsibility for execution, at least in the formal sector, lies with the Supreme Council for Educational Planning, a body comprising the minister and senior staff of the Ministries of Education and Higher Education (The British Council, 1980, p.18).

In building up its modern economy, Iraq has drawn up five-year plans, implemented as annual plans. Besides the regular quinquennial

plans, Iraq has drawn up three alternative long-term plans that extend to the year 2000. In the last two decades, particularly after the nationalisation of oil, there has been a rapid increase in investment in all sectors of the national economy.

The quinquennial National Development Plan 1976-1980 included significant and rapid expansion in the industrial structure, both in establishing new industries and expanding many existing ones. For example, the level of investment in 1976 was increased by 58.3% from the previous year. This undoubtedly led to the establishment of a new university to be a major channel for the supply of the skilled engineers and technologists, and to keep pace with industrial changes (Al-Naimi, T. and Al-Nassri, S. 1981, pp.663-673).

Most long-term plans for Iraqi universities started after 1970, e.g. Al Mustansiriya was established in 1978. The quinquennial plan covers the requirements of students, teaching staff, curricular administration and technical cadre as well as technical requirements. The council then discusses and approves the plan and sends it to the Ministry of Higher Education. The quinquennial goals of, e.g. Al Mustansiriya University are to:

1. Increase its contribution to society's needs for a qualified cadre, within its capabilities.
2. Start new studies that serve the national development plan.
3. Raise the scientific and intellectual level in the university.
4. Stabilise the relationship between the university staff and especially between students and teachers.
5. Strengthen the relationship between the university and other official public and private enterprises by acting as consultants to them.

6. Promote scientific relationships between the university and science institutions in the Arab World, and all over the World.

7. Expand higher studies to actively participate in qualifying national cadres to staff educational institutions and government establishments (The Report of Al Mustansiriya Five Years Plan, 1981).

The five-year plan is considered the best basis on which to measure the goals of the university. Usually the plan is discussed quantitatively and qualitatively and it forms the target for the university. The quantitative figures are divided into yearly goals.

Iraqi universities are continuing to plan on a five-year basis. For example, the University of Technology has drawn up a quinquennial plan for the years 1986-90 based on its goals and indicators, and taking into account the relationship between the university and the development plan of the country and the problems of scientific development in state industries (Ath-Thawra, No. 6113, PS, February 19, 1987, p.5).

In 1986, the University of Basra embarked on a five year plan for scientific achievement. The plan was set up primarily as a means of attaining the university's goal of meeting development demands for scientifically qualified manpower, scientific research, etc. Another of its purposes is to resolve problems which face industry, agriculture and commerce. In order to simplify the execution of the plan, indicators have been set up from the scientific research movement with emphasis on applied research for development operations and encouraging methods of research grouping.

The execution of a five year scientific plan involves certain requirements:

1. Details of the annual plan need to be sent to the college and scientific centre in accordance with the major requirements of the plan.

2. The development of the technical abilities of the researchers and the standards of university departments, e.g. through conferences, seminars, etc.
3. The provision of sufficient funds to execute the five year academic plan.
4. The provision of services and facilities, e.g. buildings, laboratories, technical equipment and transportation.
5. A forum for the exchange of ideas and the publication of research results, e.g. through the university.
6. The provision of incentives to researchers and scientists so that they benefit economically from the results of their research (Ath-Thawra, Feb. 19, 1987, p.8).

Although the precise requirements of the plan will vary at different operational levels, a fundamental requirement is the availability each year of money to cover the plan. Thus it can be seen that the success of quinquennial planning depends on accounting efficiency, which at present is lacking.

Higher Education Financial Development after 1970: The six universities are influenced by central government, but their statutes allow great freedom of action internally in academic and financial matters. After 1970 they became answerable to the Ministry of Higher Education, Finance and Supreme Financial Auditing.

Higher education in Iraq is financed by the state from the general budget and the five-year development plan, but the institutions manage their own budgets within a framework established by the Ministry of Higher Education and the Council of Higher Education.

An important aspect of the planning of educational institutions is the forecasting of student enrolment; if sufficient places are to be

provided for students and adequate educational resources made available for their programmes, then policy-makers must have some idea of the numbers to be expected. Over the past two decades, techniques for enrolment forecasting have become highly developed, the more sophisticated methodology being based on educational flow models. In any given year, student numbers are identified by grade level. Transition rates, measuring the number of students advancing the following year to a subsequent grade, to repeat the grade, to drop out or to graduate, allow estimates to be made of the numbers in each grade the subsequent year. The number of new students entering the system may be estimated using demographic techniques. This process projected for many years into the future will give a basis for the enrolment estimation policy (Evanco, W. 1979, p.53).

Although a few universities in Iraq, before 1973, depended financially on student fees and government funds, they are now totally funded by the government annual estimates and are not affected by the number of students accepted. University reports showing the university capacity in each subject and field are given to the admission centre in the Ministry of Higher Education.

Student numbers affect universities' financial planning in Iraq through:

1. The amount of textbooks and other literature needed, for these are distributed to the students free of charge.
2. An increase in the number of lecturers, leading to an increase in the amount of money needed to pay their salaries.
3. The increase of fixed assets, buildings, furniture, etc., for accommodation for the students.

Nevertheless, university student numbers increase year after year.

A central committee is formed to prepare the budget estimates for each year. By a university decree, the committee consists of the university president or assistant president, together with the finance officer, the administrative officer, the engineering department rector, and others who are included later. This is in accordance with Ministry of Finance instructions relating to the preparation of the budget.

Detailed estimates are received from all the colleges and administrative officers and are then aggregated at a meeting of the entire committee. The estimates are discussed in order to determine actual needs.

Then, the estimated budget is handed over to the University Council to be discussed for modification. Later the Council sanctions the budget for sending to the Ministry of Higher Education and Scientific Research. The committee which is formed in the ministry to prepare the budget discusses the budgets handed over from every college before confirming the final figures. Next they are collated and sent to the budget bureau of the Ministry of Finance.

The estimates committee is responsible for producing the university plan. However, there is no clear evidence that it has accountability either by controlling the plan throughout the year of operation, or by coordination with the financial and accounting department in order to ensure the achievement of the annual plan by the end of the fiscal year.

In the Ministry of Finance, a committee discusses the estimates for every university in the presence of representatives from the Ministry of Higher Education to determine the final estimates. During discussions, the budgets are apt to be increased or reduced by the legislature after they are submitted to the National Council, which has the duty to ratify the country's budget.

Then the budget is handed over to the Revolution Leadership Council for legal declaration. Once finalised, the budgets return successively to the Ministry of Finance, the Ministry of Higher Education and then to the universities.

The usual procedure for dealings between the universities and Ministry of Higher Education was described in Chapter 9. The negotiations between the Ministry of Finance and the universities involve a bargaining process, whereby the university sets up its annual budget plan, on the assumption that the Ministry of Higher Education will try to reduce the allocation. They in turn make the same assumption of the Ministry of Finance Committee. At these meetings, university members will try to negotiate increased resources. Therefore, university representatives must be equipped to define their annual budget plan and argue their case convincingly in order to achieve the best possible deal for the coming year.

In comparing the financial information received from the Ministry of Finance with that from other Ministries, e.g. Ministry of Higher Education, it is noticeable that the financial regulations arrive late at the university and take a long time to implement, hindering a number of accounting and planning procedures which depend for their execution on a final decision, e.g. the allocation of 20% of the academic allowance for those retiring from services. The university funds, however, are influenced by the regulations of many external bodies, namely:

1. The Ministry of Higher Education.
2. The Ministry of Finance.
3. The Diwan (Supreme) of Financial Control.
4. In addition there are financial and accounting regulations which are issued from the financial states of central government.

The percentage of transferable amounts may be from 10 to 20% determined by the regulations of the annual financial budget. The major problems facing the university are:

1. To follow-up the regulations of the Ministry of Finance and not to exceed the annual and the monthly financial allowance.
2. To control spending at the end of the financial year and to account carefully and accurately for expenditure, because it can affect the final account of the university. In the last month of the financial year, universities try to spend any funds remaining from their allocation in order to show that their spending is in accordance with the budget, and to give them a basis from which to argue for an increased allocation for the following year.

11.3 IRAQI UNIVERSITIES' PLANNING, RESOURCE ALLOCATION AND ACCOUNTABILITY IN PRACTICE

This section investigates planning, resource allocation and the monitoring process in practice and as seen from available information, articles, documents, etc. In this section is revealed the greatest scope for improvement within Al Mustansiriya and the Technology University.

The greatest opportunity within universities to improve their efficiency and effectiveness is in planning and the use of resources. To investigate this in the UK, seven questions were posed by the Steering Committee (1985) in their report. The researcher has applied the same questions to Iraq and this study will review relevant literature concerning other developing countries as well as the answers to the questions as they apply to Al Mustansiriya and the Technology University.

1. How much strategic and long-term planning takes place in universities?

2. On what criteria are resources allocated?
3. By what mechanisms are resources allocated?
4. What is the quality and extent of management information?
5. Who, below council, is responsible for the allocation process?
6. What is the budgetary control mechanism?
7. What is the process of accountability?

There follows a review of the evidence under these seven headings, concentrating on the evidence of scope for improvements in efficiency.

11.3.1 Strategic and Long-Term Planning: The interview findings and the literature show that objectives and goals of universities in Iraq are defined in broad ambiguous terms, and that universities' goals need to be clarified and interpreted in order to enhance their relationship to long-term financial planning.

Since the 1970s there has been long-term planning in universities for students and academic staff. However, these internal plans were subject to repeated alteration because the universities based their plans on their own capacity, rather than the level of demand for higher education. There was no aggregate long-term planning by the Ministry of Higher Education, and a lack of government policy to regulate the universities. It was found that although the universities had long term plans of a sort, they contained no financial estimates, they were not comparative and it was difficult to relate the university budget to the plan.

There has been an obvious failure on the part of universities to define accurately their objectives and to interpret these by means of long term financial plans.

Hamami, Y. (1986, p.266) discussed the deficiencies of planning in higher education (excluding accounting and financial planning). Until the end of 1982 there was no planning office at the Ministry of Higher

Education, nor at any Iraqi university, aspects of the planning process being carried out by the university board, or by the social department at the Ministry of Planning. This deficiency had already led to serious problems, such as the rapid expansion in enrolments without a parallel increase in the number of staff and other facilities, which in turn had an adverse effect on the quality of graduates. Now at least there is an official awareness of the dangers of this and serious efforts are being made to rectify the situation. Research on educational needs and manpower requirements in Iraq is being endorsed and financially supported by the Ministry of Planning with unprecedented vigour.

A few preliminary studies on planning and development of higher education have been completed, and many more are being commissioned by local and international agencies and universities (Al Rahim, 1977; Ghazoul, 1977; Hamami, 1986). Nevertheless, there is still much to be done.

It is difficult to imagine that, even if universities were to draw up a long-term financial plan, it would be successful, because Iraqi universities have only recently begun to use long-term planning for their students, curriculum, etc. But a greater concern is to maintain the consistency of central government funds throughout the year, as the government supplies all the funds to universities. In order to draw up long-term plans, universities have to be sure of continued government funding at the same level every year, and if possible universities should develop other ways of gaining resources, for example by opening their services to the public and private sector; training, continuing education, researching, etc. In addition, they should undertake careful self-examination, in order to increase their efficiency; reducing unnecessary expenses, training their employees for more efficient work, etc., which would contribute to the achievement of long term plans.

11.3.2 Resource Allocation Criteria: In investigating, "On what criteria are resources allocated?", it seems that there is no long-term financial planning for the two universities, though long-term plans in other areas were developed in Iraq after 1970 and in the universities after 1974. Nevertheless, universities have started formulating long-term plans other than financial plans, and these non-financial plans need to be analysed in order to show the variances between the plans and actual events.

The universities' financial plan is just a block of figures drawn according to the uniform accounts (Appendix No. 5) which shows the expenses of the last year, current six months and estimates for the coming year. The classification used by the system does not correspond with the university structure, e.g. it is impossible to distinguish the expenditure on individual academic departments. The uniform form of accounts used by universities includes an account for academic departments but investigation shows that this account is an aggregate figure without further analysis into colleges or departments. Thus it not only fails to provide information regarding university activities as revealed by allocations to different colleges and departments, but it also obscures the process of accountability. This aspect of university finance is not covered by the uniform accounting system, so that the provision of accounting information is inadequate to satisfy the needs of colleges and academic departments.

Failure to analyse the academic department accounts into individual colleges and departments affects their ability to contribute to the financial estimates, on the one hand, and control and accountability for their activities on the other. Thus the university is deprived of a means of measuring its use of resources and making instructive comparisons between the performances of different departments. Finally, without this kind of analysis, it is very difficult for universities to determine

accurately the cost of particular activities in order to form realistic budgets.

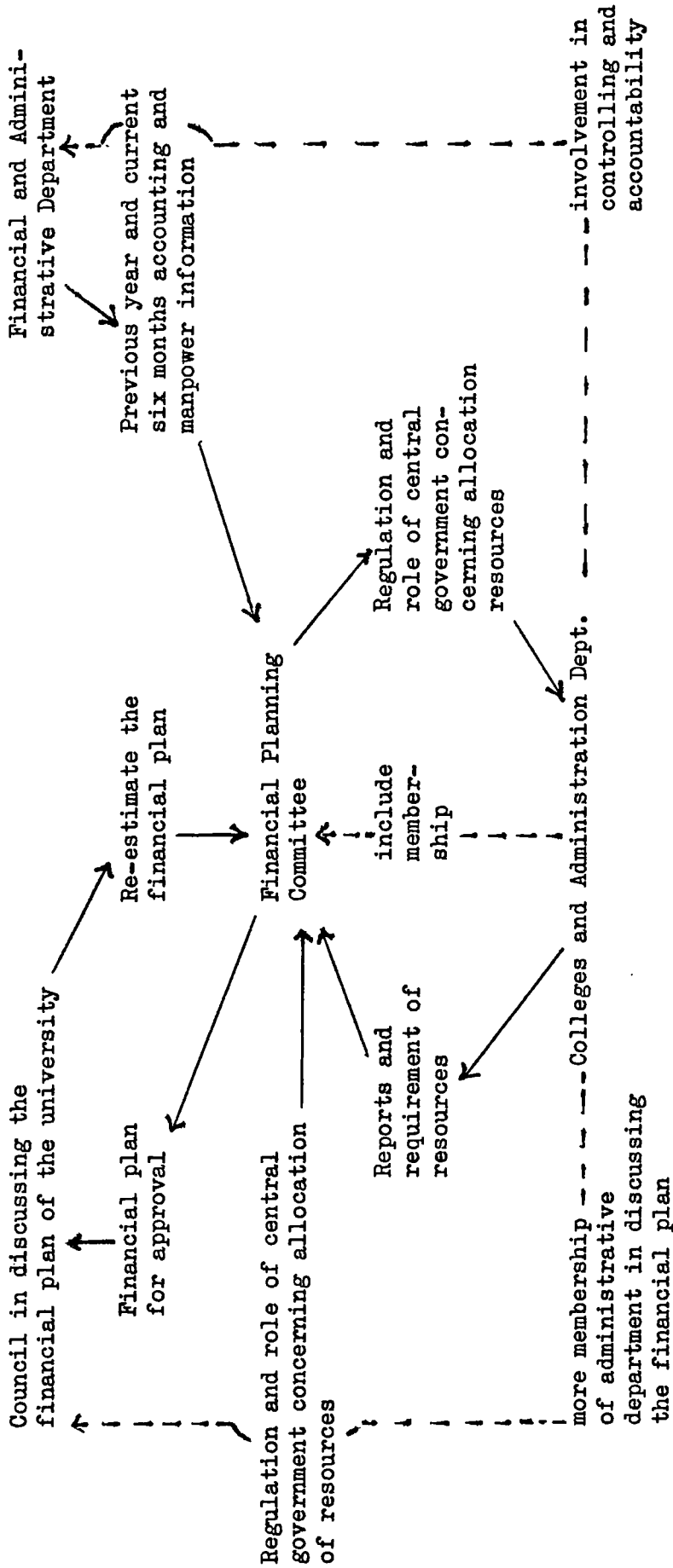
11.3.3 Resource Allocation: The question now arises, "By what mechanism are resources allocated?" The traditional process in universities and the public sector has been the annual formation of special committees to take responsibility for the financial estimates, the committee being headed by the President or his assistant and containing the heads of financial, auditing and administration departments. This committee is answerable to the Council of the university. It seems useful, therefore, to elaborate Figure No. (11-1), which shows the internal estimate procedures by a solid arrow (—), while in view of the deficiencies of the mechanism, the broken arrow (---) indicates a suggestion for a more effective procedure for university financial planning. In addition, it is suggested that the financial planning committee might hold meetings for discussing the financial plan with deans of colleges and heads of departments before forwarding it for approval by Council. In this way many important suggestions might be made, the members gain knowledge of the development of the financial plan, and all members share accountability in the event of poor performance.

In the Technology University Council it appears that there is more discussion of the financial plan, with the academic department and the latter have more influence over the final decision of the Council, than in Al Mustansiriya, where the responsibilities lie with the committee and financial department as shown in the Figure No. (11-1).

Additionally, the president of the university is the key figure in the Committee and Council in allocating resources, as shown in Laws of Higher Education No. 132, 1970, and 55 for 1983 (see Chapter Ten).

Figure No. (11-1)

The Process of Estimating the Financial Plan and Suggested Improvements



Notes Line ———→ represent the current mechanism of process of financial plan
 Line - - - - -→ represent the suggestion for effective mechanism of process of university financial plan
 Actual financial estimation process summarized by the researcher from documentary and other evidence, together with the researcher's proposed, simplified alternative.

The council of the university discusses the details of resource allocation with each college as it presents a block of figures before sending it to central government for approval. At this level the planning mechanism is deficient. The problems which arise will be discussed in another section, but briefly, they are as follows. Because the block of figures is not divided into colleges, it is difficult for deans to discuss it and accountability is not clear.

The reports of the colleges are not included at the Council meeting, but go to the Finance Committee. However, the reports are inadequate for planning purposes, as although they may state requirements for equipment, etc., there is no indication of expected cost, as the reports are compiled by staff who have no experience or knowledge of financial procedures and regulations. A major weakness of the system is that there is no procedure for monitoring the outcome of allocation demands.

However, the Financial Committee needs advice from more sources than the president and heads of financial, accounting, administration and auditing departments. For example, professional administrative staff from the operational levels of the finance departments and academic staff of the university have much to offer.

The estimated financial budget with its details of the resource allocation in a Uniform Accounts form is discussed by the Ministry of Higher Education in a committee with university representatives, who in turn forward it to the Ministry of Finance for more discussion (see Chapter Nine for details).

The universities require more control in determining the financial budget and Uniform Accounting System especially when the regulations are not flexible enough in application, as has been discussed in the previous section. Furthermore, the auditing department is short of staff, and

also the quality of staff poses a problem.

The accounts which are emphasised are: the varieties of salaries and wages, allowances of academic staff, student allowances, which must not exceed the estimates, and other items that must not be exceeded as shown in the budget and its classifications of accounts.

The plan is set up annually without estimating future requirements and it has to be considered yearly as discussed in Chapter Ten.

The success of the annual financial plan depends on coordination between academic staff of colleges and administrative departments. Although there are general government policies regarding university planning, these have not been interpreted for colleges and administrative departments. Centralized planning and resource allocation by insufficient and inadequate committee members, failure of the plan to show the responsibilities of each college, and dependence on a single source of funds - central government - make it difficult to assess the efficiency of colleges in using their resources, and to control the annual allocation of major resources.

It seems beyond question that there must be a considerable change in the internal planning mechanism of universities. There is a need for a more effective committee structure including discussion by colleges of their activities and financial objectives, leading to a greater awareness of accountability and responsibility, bearing in mind that these colleges differ in purpose, student and staff numbers, and overall contribution to the university, and thus their costs and resource requirements will also vary.

11.3.4 Management Accounting Information: Onushkin, V. 1973, wrote on planning the development of universities in developing countries, though

unfortunately he did not write on efficiency in developing countries. However, as he argued, the information system is indeed a key element in planning, but it must be organised to provide for those who have the power vested in them to make decisions (Ibid, 1973, p.57). We now turn to the question: "What is the quality and extent of management information?"

The university provides many types of management accounting information such as those discussed and classified at the beginning of Chapter Ten. Nevertheless, the external bodies, ministries, have commented adversely on this information's adequacy; some universities' trial balances do not agree. The quality and timing of information are important to the external bodies and their final decisions.

University colleges handle a great deal of information about students and staff, in the form of data and figures, but this is not in a form that facilitates comparison between colleges, etc. Most of these data are used to provide statistical information to the Ministry of Planning rather than for internal financial planning and control. Academic departments have a lot of data but they are not used efficiently to help the financial or registration departments with their planning, because the methods of collection, analysis and interpretation are inadequate. It would appear that financial management like the provision of non-accounting information, is still at a comparatively low level.

Internally, the university needs a more adequate management and accounting information system to increase the understanding of administrative and academic staff and most of all to understand the purpose of the annual financial plan and its execution. Without an adequate information system, it seems impossible to implement the annual budget of the university, and, as the university is part of the public sector, its failures in execution affect government plans for the country as a whole.

The measurement of input is not much better than the output of financial accounting information; thus, rules and regulations are usually difficult to interpret and inflexible, besides which a great deal of the financial information received from outside the university is not adequate for direct use because of its complexity, broad scope and lack of interpretation.- as discussed in the previous chapters about Iraq. Academic staff and administrative departments receive little help in understanding this information. Furthermore, external auditors, the Supreme of Financial Control, have voiced many criticisms of the execution of transactions and Uniform Accounting Systems.

However, comparing the financial and accounting information with administrative information, the latter is far better organised and classified. An example of this is the "Ministry of Higher Education Statistics" which contains detailed data regarding students, academic, administration staff, etc.

It has been stated earlier that at the micro or university level it is hard to find the use of planning models and theories, and this research at least tries to draw the attention of accounting and economics researchers and students towards these problems in universities. It is a fact that the curricula followed in universities are not related to the needs of the public sector and more study is needed for further development; e.g. discussing the problems of the public sectors, training, accounting and finance and more practical research.

Since 1980 the Uniform Accounting System has been used. This was introduced to replace the government accounting system in order to unify the system in the Ministry of Higher Education. However, the Uniform Accounting System does not fully incorporate cost accounting and management accounting. Moreover, other forms of accounting are applied in the

universities, such as the private commercial system, as described in Chapter Nine.

The academic departments - as in the Technology University - are more equipped with the details of the department budgets as the figures have to be used throughout the year wherever any expenditure has to be approved by the council of the university. Al Mustansiriya and Technology Universities need to improve their methods and techniques of controlling their college budgets, perhaps by adopting PPBS.

The success of the annual financial plan depends on coordination between academic departments (colleges) and administrative departments. Nevertheless, general knowledge of financial and accounting rules, regulations and procedures is lacking in most people dealing with financial affairs. Education and publicity regarding the importance of accounting are necessary to the people who are dealing with university affairs and academic and administrative staff. Accordingly, it must be stressed that the greatest problem in accounting and finance is the lack of awareness of the importance of accounting and general knowledge of finance.

However, later in this chapter, we will discuss the feasibility of using PPBS in universities and colleges as an important step towards improving the universities' control over resource allocation and increase their efficiency.

11.3.5 Responsibility for the Resource Allocation Process: In dealing with the question, "Who below Council is responsible for the allocation process?", it was found that an annual committee was formed for the purpose of the financial plan as discussed in Chapters Nine, Ten and in this current chapter. However, thereafter the responsibility for the process is under the control of the financial department of the university. Thus

the department provides the monthly, quarterly and annual written reports and other financial information. Throughout these reports operational control is held by the department.

The present committee structure for the planning and allocation of resources needs to be improved as it is usually formed from the university president, or his assistant, and the heads of the finance office, the administrative department, because of his responsibility for the manpower budget which should include his financial plan, and the auditing department. However, it appears from the findings that the committee requires the expertise of academic staff members and other administrative departments. The usual committee contains too few members, who seem remote from the activities of colleges and departments, and who do not understand the goals and objectives of each college, causing unscientific competition in the financial plan sent for approval by central government. This is the case in Al Mustansiriya University. The plan is discussed at length in the councils of the Iraqi universities who have the final responsibility for planning resources allocation in the presence of the head of the finance office.

Thus, it could be said that there is a need for effective action in the actual contribution by the operational hierarchy levels, mainly accountants and other administration heads. Additionally, academic staff need to make a more active contribution to the committee in order that the financial plan be stronger and better reflect the universities' needs. However, it is difficult to criticise universities in the absence of research and study at the micro level to discuss and analyse the theory and the implications for universities of such techniques as PPBS, CBA, etc. Even with an academic input, e.g. administration, accounting, economics, etc., these institutions still need to be more efficient and effective.

11.3.6 Budgetary Control: "What are budgetary control mechanisms?"

It seems that the academic departments and colleges are not held responsible for expenditure simply because they do not have accounting units. There are figures showing the budgeted expenditure but that does not mean the finance department will stop funding or paying the expenses of colleges. Indeed, in the University of Technology the departments ask the council of the university for additional funds when they exceed their budget. Iraqi universities do not see themselves as unit cost and revenue centres, an attitude which encourages over-expenditure by the academic departments.

The heads of academic and administrative departments are uncertain of their responsibilities with regard to financial performance. Heads of departments receive current financial information circularised in memoranda from central government, but they are inundated with this information, it becomes difficult to interpret it and time is wasted in requests for clarification. Further research needs to investigate the lack of understanding of central government regulations by the universities and its effect on efficiency and effectiveness. Moreover, as far as the accountability of the heads is concerned, they do not seem to accept accountability, with the exceptions of the heads of the finance and auditing departments who have ultimate responsibility for finance and accounting, simply because these departments are centralized for the acquisition and recording of such information.

Therefore, academics and administrators should act with greater consciousness of their accountability in efficient financial dealings, and co-ordinate more effectively with the financial and auditing department to generate better financial and accounting information.

The university prepares its plan when it receives the annual financial regulations from the Ministry of Finance. Thus the Financial Committee is formed for setting the annual plan (1/1/ to 31/12). On the other hand, the academic year runs from the first of September to mid-June of the next year; thus the financial and the academic year do not run concurrently. It also seems that there are many versions of accounting and financial plans besides the regular financial plan of the university. For example, the students financial budget provides students, Iraqi, Arabian or foreign, with fixed support and loans to those who are not from the local area. This plan still follows the commercial accounting system and starts at the beginning of the academic year. The plan for development projects commences in the calendar year (1/1/ to 31/12/). This is a special annual financial plan for development projects for new buildings, stores and other constructions which are required by universities, and the commercial system is applied with modifications depending on the project's basis and contractual agreements.

Thus there are many university plans, the ordinary plan, which is the main annual plan, and plans for projects and student loans, each of which uses a different accounting system, and above all, the Uniform Accounting System. The universities' internal administrations do not unify these plans in order to facilitate study and comparison. In addition, there is no link between them at any level of the university, the only knowledge of them resting with the council of university. Therefore, the responsibilities of the academic departments, the main budgetary unit, are not clear. Above all, there is no instrument for controlling the activities of the academic departments.

While academic departments have no control over their accounting and resource allocation, the diversity of accounting methods used means that

there is inadequate information provision for centralized accounting.

The annual financial budget of the university is detailed according to the financial accounts of the Uniform Accounting System (Appendix No. 5) within which the accounts are supposed to be divided into academic and administrative departments, though in practice this is not the case. In addition, there is no section for the financial department in charge of the unit costs of the university. Hence, the Uniform Accounting System is not applied with maximum effectiveness. If the system appears to be incapable of meeting university requirements effectively, then it may be abandoned as was the case with the government system used previously. The financial department issues financial reports, both monthly and quarterly which are sent to the Ministry, and in these the failure to make the distinction between the various departments and colleges, and to show their aims and centralisation on financial issues, leads to inefficiency.

It has been found that the auditing department - which is in charge of controlling the financial transactions and manpower affairs according to the central accountability rules and regulations of Supreme (Diwan) auditing and central government - is not linked to the highest authority of the university, i.e. council or president of the university, unlike most academic activities. Instead, they are linked to the assistant administrator of Al Mustansiriya University and to the senior financial head of the Technology University. This could be one of the main reasons for the lack of control, especially when the number of auditors is not more than five, including the director (Al Mustansiriya University, 1981, p.131) and the number of auditing departments was reduced to three in 1983. This number of auditors, despite the fact that three from the five are high school-trained in auditing, is still short of requirements. University accountability and control is not concerned with fraud or deliberate misuse of the financial budget but looks for deficiencies in use and

the failure of accounting procedures which reflect the efficiency of control in university accounting and finance.

11.3.7 Resource Allocation Accountability Process: To answer the question: "What is the process of accountability?", for resource allocation, let us examine the accountability process of the two universities, Al Mustansiriya and Technology.

Formal financial reporting in the universities takes place monthly, quarterly, yearly and in ad hoc reports from every level of the university and outsiders, such as the Ministry of Higher Education, Finance and Planning (see Chapter Ten). These reports are prepared according to the Uniform Accounting System (Appendix No. 5). There is no accountability process at the lower (college and departmental) levels, and previously in this research it was suggested that the reports of the financial department should be issued to colleges and other departments to increase their contribution toward the university budgetary process and monitoring of their performance.

It is the financial department, specifically the records section, who are issued with the financial and ad hoc reports. Nevertheless, this section performs inadequately, because of a shortage of employees. The university applies the Uniform Accounting System which is characterised by mechanical processes for the simple reason that a transaction and its affiliated accounts has to be recorded in so many accounts. In such a long process, employees in the records section deal not with the whole, but with the end point only; they are short-staffed, and in addition, employees were insufficiently trained in the Uniform Accounting System at the time of its introduction. Nor is enough time allocated to the teaching of the system in the universities, which again leads to difficulties in application. Universities need to provide continuing training

and education for accounting employees; the system needs to be mechanised and the advice of consultants sought to increase accounting efficiency.

The problematic nature of the external regulations has already been mentioned; nevertheless, the accounting information provided by the universities is believed to be inadequate, though in comparing the universities of Al Mustansiriya and Technology, the Ministry of Higher Education believed the Technology University to be more efficient in producing the accounting information on time, monthly, quarterly and yearly. The Technology University had coped with the Uniform Accounting System because it had provided training for the accounting cadre, and also because of the cooperation of the consultants from a national centre of administration development of the Ministry of Planning, while Al Mustansiriya had no such help when applying the system. Further, the Technology University's departments and sections of the finance department held a number of meetings throughout the year, leading to greater financial efficiency than in Al Mustansiriya, which had no meetings during the year to discuss financial affairs and problems of accounting. Such activities affect the performance of the finance office and coordination between sections, and the quality of accounting information is influenced by discussion of deficiencies in the management of financial affairs.

The accountability process and reporting in both universities are oriented towards formal reports and highly prescribed rules and principles. The top level management control have long term goals while the financial departments have short term goals. In addition, the top levels strictly follow the overall goals of the university, while the sections think only of their own tasks. The qualities of analysis, experience and intuition are equally important for all.

11.4 THE ACADEMIC DEPARTMENT AND MANAGEMENT OF ITS RESOURCES

The findings regarding resource management in the two universities, Al Mustansiriya and Technology and their colleges and academic departments respectively are given under the following headings:

1. Authority of colleges or academic departments
2. Accountability
3. Colleges' management style

11.4.1 Authority of Colleges: In Chapter Eight it was mentioned that Law No. 132 of 1970 and 55 of 1983 defined the colleges' and deans' responsibilities. For instance, item 21 of Law No. 55 of 1983 defined the role of the college council, specifying its academic responsibility, although briefly and in a very broad sense without details of the finance and accounting of colleges. "Pondering all the financial, executive and scientific affairs related to the college and the other specialisms which are put down in this constitution and others which are valid, provided that they do not oppose the responsibilities of the other councils" (Law 55 of 1983, Item 21.H). However the Law 55 of 1983 emphasises academic affairs rather than the financial and accounting affairs of colleges and departments (Figure No. 11-2). It might be that the law delegated financial and accounting affairs to individual universities, but, if this is the case, it has been hard to find a stated explanation and elaboration of finance and accounting of colleges in the universities. The Universities of Al Mustansiriya and Technology have to consider their financial and accounting affairs and to define their financial affairs in more detail under their constitution, these being as important as academic affairs. However, the research has shown that colleges - see Chapter Ten - have a lack of power over their resources and their allocation. Their only contribution is a report of their requirements at the time of the preparation

Figure No. (11-2)Items 21 and 24 of Law 55 of 1983 in Defining
the Colleges and Deans of UniversitiesItem 21

The college council is specified as follows:

- A. Laying down the plans of higher education, scientific research and the services which are offered by the ministry and suggesting its own ordinary budget. Also it ratifies the final examination results except the final class results which require the agreement of the dean.
- B. Making recommendations regarding starting, merging or cancelling departments or higher studies in the college.
- C. Supervising the application of regulations and instructions in relation to scientific administration affairs and students' activities.
- D. Limiting the number of the students to be matriculated annually and setting matriculation requirements.
- E. Recommending the grant of scientific grades, promoting the members of the teaching staff, giving them leave or scholarships abroad according to the suggestion of the department.
- F. To suggesting giving study leave inside the country to college members according to the recommendations of the department.
- G. Making recommendations based on the suggestions of scientific departments which are related to their programmes.
- H. Pondering all the financial, executive and scientific affairs related to the college and the other specialisms which are put down in this constitution and others which are valid provided they do not oppose the responsibilities of the other councils.

Item 24

- A. The dean specialises in the administration of the college scientific administrative affairs and he is responsible for implementing the constitution's regulations and decisions of the revolution council, the university council and the college council within the limits of the valid constitutions.
- B. Nominating the teaching staff members, officials, managers and technicians to carry out the tasks required by the college interests.
- C. A report should be submitted to the dean at the end of every study year on study affairs, scientific researches and all other aspects and activities within the college.
- D. Appointing a deputy chief for any department in the case of a vacancy for any reason until a proper appointment can be made.
- E. Representing the college in different fields.
- F. The dean can accredit some of his powers to the department chiefs, the assistants and the managing officials in the college.

Source: Ministry of Higher Education, Law No. 55 of 1983.

Note: Translation by the author of this thesis.

of the financial plan. In addition, it seems that colleges are not accountable for collecting their resources. The Universities of Al Mustansiriya and Technology are centralised in their financial and accounting affairs, but even with such centralisation colleges and departments could operate an efficient method of resource allocation, monitor their resources and be more accountable in their financial and accounting affairs.

11.4.2 Accountability of Colleges and Departments: It has been mentioned that the universities of Al Mustansiriya and Technology are centralised in their financial and accounting affairs. Although these universities and their affiliated colleges have no formal responsibility over their financial affairs and even though they apply the central government rules and regulations, they should try harder to define the colleges' responsibility for their financial affairs, using the theoretical approaches, PPBS, CBA and corporate planning and let the colleges contribute to the detail and coordination of the financial plan.

It appears that colleges and academic departments have no incentive to promote efficient use of their allocated resources, their financial and accounting efficiency and end of fiscal year budget.

Academic departments in the Technology University have more responsibility for the bulk of their money and through council alone they can increase their department share, unlike Al Mustansiriya, which it seems has a regular financial allocation with no competition between the colleges for financial advantage. However, both face the same problem in that there are no outside funds other than those divided according to the annual financial plan. In neither also is there any measurement of value for money from each of the colleges or departments.

11.4.3 Colleges' Management Styles: Al Mustansiriya University is divided into colleges while Technology University is divided into academic

departments. Nevertheless, whether colleges or academic departments, they are under the same law of the Ministry of Higher Education No. 132 of 1970 and 55 of 1983. They are headed by a dean whose responsibilities and undertakings are defined by the law. They are centralised except for administrative affairs. The administrative directorate has authority to serve the academic staff, headed by one of the academic staff as in Al Mustansiriya University. The management style here seems to be that all college affairs are centralised except the administration of academic affairs. However, the management looks after the staff, promotions, absences, appointments, etc. In addition, the management of the colleges provide the methods and administration development department and other administrative departments with ad hoc and statistical information such as "Statistics of the Ministry of Higher Education" which contains student numbers, staff, buildings, etc.

The management of, for example, the College of Economics and Administration receives financial and accounting information from the financial and auditing department within the centralised universities as follows:

1. Official letter of budget estimates information. In the beginning of each year letters are received showing the requests of academic staff needed for the next year as well as the employees needed, the stationery and furniture, etc.
2. Official letters nominating members of the annual committee which authorizes spending and handles the petty-cash. Each college can nominate members to the financial committee, whose duty is to govern the costs that are needed immediately for the college to purchase stationery, etc. The committee can borrow ID 500. Each year it should submit the money that is not spent and the receipts for that spent to the accounting department.

3. Generalised letters consisting of laws, resolutions, etc.

The management information can be classified in different ways depending on the department of issue but briefly it is as follows:

1. Information about appointments, promotions, increases in salaries, official letters issued from the Administration Department and signed by the President or his deputy.
2. Statistics, schedules and forms received either from the Administration Department or the Administration and Development Department.
3. Student affairs which show the students admissions, levels, subjects, student results, etc.

11.5 PLANNING AND RESOURCE ALLOCATION IN IRAQI UNIVERSITIES AND PPBS

11.5.1 A consideration of deficiencies in the current planning, resource allocation and accounting system:

The demand to develop accounting, planning and financial systems is a matter of urgency in view of the rapid development of universities. Environmental pressure has brought about a considerable increase in student demands on universities and enrolments continue to increase. Although the Ministry of Finance has attempted to change university planning and accounting in the light of these indicators, and to improve accounting rules in line with economic requirements, there are still many weaknesses and problems of internal inefficiency in university planning and accounting.

1. It seems that internal planning in universities is highly centralized. Lower level administrative and academic departments face many demands from higher levels for information on subjects of decision making. The system operates inefficiently, with delays and obstacles throughout. The absence of clearly defined responsibilities with adequate authority to make decisions increases the doubt and reluctance to act at the lower adminis-

trative level, and create a tendency to "buck-passing" and avoidance of decision-making.

2. The current plan needs to be comprehensive, including all university activities, fund allocation and expenses. It should also unify the fund allocation to individual colleges, academic and administrative departments. At the same time, there should be a policy of free transfer of funds between departments. The plan should be issued well in advance of the operation period. However, under the present system, the current university plan does not give a comprehensive picture of the university's financial activities, because there are three separate funds, the ordinary annual plan, the development plan and the student loan budget, all of which receive funds from central government. Therefore the current radical plan is not uniform and there is no link between these different funds. In addition, the university's financial results are inaccurate. The existence of many plans reflect the weakness in planning and decision making and the lack of coordination at the lower levels of the hierarchy. Only the university council and the Ministry of Finance have knowledge of all three plans.

Planning principles emphasise the importance of links between the plan and the implementation programme, the plan should be an effective means of decision making and administration. Planning must also link the long and the short terms.

3. There is insufficient definition of university goals, therefore, it is not possible to determine the allocation of funds to each different activity, in order to achieve specific goals.

4. The university plan does not encompass the number of students expected to graduate in a given year. Therefore there is no link between the plan and the university output, thus the university administration

cannot measure performance indicators and make full decisions.

5. Formulation of the plan is not based on detailed analysis of available alternatives to achieve university goals but on the previous year, with any increase or decrease determined by government objectives. The main allocation of the plan is usually for salaries, in which there is no flexibility.

6. It seems there is not usually a clear programme for implementation of the plan in universities and their affiliated colleges. Without an implementation programme, and with the plan not divided into units (colleges or departments) then there is no cooperation in implementing the plan.

7. Planning requires the preparation of an aggregate plan for more than a year, to be adjusted in detail for each year. However, the ordinary plan of the university is prepared annually.

8. The universities' current accounting system is centrally applied. Thus its figures are limited by the lack of complete records and classification into sufficient units (colleges, departments, etc.), in its analysis. The modern administration needs adequate accounting information on all activities, and an accounting system is needed which can provide such information. The university accounting system was originally designed for the purpose of control and auditing on the basis that expenditure does not exceed the allocation in the plan. Although this is one purpose of the accounts, it is too basic and simplistic a view. Modern administration requires a system which provides information for analysis and decision making, and as a means by which to assess effectiveness.

The accounting system is insufficiently developed to provide adequate information. The accounting information generated is sufficient only for auditing and the provision of information mostly relates to salaries and related matters. This emphasis does not meet administrative needs.

9. The university accounting system has a more serious problem, in that it uses the cash basis, so that the system is not susceptible to use for cost accounting and the display of accounting activities. The cash basis does not allow sufficient analysis of results so that it is difficult to compare the final budget with the original plan.

10. The university accounting system is characterised by lengthy procedures, time-wasting, and hence to delays in the provision of necessary information and financial data to the top administrative level for decision-making.

11.5.2 Brief definition of planning programming budgeting system (PPBS):

PPBS is an administrative and planning system which aims to provide adequate information for decision making to all hierarchy levels of the public sector. One of its characteristics is its emphasis on a specific result in the programming budget. In addition it uses analysis as a means to measure performance. Therefore, it necessitates improvement in procedures and development of the accounting system and depends on planning which is the basis for the application and development of PPBS.

PPBS has been defined as follows:

A set of procedures used in government agencies that provide for the identification of objectives and goals, the design of programmes to achieve these goals and the development of programme budgets in which each programme is treated as an entity. For example, most university budgets classify expenditure by department and by object, such as salaries, supplies, utilities, travel. The objectives of a university generally include education, research and service; but the budget is not classified in a way that would show the expenditures for each of these functions. With PPBS, separate budgets would be developed for the education, research and service programmes. Budgets could also be developed for sub-programmes, such as community extension services, undergraduate education or accounting research.

(Estes, R. "Dictionary of Accounting",
MIT, 1981)

PPBS aims to increase performance indicators by creating an administrative system capable of setting up a successful plan and creating an information system which will enable the public sector administrative hierarchy to achieve economic goals.

The system examines accounting behaviour and its improvement in the public sector in order to create group contribution to administration by delegating authority and determining the responsibilities. In addition it can classify activities and clarifies goals and objectives, creating distinct programmes within the complex and multiple objectives found in higher education.

From the above, PPBS can be seen to have a number of characteristics which make it applicable to Iraqi higher education, namely:

1. Introducing economic concepts as a means of improving the level of planning, direction and analysis to aid decision making in Iraqi higher education.
2. Determining the objectives of Iraqi universities in order to orient planning and implementation.
3. Bringing about co-operation in the preparation of plans and determining resource allocation in light of specific goals, to enhance planning and programming at the lower administrative level in colleges, academic and administrative departments.
4. Reviewing alternatives and selecting the appropriate means to ensure optimum use of allocated resources in the universities.
5. Delegating authority and determining accountability to encourage responsible behaviour in expenditure, and increasing awareness of performance indicators.

6. Defining adequate means of control over operation of the plan by improvement in staff performance.

11.5.3 Annual planning and PPBS: Increased specialization arises from the development of government administration. Most governments try to find methods of orienting and controlling administration, and the trend is to use the annual plan as a means of achieving this objective. The university plan normally estimates revenue and expenses for a year. The greatest weakness of the plan is that expenses are not linked with economic and social goals. In addition, there has been a neglect of cost accounting and the performance indicators in preparing the university plan. There is no application of economic methods in deciding between the available alternatives on the basis of cost and benefit.

Although the planning concept has developed as a result of economic development and increased public sector activity, the university plan does not sufficiently emphasise financial auditing or clarify the financial situation. The current economic development and expansion of planning theory has created a need for the provision of adequate information for economic activities and decision making. Therefore, the plan and its implementation are the most important aspect of university administration.

The demands on the government budget have increased with economic development in Iraq, and the consequent expansion of government administration, and while the demands on universities have increased, at the same time, universities have faced a decrease in government funding compared to the expansion of student numbers and other activities, as shown in the previous chapter. It is apparent that control of expenses necessitates adequate planning and the linking of university expenses with macro development plans. Therefore, it appears that there is a need to review the current budget and to introduce concepts which will enable the university

budget to keep pace with the changing environment and present demands. This is an argument in favour of introducing PPBS to Iraqi university budgeting. Preparation of the university plan according to PPBS requires the planner to consider a number of points:

1. It must be ensured that programmes for each unit, e.g. academic department or college, reflect the goals and objectives to be achieved. In addition, these programme objectives must be linked with the broad goals of the university.
2. The programme goals have to be clear and a programme of operation must be planned in the light of the results which need to be achieved.
3. A clear unit of measurement must be determined to reflect the programme's activity. In addition, the cost of necessary activities needs to be calculated.
4. Each operation and its cost must be studied and analysed in order to estimate costs for the next period.
5. There must be a method of choosing between alternatives in a decision-making situation.
6. It will be necessary to expand the information provided by the uniform accounting system so that it is adequate for administrative purposes. Obviously, care must be taken that the benefits derived from improving the accounting system are sufficient to justify the cost of the application.
7. It is possible to estimate expenses for each programme but this should be done in a flexible manner rather than over-precise because the purpose of estimation is not to dictate but to assess the situation. Therefore, all the alternatives have to be taken into account in estimating the programme of each academic department or college.

11.5.4 The Uniform Accounting System: The uniform accounting system and its information provision are most important to administration. Although the uniform accounting system emphasises information provision from the point of view of control, auditing and financial reporting, it is still inadequate to meet the present requirements of university administration for planning and decision-making purposes.

PPBS classifies activities and brings them together in a programme with clearly delineated responsibilities and authorities to achieve the goals set. Therefore the programme needs the provision by the uniform accounting and information system with all information related to the activities. Then the accounting system must encompass the cost of the activities within each programme, which involves cost accounting for each unit. The uniform accounting system should be able to display the costs of activities for comparison with the plan. Accordingly, the administrator will be able to assess whether performance is on target with the planned goals. The administrator must also know the expenses incurred on each programme and the reasons for them. Finally the uniform accounting system must reveal the following information in order to be efficient.

- Type and average cost of each programme (academic department or college).
- Total programme cost (all the academic departments or colleges).
- Total cost of university (academic and administration departments).

The accounting system should be able to display every type of expense associated with the programme. However, although it should provide more information, this should not be at the cost of undue complexity, increased manpower, and high running costs. Therefore PPBS aims to find the simplest

accounting system consistent with the provision of adequate information and analysis for planning and decision-making purposes.

Although the uniform accounting system has always emphasised auditing and financial control the modern view of accounting has progressed beyond that, to include control of performance indicators. Hence the administration can tell whether expenditure has achieved its objective. PPBS depends on measurements of performance and performance indicators in order to compare results with the plan and determine costs throughout the period. The accounting system in PPBS is decentralized in order to give the accountants and administration flexibility in achieving their objective because their handling of funds gives them responsibility for the final result.

11.5.5 Brief comparison between current auditing practices and the

application of PPBS: Current auditing concentrates on feasibility of expenses within the plan, but auditing has gone beyond that to measure the efficiency and effectiveness of an organisation. The main characteristic of current auditing is its emphasis on keeping expenditure within the budget plan, reviewing transactions before payment and ensuring that expenditure is authorized. These principles are basic auditing duties and do not reflect the comparative role of auditing in recent years. Although PPBS emphasises expenses as the means of achieving goals, an element of control must go hand-in-hand with achievement of goals and verifying expenses. Therefore the application in universities of internal auditing in the light of PPBS would include the following objectives.

1. To ensure that overall expenditure is in accordance with the financial plan and serves the attainment of the university's broad goals.
2. To confirm that expenses are authorized by auditing transactions and records.

3. To monitor the performance of academic departments against costs.
4. Continued commitment to PPBS and monitoring of its application.

From this brief review of auditing objectives it can be seen that auditing does not stop at checking transactions but it is a continuing process of administration and financial control. The application in universities of auditing in the light of PPBS must contain

First: Control at the planning stage. Before estimating the effectiveness of control with PPBS, it is necessary to point out the problems in the present auditing system. The initial estimate is usually based on that for the previous year, accordingly problems will be transferred to the budget for the following year. Auditing in this case does not have the role of arguing, discussing and exerting influence.

The nature of control achieved with the application of PPBS in universities will be more extensive. When each college or academic department presents its prepared plan, it will be possible to discuss the programme in the light of extended achievement of the plan, resource allocation and the previous year's operation by comparing performance and actual expenditure with what was planned. In the light of information on past performance, the plan can be varied as appropriate.

Second: Control at the implementation stage. The purpose of current auditing is as follows:

1. To ensure that allocation is implemented according to its accounts.
2. To confirm that the actual expenditure does not exceed the allocation in the plan.
3. To audit transactions and authorize expenses.

The main purpose is to ensure that public money is used exactly as planned, but the system is incapable of ensuring that expenditure actually achieves the goals set. However, PPBS emphasises expenditure as a means of

achieving objectives and goals, as discussed elsewhere in this chapter.

11.5.6 Comparison between the universities' present system and PPBS

In order to clarify principles which are adopted by PPBS, it may be compared with the present university system. The following differences are found between the two systems.

Current System	PPBS
<p>1. The classification of plan depends on function.</p>	<p>1. The classification of PPBS depends on the programmes in which the function and activities are interpreted.</p>
<p>2. The previous year's expenses are taken as a base in each system. However, the current system does not link the allocations and actual result.</p>	<p>2. PPBS tries to estimate funds and resource allocation according to expected results (setting goals). Therefore, the planning process and allocation of resources are more closely related to results. It also shows the purpose of each expense so that the plan becomes the means of implementing the operation.</p>
<p>3. It is possible to reduce the university plan by cutting the expenses in the account. Therefore it is possible to control total expenditure in the execution of the plan.</p>	<p>3. It is not possible to reduce the plan by reducing the expenses in the accounts but it can be reduced over the programme as a whole because the allocation is made throughout the whole programme.</p>

4. It does not require the training of a large cadre of manpower because the cadre responsible for the budget is limited to a few specialists. There is no need to disseminate knowledge to non-accounting people and professionals in other departments.
5. The current plan system encourages the university to absorb all the allocated resources without actual reason for the expense and the university tries to use all allowances in the last month of the fiscal year because it cannot benefit from the allowance after the year end. At the same time, it will try to show its estimate was accurate and bargain for more resources in the following year.
6. The allowances within the plan are generally decided by the higher level or a committee and approved without any contribution by the academic staff towards planning, or estimation of resource allocation.
4. It demands training and provision of knowledge to many people including academic and non-academic staffs. The responsible cadre must be professionals because of their contribution in preparing and allocating resources within the programme.
5. It does not encourage the absorption of allowances without need, but increases knowledge of costs and their relation to benefit. It also creates a responsibility to use funds economically. In addition, it causes all administrative levels to analyse alternatives and select the best, because control and measurement of efficiency operate on the basis of comparing results with cost.
6. It demands the contribution of all levels towards setting-up the plan and its operation and estimating the allocation of resources according to goals.

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| <p>7. The accounting information system does not provide information and data indicators about actual results from expenses, accuracy, timing and relationship of achievement to university objectives.</p> | <p>7. The main purpose of the system is to reveal the results of activities which run parallel with expenses. Throughout, expenditure is linked with results.</p> |
| <p>8. The university ordinary plan operates for one year only.</p> | <p>8. Aggregate plans are prepared for more than one year, though with detailed reference to the year in question.</p> |
| <p>9. Authorities and responsibilities are limited and centre on auditing and financial activities.</p> | <p>9. Delegation of authority and responsibility is clear and defined. It also includes control of financial and administrative activities.</p> |

11.6 THE APPLICATION OF PPBS IN UNIVERSITIES

It seems that there has been insufficient development in university accounting and resource allocation in relation to development and availability of funds and manpower since the universities became part of the public sector. Therefore, there is a great need to make radical changes in the public sector, including universities, which are at present unaware of the usefulness of PPBS, in order that they may develop the method and achieve a satisfactory administrative and information system. It would also raise universities to the level of government administration involving active and successful cooperation throughout the university hierarchy. By this means the accounting system will be based on accountability instead of variable funding according to government policies.

In order to apply PPBS in Iraqi universities, they must study the theory and devise a system which is appropriate to their needs. The system needs to combine emphasis on programming and performance indicators and on the central planning and independence of university administration. The attempt to apply PPBS in Iraqi universities should not entail merely copying the application of the theory in the West but must be tailored to the level of financial development, the adequacy of a cadre to study and analyse university goals and objectives and be flexible in applications in order to be efficient in use for accounting, resource allocation and planning.

The prerequisites for the application of PPBS to university internal administration are as follows:

First: Definition and interpretation of the goals and objectives of the university and analyse them into activities and programmes.

Second: Setting up a plan for each programme specifying methods by which goals will be achieved. The programme could possibly be divided into:

1. Allocation of an allowance to each individual college or department.
2. Classification of the plan for the college and/or department according to programme structure and not as a radical plan.
3. Definition and delegation of authority and determination of responsibility for finance and administration of each programme (colleges or departments).
4. Application or modification of the uniform accounting system according to programme, ensuring coverage of the cost of each programme and its activities.
5. Development of a statistical department in the university by provision of information.

Third: Linking expenditure with the outcome of programmes and the operation of universities as a whole, by collecting details of the expenses for each programme and comparing them with activities and university goals. In addition fundamental measurements of performance indicators will be set up. Confirmation of the availability of resources is according to the actual activities.

Fourth: Delegating the main authority and dividing responsibility to enable the administration to implement the plan.

Fifth: Preparing the estimate according to aggregate contributions from academic and administrative staff at all levels. Its preparation depends on government regulations. Nevertheless the contribution of academic departments is valuable because it is they who will be responsible for achieving the goals set, their efficiency or otherwise which will determine the outcome.

Sixth: Decentralising implementation throughout the colleges and academic departments, enabling them to use their resources in such a way as to achieve their objectives and give them flexibility in operation, albeit that financial auditing is necessary to determine the efficiency of performance and exercise some control over their activities.

Seventh: Finding an adequate system to provide information for decision making by developing and analysing the current accounting and statistical system.

Eighth: The current practice of bargaining for resource allocation should be dropped in favour of a system in which universities operate within limits pre-determined according to the number of students to be admitted for each university.

Ninth: It seems that the administration has various functions in universities. Al Mustansiriya and Technology managers, both middle and lower, need to understand their function in greater depth, and require continuing training as it seems there is no contribution in a joint training process particularly relevant to the educational institutions. Additionally they require flexibility in their administrative operations. For example, financial regulations affect the efficient use of resources - one of the main aims of the university - to achieve university goals, yet flexibility is necessary in executing the financial role, and implementing regulations, in the annual and long term plans of the university.

One of the deficiencies of the University of Al Mustansiriya administration is the lack of flexibility in the application of financial information to achieve university goals. Many times the financial administration complicates financial affairs, its cumbersome interpretation of regulations tending to limit or delay achievement of financial objectives. The head of the financial department tries to follow the regulations of the Ministry of Finance, but experiences difficulty arising from ambiguity of meaning, resulting in failure to achieve financial goals in the university.

11.6.1 The application of PPBS in colleges and departments: There are certain fundamental elements which are required for the application of PPBS in universities, summarised as follows:

1. Government planning is translated into programmes for academic departments. The dimensions of these programmes are determined in relation to the goals and objectives of the university.
2. A work plan is set up for each programme and authorities and responsibilities laid down in order to achieve the objectives. Criteria for

measuring performance are determined in order to include a control system with performance indicators.

3. The availability of resources for the programme is determined, as is the decentralized implementation procedure.

4. An adequate information system is set up by improving the uniform accounting system, statistics and method of setting-up plans.

In order to achieve successful application of PPBS, it is necessary to allocate an individual plan to each academic department, classified according to the department's structural programme. Responsibilities and authority for finance and administration would be allocated to each head of department. An accounting system would be prepared according to departmental programmes, using the uniform accounting system and developing a statistical office capable of providing the administration of the academic departments and those in charge of the programme with adequate information, as well as supporting the actual application of the PPBS system.

The current budget and accounting system presents difficulties for colleges and academic departments.

1. Colleges are not informed in advance of increases in student admissions and proposed changes for the current year, to enable them to prepare appropriate plans for facilities and equipment. The obligation to execute such plans would require universities to assess their situation carefully at the end of the year, while the current plan might become the basis of pre-planning for subsequent years.

2. Academic departments and colleges have no independent budget.

3. There is insufficient support to academic departments and a lack of involvement with decision-making.

4. The centralization of the system prevents individual departments from receiving adequate information. In addition, relations between departments tend to be non economic in nature.

5. Academic departments do appear in the classification of annual costs and services.

6. The multiplicity of funds, regulations, development plans, etc., from central government has made it difficult to measure departmental costs.

PPBS aims to increase performance indicators. Therefore its application would make it possible to achieve benefits for the university at work. Successful application depends on the internal officers of the university.

Furthermore, since universities are funded by central government, it will have to support the application of the system in the universities and exercise careful control to ensure the future success of the system. Therefore a number of suggestions may be made for the implementation of PPBS at various stages.

First stage: The university should prepare facilities for application for one year as a preliminary stage. During that time, it should report, monthly and quarterly, to the highest level of university and the Ministry of Higher Education. Comprehensive assessment of the system must be carried out and suggestions relating to its further application made. It would be desirable to establish a committee in the Ministry of Higher Education to collate the universities' reports in order to assess the feasibility of application.

Second stage: In the event of the application of PPBS being continued, the Ministry of Higher Education could issue a decree to that effect to all the universities. The decision would include the work of planning

and introduction.

- a. Study communication between academic departments, colleges, universities and the Ministry of Higher Education.
- b. Prepare the plan for academic departments, colleges and universities.
- c. Establish the fundamental rules of the uniform accounting system according to PPBS.
- d. Study the control and auditing functions to bring them into line with PPBS.
- e. Prepare training programmes for all the officers involved in the application of the system.
- f. Prepare adequate reports on the most important results of PPBS; monthly, quarterly and annually.
- g. Prepare a report discussing the methods and continued application of PPBS at the end of the year.
- h. Give priority to discussing the application of PPBS in their universities, with management and academic departments.

Third stage: At the macro level of application, the Ministries of Finance and Planning will cooperate with university colleges and management to establish the fundamental rules of application of PPBS.

- a. A comprehensive survey of each ministry and its affiliated directorates and preparation of a PPBS plan for each and for the whole year.
- b. Aggregation of the efforts of all the ministries concerned into one plan.
- c. Preparation of the government plan according to PPBS.
- d. Establishing the basis of an adequate accounting system in line with PPBS.

- e. Work towards a change in emphasis from auditing control to performance control.
- f. Organize training for all the ministries which apply PPBS.
- g. Prepare a report on the result of application.
- h. Prepare a report concerning methods of improving the system for its continued application in future years.

11.6.2 Funding to academic departments: Efficient resource allocation involves knowing the costs for a given cost centre (e.g. department or school) in order to determine the needs and performance of each academic department. This is a new approach in Iraqi universities, where departments have not been used to running their own affairs. Further, savings of time and money are only of secondary importance, the real task is to experiment with new materials, new methods and new orientations. In fact, efficient resource allocation, clear patterns of accountability and effective planning at departmental level can not make for more efficient attainment of educational objectives without assessing the value of various activities to the student, research, consultancy, etc.

Academic staff at present need more teaching time and more administrative and clerical back-up than formerly, because of increasing student numbers. They are working longer hours, being obliged to attend eight hours a day, as in other areas of the public sector. There is no organised provision of time for individual research and writing. There is a fixed salary scale with increments according to qualifications, length of service and publication, but there is no involvement with resource allocation, planning and financial accountability, nor are they able, by their activities, to increase funding to their department or college, or to the university as a whole. The function of academic staff is restricted to teaching and research and even this limited function is not

measured and translated into funding for the universities.

The efficiency of funding to education may be improved in a number of ways relating to the functions of academic staff, departments, colleges and universities. Academic institutions could remain open throughout the year on a four-term system, thus increasing their student capacity by as much as a third without affecting their standard ratios or requiring new facilities. Student travel time between classes should be cut, resources pooled and management generally improved. These objectives can be attained by establishing cost centres, increasing the autonomy of academic departments and motivating staff to bring increased funding into the university.

Rising student numbers necessitate efficient planning of teaching time and increase demands on the university administration. Furthermore, the contribution to the quality of education of technicians, curriculum coordinators and counsellors has yet to be assessed. These factors can not be determined without the formulation of clear objectives related to the functions of academic departments and a clear picture of the costs of their various activities.

Obviously, the best way to increase the efficiency of academic departments or colleges is to reduce or eliminate waste. This is an urgent priority in Iraqi universities which are suffering from single-source funding, increased student demands, and a lack of systematic approaches to handling, resource allocation and planning. Generally speaking, universities can be said to be operating economically when available resources are being allocated in a manner that maximizes student learning, research and consultancy and minimizes waste, not only of money and materials but also in the way resources are handled and used. For example, failure to make effective use of space effectively constitutes the waste of an

investment opportunity of money and learning. From the efficiency point of view the average expenditure per student should be found in order to determine the cost of each academic department and measure their productivity.

The possibility of increasing university efficiency by broadening funding should be reviewed by universities and by the Ministry of Higher Education. At present higher education is entirely government funded. This funding is variable because of the pressure of other demands on the government, forcing the universities to attempt to limit their spending, despite increased admissions. University internal administration is hopelessly inadequate, with no method of determining the costs of colleges and departments or relating these to their objectives, no efficient way of handling the public sector, inadequate statistics and accounting systems which are not sufficiently developed to provide the information needed. Therefore, universities should reduce their dependence on central government funding and enter a new area of economic thinking, reviewing their functions in society and using their relationships with other sectors in order to increase funding to departments, colleges and the university as a whole. The present ideology is that education is free to all. However, there are many students who would be able to pay a proportion of their tuition costs. It could also be argued that textbooks, stationary, uniforms etc., all of which are provided free of charge at present, could be paid for, at least in part, by the students themselves.

Academic departments and colleges should form a finance committee responsible for investigating ways of increasing revenue. Such methods might include, for example, publications, research, seminars for individuals and organisations outside the university, training programmes, consultancy, etc. Each of these could, directly or indirectly, increase the efficiency

of academic departments or colleges. In addition, universities could obtain revenue by renting their buildings and facilities to other organisations for functions, etc. Universities in Iraq are part of the public sector, intended to serve society. Output of graduates is their main function but they could serve other functions and make these a source of revenue. In the present economic situation they can not afford to continue to make all their services to the public entirely free of charge. At the same time, their public sector status gives them a particular responsibility to use their funds effectively.

Increasing the sources of revenue to academic departments would protect them from the effects of uncertain government funding. This can be done flexibly, developing activities, laboratories, computing, etc., which would benefit the teaching function as well as increase revenue. At the same time, an effective system by which to measure expenditure against revenue would enable departments to monitor their efficiency and eventually to improve it.

11.7 SUMMARY

This chapter has evaluated financial planning, resource allocation and fund monitoring in Iraqi universities and has considered ways of improving efficiency in these areas. Some parallels have been drawn between Iraq and other developing countries whose planning needs and deficiencies have been pointed out by a number of writers.

Since 1970, the central government of Iraq has endeavoured to provide yearly guidance on the financial plan for the next year. This gives information on increased estimated expenditure or saving.

The Iraqi university resource allocation and accounting system operates in yearly periods (1st January - 31st December). The financial

year does not operate over the same period as the academic year which starts in early September and ends in June as discussed in Chapter Eight. The two different cycles, the financial and the academic, make it difficult for analysts, researchers, accountants and accounting systems to measure accurately the costs of education in the university - student costs, course costs, etc. In addition the introduction of the uniform accounting systems and the continuation of the government and commercial system (Chapter Nine) coupled with the introduction, but not yet full application, of managerial and cost accounting, cause problems for efficiency.

Iraq university funds come directly from the Ministry of Finance. Collection of the funds depends on university reports: trial balances, bank statements and requests for monthly funds. It was found that Al Mustansiriya and Technology Universities experience no delay in the regular receipt of government funds. Although each university must keep within its approved annual estimated budget, university quinquennial plans cover estimation of student numbers, manpower, curricula, etc., in isolation, while financial planning for universities is comparatively neglected.

The university financial plan is not related to the number of students accepted, and its attainment is therefore hampered by the burden of providing free education to uncertain numbers of students.

The present system of financial planning is unduly complex and university financial departments are unable to cope with the information required.

Another major problem is lack of regard to proper national management control systems, auditing and a lack of qualified official teaching staff for this field to be adequately covered in the universities.

The lack of adequate management information highlights the need for strong university accounting departments and suitably trained personnel.

However, many departments suffer from weak and dated curricula.

The problems faced by Iraq in this respect are similar to those which have been identified in countries such as Kuwait.

Planning, resource allocation and monitoring of funds present great opportunities for universities to improve their efficiency. These areas were evaluated with reference to the same seven questions posed by the Steering Committee in the UK.

It was found that there is still a lack of financial planning and such planning as does take place is hampered by the inconsistency of funding, together with lack of training. The resource allocation procedure has the advantage that there is no long chain of intermediaries between the government and universities, but there is insufficient involvement of academic departments, coordination relying too heavily on the president and his assistant.

Auditing departments are short of staff, and their lack of training affects the quality of information and the time-scale within which it is presented for financial decision-making. In addition, there is a general lack of understanding of the importance of accounting and financial planning.

Management accounting systems are a key element in planning and decision-making, yet management information systems in Iraqi universities are in many ways inadequate, though the external provision of accounting information is extensive because of rigid government regulations. However these are difficult to interpret, and the information produced is not always accurate.

Resources are allocated through a committee structure which is not efficient. The main problems are that there are too few members, and

they lack experience and understanding. Academic departments need to be more involved in the accountability process, and attention should be paid to the possible role of PPBS, CBA in defining goals and monitoring the success with which they are met.

Lack of budgetary control is evident in Iraqi universities. Heads of department are uncertain of their responsibilities in this respect, and do not seem to accept accountability. The fact that the financial and academic years are not concurrent, and the variety of financial plans and systems in existence complicate the control process, while the lack of a link between auditing departments and the university council also contributes to lack of control.

The financial department, which receives the financial reports, cannot perform its functions effectively because of shortage of staff, lengthy processes, and inadequate training. The greater success of Technology University in this area reveals the importance of staff development and in-service training, as well as its more efficient communication and coordination between sections.

Iraqi universities lack power over their resources and confusion exists over their responsibilities in resource allocation. Financial efficiency could be improved by dividing the financial budget in advance and defining the authority and goals of departments. PPBS, CBA and corporate planning, which are not currently applied, may have a useful role to play, and their value should be investigated.

PPBS is an accounting and administrative system which aims to increase the efficiency of public sector administration in decision making, to increase use of performance indicators and emphasize results. Therefore it requires improvement in methods of preparing budgets, accounting systems and statistics. In addition, it emphasises management control

of performance as a method of directing operations. In the light of the government budget, the system should apply the government plan comprehensively to all activities depending on the available resources. PPBS highlights the weaknesses in the government's original concept of budgeting, which does not link goals and expenses, and fails to give adequate importance to cost accounts. This system must be reviewed, PPBS applied, accounting systems developed, and statistics improved to provide adequate information for administrative purposes.

In the light of the emphasis of the current accounting system on information for control and direction only, the accounting system for PPBS will be changed to emphasise the provision of information for planning and decision making at all levels of the administrative hierarchy. Therefore, it must include:

- Types of expense to each academic department and college.
- Actual costs of academic departments and colleges.
- Costs for the university as a whole.
- The actual average of each department.

It seems that university objectives are complex, and there has thus far, been a failure to clarify and define the objectives of the academic departments and colleges as executive units. In practice the academic departments have a very limited role in cooperating in setting-up the university plan, and consequently it is difficult to determine the adequate allocation of resources to achieve their objectives. Finally, it does not provide the opportunity to link expenditure with the output of academic departments and colleges. Furthermore, there are many problems inherent in the present financial and administrative system, including lack of work planning, weak internal financial planning for academic departments and colleges as budgetary units, and inadequate or non-existent academic

contribution to resource allocation, planning and decision-making.

Comparison between the present budget system and PPBS shows that the original budget system depended on functional expenses and determined adherence to financial targets as the sole objective, while the PPBS classification is based on programmes and highlights the importance of the results achieved. While the present system allocates resources on the basis of the previous year with a percentage increase, PPBS requires estimation based on the desired results. Control in the light of PPBS is concerned with performance, the use of available funds and manpower, to achieve specific goals, rather than on financial and accounting control alone, as at present.

Thus, although the chapter has revealed a number of inadequacies in the present system of financial administration in Iraqi universities, remedies have been suggested that may help the universities to meet the demands of the Iraqi government for increased efficiency. The following chapter links these findings with those on UK universities, discussed in earlier chapters. Although the administrations in the two countries differ, both are under scrutiny in times of financial constraint, and comparison between them is instructive.

CHAPTER TWELVEBROAD NORMATIVE ANALYSIS OF THE IRAQI
UNIVERSITIES' CASE STUDYCONTENTS

- 12.1 INTRODUCTION
- 12.2 THE SIGNIFICANCE OF THE LITERATURE REVIEW OF THIS STUDY
- 12.3 THE APPROACH TO CONDUCTING THE CURRENT RESEARCH
 - 12.3.1 Institutional Background
 - 12.3.2 The Governance of Universities and Efficiency in the Use of their Resources.
 - 12.3.3 Universities at Work as a Background to Planning.
 - 12.3.4 Planning, Resource Allocation and Accountability in Individual Universities.
- 12.4 SUMMARY

12.1 INTRODUCTION

This study investigates the accounting, resource allocation, planning and efficiency of Iraqi universities, concentrating on the efficiency with which universities manage their resource allocation in practice, which is seen in relation to university funding, goals and objectives, and governance. It evaluates financial planning and fund monitoring in Iraqi universities in order to identify ways of improving their efficiency in these areas.

Chapter two reviewed a variety of literature on the concepts of efficiency and effectiveness in relation to the public sector and higher education. Literature has also been reviewed concerning higher education in Western and developing countries, with particular reference to universities and the demand for efficiency.

The concepts of efficiency and effectiveness are reviewed in relation to planning and control, to the goals and objectives of the organization, auditing and to higher education in the United Kingdom and developing countries.

The purpose of this review was not to develop a conceptual model, but rather to provide a broad understanding of the concepts of efficiency and effectiveness as background to the main purpose of this thesis.

Against this background, information was sought from academics and administrative officers on a number of significant points. The information so gathered is presented and analysed in this chapter.

12.2 THE SIGNIFICANCE OF THE LITERATURE REVIEW OF THIS STUDY

The research task is to investigate the accounting and financial management efficiency of UK and Iraqi universities, examining the influence of central government and other bodies on the efficiency of universities and in particular on their accounting and financial management.

An attempt is made to evaluate whether or not university management structure and systems are efficient in ensuring that decisions are fully informed, that optimum value is obtained from the use of resources, that policy objectives are clear, and that accountabilities are clear and monitored.

Each case study looks at the authoritative bodies within universities and at the infra-structure of governance including the roles of senior academic and administrative office holders. Here, the researcher relies heavily on the information derived from responses to a questions guide, to recommend changes that should be made to improve the effectiveness of the system in general and the planning and resource association mechanisms in particular.

The researcher reviewed the many factors which form a background to the universities' strategic planning and decision-making processes. The case studies concentrated on the internal efficiency of the universities and consequently much of the material in this section is drawn from the original studies of committees in charge of discussions and overall assessments.

The case studies of two Iraqi universities investigate the resource allocation and monitoring of funds by the study officers and it is in this area that the researcher believes there is the greatest scope for universities to improve their effectiveness and efficiency.

Finally, the research findings are collated in order to assess the accounting practices, financial management and efficiency of Iraqi universities.

Both quantitative and qualitative methods are used by the researcher in assessing the findings of the case study and drawing conclusions from this research.

12.3 THE APPROACH TO CONDUCTING THE CURRENT RESEARCH

The method of investigation used in this research is primarily qualitative; the researcher collected and reviewed a variety of publications and documents, as well as devising a question guide to be answered by the interviewees. However, it is possible to highlight some quantitative measurements from these responses according to the definition of normative measures by Kerlinger (1979, p.508).

Normative measures are the usual kind of measures obtained with tests and scales: they can vary independantly - that is, they are relatively unaffected by other measures - and are referred for interpretation to the means and standard deviation.

Much of the information on Iraqi universities was given in response to a question guide. Figure No. (12.1) illustrates the guide's key statements, condensed into five groups, and in addition, the number of interviewees answering these questions. It should be said that because the question guide covers all aspects of university organization, accounting, resources allocation, and the overall planning process, each group of questions concerned a different set of interviewees, according to their level of experience and involvement with the area concerned. Respondents often wrote in some detail on the areas with which they were most directly concerned, but left some questions unanswered as being outside their sphere of activity. Some questions, for example, could be answered by academic staff but not by accountants, and vice versa. Even so, it was felt that it was possible to gain an overall view of university accounting, resource allocation and planning procedures, and to form some view of their level of efficiency in these respects.

In order to analyse the Iraqi universities' case study, and derive some normative measures from answers to the questions guide, the method of score points is used. The scale runs from 1 to 5, 1 indicating the "first"

Figure No. (12-1)
 The Key Statements of the Questions Guide, Percentages and Contributors to the Current Research

No	Key Statements of the Questions Guide	Main No. of Questions	%	External	Financial Officers	Accountant	Accountant-Secretaries	Academic	Total
I	External influences on the efficiency of administration, accounting and finance	6	7	2	1				3
	The universities' internal administration, accounting and finance objectives and goals	11	13	2	1				3
II	The governance of universities and efficiency in the use of their resources	19	23			1	15		16
III	Universities' operation and background to planning	12	14			1	15		16
IV	Planning resources allocation and accountability in universities	28	33			1	15	2	18
V	The department and how it manages its resources.	8	10					2	2
	Total number of questions and sub-questions	84	100	4	2	3	45	4	58

or "lowest" and 5 indicating "last", "highest" and "most", with 2, 3 and 4 indicating positions in between.

Thus a score is ascribed to each statement investigated. The researcher's comments are shown after each figure.

12.3.1 Institutional Background: The following commentary is concerned with the institutional background to the question guide, quantified with score points from 1 to 5, 1 indicating the first and lowest, 5 the last or highest with 2, 3 and 4 indicating positions in between. Figure No. 12-2 scores the answers to the first group of questions, related to "institutional background". The responses in this area showed:

1. That university accounting and finance is not independent, but subject to many external influences, e.g. government regulations, student admissions, etc.
2. The university objectives and goals are complex and multiple. Interpretation is rendered difficult and much is left to the universities. The internal administration of the university, however, is unable to break down its objectives in such a way as to use them for preplanning.
3. Universities cover a wide range of academic activities. Al Mustansiriya offers a range of Arts and Science subjects, while the Technology University offers purely Science activities. Therefore, the latter is more involved with outside consultancies, though this does not affect its funding because of the Iraqi policy on public sector services. Thus they are able to offer little help with funding provisions and loyalties are mainly to university activities.
4. Universities are considerably affected by the financial and regulatory pressures created by the current Iraqi environment, which because of the War has been subject to change and uncertainty.

Figure No. (12-2)

External and Internal Influences and
Accounting, Finance, Objectives and
Goals and Their Efficiency

Qu. No.	External Views	Internal Views	
		University 1	University 2
1	5	5	5
2	5	5	5
3		3	3
4		5	5
5		5	5
6		5	5
7		1	1
8		1	1
9		2	2
	Sum	32	32
	Mean*	3.6	3.6

- Note: 1. Score points are on a scale from 1 to 5. 1 indicates the first and lowest and 5 indicates last or highest with 2, 3 and 4 indicating positions in between.
2. The score points given are based on assessment of replies given in the qualitative study.
- * Both universities have the same mean score, because they both face the same influences.

5. Student admissions have increased rapidly, but this has not affected the numbers or salaries of academic staff. There is no measurement of staff/student ratios. Increased enrolments have been dealt with by changing teaching methods and use of rooms. An effect is felt, however, from the need to provide students with free books and stationery.

6. The response to variable funding and strict regulations has caused Iraqi universities to review their administrative procedures, and to attempt to save money by restricting recruitment to administrative posts, despite the increase in the administrative work required by increasing student numbers.

7. It was found that the level of funding bears no relationship to the number of student admissions, suggesting inefficient evaluation, and absence of cost measurement in universities.

8. The effectiveness of universities must be seen in relation to their goals and objectives. Since it was discovered that university objectives are not interpreted or translated into practical goals, effectiveness cannot be maximized.

9. In broad terms, there is evidence from literature and legal and accounting documents that universities have been the victims of a changing and uncertain environment. However, there seems to have been no clear policy or sense of direction in responding to these events. Any review must take account of the universities' goals, objectives, structure and academic activities.

12.3.2 The Governance of Universities and Efficiency in the Use of Their

Resources: The commentaries are concerned with the appropriate section of the question guide. The researcher quantified the five questions into scores from 1 to 5, 1 indicating total inefficiency and 5 indicating high

efficiency, with 2, 3 and 4 indicating positions in between.

Figure No. (12-3) shows the scores ascribed to answers on university governance and efficiency in use of their resources. The analysis reveals the following points.

1. The university Council is concerned with strategic planning, according to the Law of Higher Education and the literature, but in practice goals and objectives are not analysed in such a way as to facilitate such planning.

Regarding the financial plans, a university committee estimates this annually. However, there is little evidence of any discussion held at the end of the year to compare the actual practice with what had been planned, in order to monitor the achievement of the plan. The only members of Council involved with the plan are the President and Vice President. Because universities are part of the public sector, their finance is largely regulated by law and is a sensitive issue. Members of Council who are all Deans of the university are involved in the allocation of resources for their colleges. The complete budget process will be seen later. (See Chapter 9 also). Inefficiencies are shown in Councils' strategic planning. However, Technology University differs slightly in its method of allocating finance according to demand each year and adhering to the plan throughout the year. There is no evidence of attempts to monitor or control expenditure and no clear pattern of accountability.

2. Committee structures are inefficient in size, and there is a notable lack of academic staff contribution to the committee. The budget committee is headed by the President, Vice President and representatives of the financial and personnel administration. The committee is inefficient in monitoring the budget during the year, no consultancy has been suggested, and there is no responsibility for adhering to the budget.

Figure No. (12-3)The Governance of Universities and Efficiency in the Use of their Resources

No	Rate	University 1	University 2
1	1 2 3 4 5	3	4
2	"	2	2
3	"	3	4
4	"	2	3
5	"	1	1
	Total	11	14
	Mean*	2.2	2.8

- Note: 1. There are five main groups of questions. They are ranked from 1 to 5, 1 indicating inefficiency and 5 indicating efficiency, with 2, 3 and 4 indicating positions in between.
2. The rate is a score point ascribed to observations found in the qualitative study.
- * The difference in mean between the universities reflects the move in University 2 towards dividing the budget into colleges, delegating more authority over spending to colleges, and finally giving freedom to colleges to ask for funds. However, neither university has cost centre accountability or defines its activities in a measurable way.

3. In theory the President and Vice President have full control over the effectiveness and efficiency of budgeting. The President is the main link between the university and ministries regarding requesting and collecting funds. Efficiency might be enhanced by the delegation of some of this budgeting authority to others and simplifying the procedure. At present, academic staff have no influence or control over the accounting and financial affairs of the university. The financial officer and his section are responsible for all information provision and monitoring. Deans are involved to the extent of reporting on the queries of the annual committee. Deans, like heads of department, have no control over their expenses, and make no contribution to the financial plan of the university, even though they are in a good position to understand student costs and departmental needs.

4. Resource allocation to departments is set up through a report showing what is needed for the next year. Figures given in the report are incomplete and the departmental estimate is, therefore, inadequate, though it will be approved and measured against the books.

5. It should be said that colleges and departments have no outside private funds, e.g. from consultancies, research for outsiders, etc., which could earn resources for the department. The only funding source is central government. Colleges and departmental staff and administration payroll are set up by the central administration of the university. Supply of equipment, etc., is also centralized, though coordinated by academic departments. Petty cash and ad hoc expenses are left for the academic departments, which are accountable for spending according to the financial policy. There is no cost centre or planning process, inadequate monitoring, lack of accountability for finance and no clear goals or objectives in respect of finance and accounting, student numbers, etc.

12.3.3 Universities at Work as a Background to Planning: There are more than twenty-one questions in this group, therefore, the researcher put them into six groups in order to produce some quantitative measurements. Scores are ranked from 1 to 5, 1 indicating lowest or least efficiency and 5 indicating highest or most efficiency, with 2, 3 and 4 indicating positions in between.

Figure No. (12-4) shows background factors to the internal planning of the universities.

1. External influences, particularly funding, have considerable impact. Other than central funding, there are no resources. Reduction of funds was felt after 1981 and created internal pressure on universities. Central government provides general information concerning its planning policies for higher education and this may be on time, but regulations are broad and difficult to implement. The university has difficulty translating and interpreting them accurately, especially as they are very complex. Many bodies exist with their own rules and regulations, e.g. Diwan of auditing, Ministry of Finance and Higher Education, and university policies. There is a long chain of command between the university and Ministry of Finance, hampering the bargaining process.

2. Major problems exist in the process of funding, reviewing university procedure, manpower, and efficiency of accounting and effectiveness as a whole. Rules and regulations demand that universities should maintain their operations within the limited funding provision of central government despite the expansion of student admissions. Universities have inherited an inadequate accounting system. They are trying to cope by freezing manpower recruitment to administration, reviewing their procedures, working longer hours, etc.

Figure No. (12-4)Universities at Work as Background to Planning

No.	Rate	University 1	University 2
1	1 2 3 4 5	4	4
2	"	5	5
3	"	1	1
4	"	3	3
5	"	3	3
6	"	1	1
	Total	17	17
	Mean*	2.8	2.8

Note: 1. There are twenty one questions in this part, arranged into six groups. Each group, then, ranks from 1 to 5. 1 indicating inefficient and 5 indicating efficient or highest, with 2, 3 and 4 indicating positions in between.

2. The Rate is a score point of observations found from the qualitative study.

* It is found that both universities have the same means because they follow the same planning procedure, rules and system of accounts.

3. It seems that one of the main deficiencies in planning is the lack of relationship between student numbers and the financial plan, so that the university accepts students over and above their target, yet there is no effect on university tuition fund, etc. Thus, there is no effective way of measuring staff - student ratios and student costs.

4. We have seen that the only channel of funds to universities is the Ministry of Finance. No mediating body influences fund collection between the approval of one plan and the issue of the next. The university must forward monthly trial balances and bank statements, together with evidence that they have not deviated from their budget without authorisation from the Ministry of Finance.

5. Variable funding levels have little effect on actual operations, as might be expected, though student class sizes may change. Universities have tried to review their methods in relation to manpower, but there is no effect on tenure because university staff are civil servants; moreover, increasing student numbers require that the number of academic staff is not reduced.

6. Universities have made no attempts to increase their income from other sources. Although universities have multiple objectives and complex goals, these are not related to funding. Nor is funding related to numbers of students, whether local or overseas, etc.

12.3.4 Planning, Resource Allocations and Accountability in Individual

Universities: This section of the question guide contained seven main questions. Score points were assigned from 1 - 5, 1 indicating 'first' or 'inefficient' and 5 indicating 'efficient' or 'highest', with 2, 3 and 4 indicating positions in between. Figure No. (12-5) shows the findings under the above heading.

Figure No. (12-5)Planning, Resource Allocations and Accountability in Individual Universities

No.	Rate	University 1	University 2
1	1 2 3 4 5	2	2
2	"	2	3
3	"	3	3
4	"	3	3
5	"	3	2
6	"	1	2
7	"	2	2
	Total	17	17
	Mean*	2.4	2.4

- Note: 1. There are seven main questions in this group. They are ranked from 1 to 5, 1 indicating 'first' and 'inefficient' and 5 indicating 'efficient' or 'highest' in the researcher's scale. 2, 3 and 4 indicate positions in between.
2. The Rate is a score point of observations found in the qualitative study.
- * It is found that both universities have the same mean because they follow the same planning procedures, rules and system of accounts.

1. It was found in a previous section that university objectives are defined by the Ministry of Higher Education and in official documents, yet there is no guidance on interpretation to relate them to the actual organizational structure of universities, so that they can be achieved by means of planning and resource allocation. It was also found that there is no tradition of long term financial planning. However, it is usual to compile a five-year plan for student admissions, academic manpower, equipment, spaces, etc. It was very difficult to deduce the effectiveness of these universities in achieving their objectives because of the lack of precision in specifying goals and monitoring expenditure, and the lack of relationship between the five-year academic plan and the annual financial plan.

2. The financial plan is annual and unlinked to long-term objectives, thus the resource allocation method depends largely on the achievement for the previous year and the first six months of the current year. Every academic department or college reports to the main financial committee set up yearly, but this does not strengthen the department's position. Firstly, the committee and external policy regulations have the main responsibility for the plan. Secondly, although the committee will consolidate the academic department's reports, there is insufficient contact between finance offices and academic departments, lack of monitoring, inadequate information, and the academic department are not kept informed of financial matters. The uniform accounting system code is inadequately applied, the accounts not being broken down to departmental level. Here lies one of the main problems of universities in defining and achieving performance indicators.

3. Resource allocation is considered in relation to the code of the uniform accounting system, rather than actual costs divisions or

departments, an important factor in setting performance indicators or cost centres. Inefficient and indiscriminate assignation of costs among various departments is the result. In addition, the committee mechanism is rudimentary, lacking coordination with academic departments. The committee receives requests, but there is no discussion or feedback process. It seems that problems of timing, of knowing the policies relevant to the current year, the formality of reports to committee, and above all the lack of any properly differentiated cost centre or cost-division objectives impede the allocation process. The council has inadequate discussion of the details of resource allocation because of central government policy which lays down the limit for funding in very general terms, while the council is usually composed of deans who lack knowledge of procedures and are oriented towards academic, rather than financial, matters. They are not trained in accounting and financial matters. In addition, the council believes that the financial committee, headed by the President and Vice-President, has enough knowledge of resources allocation criteria and procedures. Again, the absence of academic contribution is stressed.

In the matter of resource allocation for manpower, the uniform accounting system codes distinguish between academic and administrative staff. However, it is difficult to divide the academic staff accounts according to colleges and identify their costs separately. It seems that control over manpower allocation most affects the personnel department because they must not exceed the stipulated level of staffing, whether academic or administrative, or allow retirement of staff, except in accordance with the annual plan. The financial officer must not exceed the amount approved in the budget without informing the ministry and obtaining their authorisation. However, the usual practice is to follow the plan, spending as much as possible of the resources allocated, in order to justify a request for increased allocation in the following year.

The absence of measures of effectiveness and efficiency in the public sector also encourages this tendency to spend as much as is allowed in the plan, regardless of actual need.

4. In general, the university requirements for management information are not clearly defined. Nevertheless, input information concerning students and staff is of far better quality than that concerning output because input information on staff, for example, contains measurable personnel information on backgrounds, qualifications, etc., represented in individual files. The same is true of student input information. In contrast, financial information is usually of low quality, and arrives too late to be useful. There is a lack of forward communication and accounting practices focus on historical information. Again, the lack of clearly defined goals and objectives for universities is cited as a reason for lack of appropriate planning information. Moreover, absence of a clear forward planning process may create difficulty in determining the type of information actually needed.

It seems clear that academic departments have insufficient information on budgets because; firstly, the annual plan for the university is not divided into colleges in advance. Secondly, even after financial approval the plan is still not divided into colleges and departments. Thirdly, the university fiscal budget usually appears for approval late. Thus accounting information, potentially the most important factor in university and college efficiency, is inadequate.

5. The present committee structure for planning and allocation is not effective. There is a need for defined purposes, responsibilities and accountability throughout the year's plan. It is inefficient because it is too small, and lacks academic contribution.

Internally, council is not involved with the responsibilities of the financial planning committee. We have seen earlier that council is more concerned with other, non-financial activities. The university deans who make up much of the council might be more involved if the financial plan represented them individually and if they were held accountable in broad terms for the achievement of their individual colleges. Further, they could compete for allocation of resources and to bring funds into the universities by research consultancies, publications, etc.

It has been found that neither academic nor administration departments serve on the central committee for planning and resource allocation, so that the committee lacks accounting information and full understanding of the needs of academic departments. Thus any decision on resource allocation is based on inadequate information.

6. It was found that one of the main weaknesses of the budgetary control mechanism is that colleges and academic departments are not the main budgetary units and they have no clear responsibilities in accounting and financial matters. The responsibilities and accountabilities of departmental heads are not defined. Although there is scope to do so, universities have not taken steps to develop their accounting systems.

7. The accountability of colleges and academic departments for the use of resources extends only to following the financial policy and general rules governing petty cash and in the legal requirements relating to committees in charge of public money. It seems that colleges and academic departments gain no financial benefit from their many activities and services to society. It may be argued that consultancy, publication, adult education, conferences, etc., could be made sources of revenue.

12.4 SUMMARY

The research method used in this study was one of qualitative investigation. In relation to Iraq, in particular, information was taken from literature and documents, but mainly from the constructive question guide. Score points were ascribed to the responses received, graded from 1 to 5, 1 indicating the first, lowest or "inefficiency" and 5 indicating last, highest or "efficiency", with 2, 3 and 4 indicating positions in between.

The data from Figures (12-2), (12-3), (12-4) and (12-5) were then aggregated to give the composite figure (12-6), which shows the totals and means for each group of findings. Figure No. (12-6) shows that the mean totals from the universities are well below the optimum. This would suggest that universities should consider changing their administrative and financial procedures to improve their efficiency.

It may briefly be stated that Iraqi universities have been found to be inefficient in operation. A review is needed particularly of the following. 1. It has been found that universities are subject to the influence of many bodies via their funding and a variety of rules and regulations designed to monitor public money. Since joining the public sector, universities have been under pressure to operate with effectiveness and efficiency. 2. Internally, objectives and goals need to be simplified and interpreted in relation to practice. Goals and objectives need to be laid down sufficiently clearly to act as guides and controls. The hierarchy of governance is inefficient and in need of review, especially with regard to the participation of academic departments, planning procedure, and committee structure. 3. In general, the background to university operations shows that although they are influenced by many external bodies, the planning information they receive is inadequate to give universities clear guidelines. In addition the plan is not linked to student numbers,

Figure No. (12-6)*The Aggregate Figure

Characteristics	Total and Mean	University 1	University 2
External and Internal Objectives and Goal Efficiency	Total	32	32
	Mean	3.6	3.6
The Governance of Universities and Efficiency in the Use of their Resources	Total	11	14
	Mean	2.2	2.8
Universities Work as Background to Planning	Total	17	17
	Mean	2.8	2.8
Planning, Resource Allocation and Accountability in Individual Universities	Total	17	17
	Mean	2.4	2.4

Note: * The figure is accumulated from the totals and means given elsewhere in this chapter.

so that it is difficult for planners to achieve their objectives. Difficulties of funding and planning do not, however, affect manpower, except by limiting the increase of administration staff. Difficulties are exacerbated because universities do not have any methods of increasing their funds, relying solely on the government funds, which gives them little control over the planning process. 4. There is a lack of strategic financial planning within universities. This is related to the lack of clearly defined objectives for these must be interrelated with the financial plan. Resource allocation is inefficient especially at the lower levels of university organization. Other inadequacies in the mechanism include lack of participation, responsibility and coordination overall, and especially in relation to academic departments. Management information is also inefficient, often being too late to be useful, and not adequate to support decisions. The budgetary control mechanism is deficient according to the investigation; accountability is not clear in the accounting and financial process, especially at the level of colleges and academic departments. 5. A further difficulty is that there are no cost accounts for universities, which calls into question their accountability for public money.

The researcher reviewed corrective measures such as the application of PPBS to the public universities in Iraq (Chapter Eleven). The introduction of PPBS would involve both efficiency and effectiveness. Because PPBS is basically concerned with the achievement of specified objectives, it is necessary to have some way of monitoring such attainment. This, in turn, requires that they be specified in a measurable way and that the measurement process is followed through from the implementation procedure to the monitoring and control process.

Because PPBS emphasises effectiveness in this way, efficiency has a less important role, but it is still an important aspect of the control

process. Both internal and external auditing functions are far more concerned with efficiency than was once the case (Briston, R. 1986, p.16).

PART FOUR

THE COMPARISON BETWEEN THE CASE STUDIES OF THE UNITED KINGDOM AND IRAQ

This part will compare accounting and financial management in United Kingdom and Iraqi universities by reviewing the findings of the case studies. It consists of one chapter. CHAPTER THIRTEEN: United Kingdom and Iraqi Universities' Accounting, Resource Allocation, Planning and Efficiency.

Having discussed the universities of the two countries in respect of the areas outlined above, the chapter goes on to make recommendations and to assess the implications of these findings for future study.

CHAPTER THIRTEENUNITED KINGDOM AND IRAQI UNIVERSITIES'ACCOUNTING, RESOURCE ALLOCATION, PLANNING AND EFFICIENCYCONTENTS

- 13.1 INTRODUCTION
- 13.2 THE EXTERNAL INFLUENCES ON THE EFFICIENCY OF UNIVERSITIES' ADMINISTRATION
- 13.3 THE INTERNAL ADMINISTRATION OF UNIVERSITIES
- 13.4 THE GOVERNANCE OF UNIVERSITIES AND THEIR EFFICIENCY IN USING THEIR RESOURCES
- 13.5 A BRIEF INTRODUCTION TO UNIVERSITY FINANCE, METHODS OF COLLECTION OF FUNDS AND INTERNAL EFFICIENCY
 - 13.5.1 Funds collection system, potential internal changes and cuts of the United Kingdom
- 13.6 UNIVERSITIES' PLANNING, RESOURCE ALLOCATION AND ACCOUNTABILITY IN PRACTICE
 - 13.6.1 Strategic and long term planning
 - 13.6.2 Resource allocation criteria
 - 13.6.3 Resource allocation procedures
 - 13.6.4 Management information system
 - 13.6.5 Responsibility of the resource allocation process
 - 13.6.6 The universities' budgetary control
 - 13.6.7 Accountability in resource allocation
- 13.7 ACADEMIC DEPARTMENTS AND HOW THEY MANAGE THEIR RESOURCES
- 13.8 EVALUATION OF EFFICIENCY IN UNIVERSITIES' PLANNING
- 13.9 BRIEF FINDING OF THE CHAPTER
- 13.10 THE LESSONS TO BE LEARNED FROM UK AND IRAQI UNIVERSITIES
 - 13.10.1 The brief lessons from UK universities
 - 13.10.2 University cost and responsibility centres
 - 13.10.3 University accounting and the school system
 - 13.10.4 The brief lessons from Iraqi universities
 - 13.10.5 Iraqi universities and the application of PPBS
 - 13.10.6 Universities' inventories and stores
- 13.11 WHAT THE UK AND IRAQ LEARN FROM EACH OTHER
- 13.12 IMPLICATIONS AND SCOPE FOR FURTHER STUDY

CHAPTER THIRTEENUNITED KINGDOM AND IRAQI UNIVERSITIES'ACCOUNTING, RESOURCE ALLOCATION, PLANNING AND EFFICIENCY*13.1 INTRODUCTION

This research investigates the efficiency of accounting and financial management in United Kingdom and Iraqi universities. It concentrates on a comparison between university administration, accounting and financial efficiency in the United Kingdom and Iraq in order to discover whether there are similarities and differences between the two systems and in the levels of efficiency in university accounting and finance. Therefore, the chapter will be divided broadly into two main parts; United Kingdom and Iraqi universities' administrative efficiency and United Kingdom and Iraqi accounting and financial efficiency.

Chapters six, seven, ten and eleven are the focus for the main purposes of the study as follows:

First: To investigate the effect of central government and the decision-making hierarchy on the efficiency of the universities in accounting and financial management.

Second: To examine the universities' system of governance and to recommend the changes needed for efficient planning and allocation of resources.

Third: To determine whether or not the university management structures and systems are effective in decision-making, use of resources, policy objectives and accountability.

Fourth: To investigate planning, the allocation of resources and the monitoring of funds and to improve their efficiency in relation to the

* Sections 13.1 to 13.9 have been synthesized and condensed from the previous chapters. References and sources are, therefore, omitted in these sections and the reader is directed towards the relevant chapters.

quality of management information, responsibilities of the allocation process, budgetary control mechanisms and the process of accountability.

13.2 THE EXTERNAL INFLUENCES ON THE EFFICIENCY OF UNIVERSITIES'

ADMINISTRATION

It was found that the universities of both the United Kingdom and Iraq have considerable interaction with their respective governments for funding. In Britain, the degree of interaction between government, the University Grants Committee (UGC) and the Committee of Vice-Chancellors and Principals (CVCP), tended to be more systematic, though universities are more generally conscious of their responsibilities and have greater autonomy.

In Iraq, interaction with the government is stronger and more direct because of the government's direct interest in national affairs and because of the centralised conduct of the economy. Universities are therefore subject to the requirements of a number of different ministries which affect planning and finance. There is no intermediate organisational structure between the central government and universities except the permanent annual committee formed to prepare the financial plan.

It could be said in summary that: 1) in general, in both countries, universities are part of the public sector, and influenced financially by central government as shown in both case studies. 2) Funds in UK universities are applied by, or derived from, intermediaries like the UGC, local authority grants, overseas' student fees, or university contracts and consultancy funds, and controlled by the CVCP. Their organisations have developed over a lengthy period, more noticeably in the 1980s. 3) In Iraq, there are no intermediary bodies, funds being provided only by central government. However, at the time of the preparation of the

budget representatives of universities meet in the Ministry of Higher Education in order to discuss it. Further committees meet when the Ministry of Finance discusses the annual budget.

UK universities have greater experience of estimating the quinquennial budget submitted to the UGC, which then makes recommendations to the government through the office of the Secretary of State for Education and Science. However, although recurrent expenditure is agreed for five years at a time, it is paid annually. It was found that no long term financial plans exist, though there are long term plans for curriculum development and academic and administrative staffing.

The adoption of the five year plan in Iraq is still relatively new, dating from 1974, and does not cover financial matters. Failure to link financial planning with admissions policies has been a serious weakness of the system. Nevertheless, universities could draw up for their own benefit financial long-term plans, even though the Iraqi central government spends variable yearly amounts on education. However, financial indicators show a gradual increase in university spending in Iraq.

Universities have faced financial change in the last twenty years, the universities of the United Kingdom and Iraq facing similar situations of variability of funds. A crisis was reached in Britain in July 1981 when major cuts were imposed on the universities' recurrent grant and, even though it was spread over three years, the strain was so severe as to raise doubts of the survival of some universities.

The most dramatic change in Iraqi universities occurred in 1970 when universities became part of the public sector. Accordingly, the resources of the universities came solely from the central government giving them little flexibility. However, the change has unified university administration: academic and administrative departments are similar

in all universities.

After 1970, Iraq nationalized the oil fields, bringing about financial development which became very important to universities in expanding their expenditure, while in the 1980s universities have tried to look towards better usage of funds and expenses.

It was found that both United Kingdom and Iraqi universities are administratively and financially inefficient in the use of their resources. Literature and empirical investigation revealed inefficiencies in UK universities' administrative and financial dealings with central government, the University Grants Committee (UGC) and the Committee of Vice-Chancellors and Principals (CVCP).

In brief, it seems that these bodies have problems of highly bureaucratic structure and lengthy routines, and it could be said that they have lost their objectives and goals, which need to be studied and investigated in depth. Accordingly, it is recommended that there should be increased attention to the need for performance indicators in and between United Kingdom universities. It would seem that the UGC is not, as yet, using performance indicators as its main basis for allocation of resources, nor are most universities.

In Iraq, external administration and financial relations are dependent on the laws of higher education of 1970 and 1983, though these laws are not formulated in enough detail to be of use administratively. Literature has made little inquiry into the administrative and financial relations between the universities and the Ministries of Higher Education, Finance, Planning and the Diwan of Financial Control, but the little research done so far has shown that these relations are inefficient, and that much more empirical research is needed to develop an efficient relationship.

In practical terms, administration of resource allocation seems to be inadequate. The committee formed in the Ministry of Higher Education, whose members are from the universities and Ministries of Higher Education is all that decides allocation of resources. In the same way, in the meeting at the Ministry of Finance there is insufficient discussion of the annual financial plan of universities and there is no adequate analysis of the previous year's finance and no forecasting for the universities. The Ministry of Higher Education has a financial aggregation department which should control and analyse the financial reports of universities, but the information received is often inadequate, and the recipients are inefficient in analysing it because of inadequate training and shortages of accountancy staff (each of whom is in charge of more than one university), lack of understanding of the department's requirements, the primitive method of analysis of the aggregated figures and late filing of universities' reports.

Accounting reporting and procedures in both the United Kingdom and Iraq are different and, as an example, Alhashim, D. 1982, p.7 stated that:

Accounting practices in socialist countries differ from those in free-enterprise countries, primarily because of the differences in political, social, cultural and economic factors. The main objective of accounting in these countries is to facilitate national planning and control. Thereby explaining the tendency in these countries toward accounting uniformity, because it is almost impossible for a central government to separate the sector of the economy which is lagging in efficiency and productivity without comparable accounting information. The Egyptian Uniform Accounting Law of 1966 is an example of the uniformity regulation typical in these countries and it is based on this uniform system of accounts. Financial and social accounting are coordinated in order to facilitate the preparation of the Gross National Product and other statistical data used to analyse and control the economy.

(Alhashim, D. 1982, p.7)

However, in Iraq, due to lack of experienced staff, the low level of academic participation, and communication problems, the existing accounting and reporting procedures between the universities and government are inadequate for achieving the desired results.

13.3 THE INTERNAL ADMINISTRATION OF UNIVERSITIES

The goals and objectives of UK and Iraqi universities are multiple. This research shows that United Kingdom and Iraqi universities are complex institutions and that the output of a university is difficult to measure. Quantification of the value to society or to the individual, of undergraduate and postgraduate study, is virtually impossible. Nor can output be adequately measured.

It does seem that western literature has failed to analyse university goals in relation to approaches such as profit maximization and other measures currently being used in the economic field.

Iraqi universities fulfil multiple objectives according to the laws of the Ministry of Higher Education. They are required to contribute to the training of both public and private sectors, by holding seminars, continuing education, showing the benefit of research to the private and public sector.

Both the United Kingdom and Iraq are short of empirical analysis on the financial administration of universities, on academic staff efficiency, time, research, the efficient use of land and buildings, equipment, books, financial and accounting affairs and the efficiency of the organization as a whole.

There are a number of features which complicate the managerial, administrative and financial accounting processes and the efficiency of universities as a whole. These are: 1) range of academic activity;

2) professional loyalties; 3) participation and the tenure issue.

The wide range of activities in both countries' universities is reflected in the number of departments. For example Edinburgh University has a total of 120 departments. This has a profound effect on administrative efficiency in terms of time, committees, routines and so on, and it was recommended that the University of Edinburgh should merge certain departments. The number of Iraqi university departments is a great deal less than 120.

On the question of professional loyalties, between a third and a half of the total staff employed in the United Kingdom universities are professionals in many diverse fields and this tends to make the direction of the institution towards a common purpose and objective more difficult.

The situation in Iraq is rather different. The university staff and faculty are considered state employees and their salaries, promotions, allowances and retirement pensions are regulated by the civil service code of the university. Although staff may work a stipulated number of hours for a basic salary, devoting time to professional interests also, the majority, if they do professional work by outside demand, do so with the approval of the university. Such work brings no financial advantage, either to the university, or to the individual. Also, the universities in Iraq are unable to engage adequately in certain activities because of the shortage of some specialists, e.g. accounting and auditing (Chapter 10.3.2).

The tenure issue and staff loyalty are among the most important aspects of the efficiency of universities. In the United Kingdom tenure of academic staff seems to fall into three categories:

1. Universities where academic staff have a complete and watertight tenure.

2. Universities where the security of tenure is subject to the legal interpretation of charters, statutes or conditions of service.
3. Universities where there is no apparent security of tenure for academic staff.

Accordingly, 37% of academics are leaving their posts and moving out of higher education to commerce and industry, with some of the United Kingdom's best scientists moving overseas. To these problems, financial cuts in universities are added and the annual rate of retirement is 1% whilst wastage for other reasons is about 3%.

Of university expenses, about 72% is attributable to salaries and wages, though this varies slightly between universities. Similarly, the highest expense of universities in Iraq is salaries and wages.

It has been found that participation and tenure in Iraqi universities are governed by academic law, civil service law and labour law. The civil service laws evolved from the Ottoman administration and have retained, despite the passage of time, some of its shortcomings, particularly in the rigidly defined salary scale (Chapter 10.3.2.3). Universities are governed by these laws, but are differentiated from other public sectors in Iraq by "the law of education service" which applies to the academic staff of universities. This law was established in 1970 in order to govern academic staff from their appointment to retirement, and it tried to eliminate the dilemma of an inadequate salary scale by relating salary to the increasing number of students, broadening curriculum, etc. The new scale of academic salaries has many advantages, such as recognized payments, promotions and unification of the differences in salaries among Iraq universities.

13.4 THE GOVERNANCE OF UNIVERSITIES AND THEIR EFFICIENCY IN USING THEIR RESOURCES

The governance of a university affects its efficiency in the use of its resources and hence its general effectiveness. The higher ranks in the governing hierarchy of the universities are similar in Iraq to those of the UK; the Council, Vice-Chancellor (in Iraq President), deans and heads of academic and administrative departments. However, the Iraqi university hierarchy is more simple than the complex governance of a university in the United Kingdom.

In theory, the Council, in both countries, is the most important central body of a university, though evidence suggests a wide variation in their effectiveness in fulfilling this role. This is especially true in the key activity of strategic planning.

The findings show that the Council of a UK university is an extremely large body with as many as 233 members in total in 1984/85. This large number is a reflection of the original sources of funding and support. Nevertheless, the investigation suggested that local authority representation could be reduced to make way for more appropriate skills and experience drawn from local, regional and national sources, especially in the form of lay (non-university) members. In addition, senates in most of the universities were large bodies consisting in some cases of upwards of two hundred members, but powers are delegated to Faculty Boards, departments and committees. Delegated work includes the admission of students, organization of teaching and examination arrangements, although any matter involving extra funds must be referred to the Councils. In brief, this study and the Reports of University College, London, and Edinburgh University identified a number of strategies which would help universities increase their effectiveness and efficiency in Council and Senate.

The main recommendations are the following:

First: Council and Senate should have less involvement with the detailed allocation of resources in universities. In fact, University College London's Council and Senate at present seem to have no involvement with resource allocation or the productivity of the university.

Second: In general, it seems that the Council and Senate should have a broad interest in the overall strategy and effectiveness of the university, while the lower hierarchy level should be more involved in the allocation of resources and productivity.

In UK universities the exercise of the powers of Councils and Senates is carried out through an elaborate system of committees. Typically, a university could have between fifty and one hundred such committees reporting to Senate or Council. For instance, University College, London in its 1984/85 schedule of committees listed seventy-four standing committees and major sub-committees under the auspices either of Council or of the Academic Board. The Report of Edinburgh University 1985 shows that there were sixty-four standing committees reporting to Senate and Court. Previous chapters have reviewed a number of the significant features of their procedure and the committees' efficiency in managing university affairs. In general, it may be said that, though the large number of committees makes for the involvement of many people, and thus for comprehensive discussion, the system is cumbersome and there is scope for streamlining it in order to improve efficiency.

In contrast, the findings show that Iraqi university Councils are very small compared with those in the UK. They consist of members of colleges, deans, a few representatives from outside bodies and a student representative. None of these members provides funds to the university. Usually, the Council delegates its authority to the President, thus he

is the key figure in the university and the main link with the outside environment. The President of the university and his Council bear the main responsibility for the effectiveness and efficiency of the university.

The Iraqi law of higher education has rigidly defined the universities' financial and administrative powers and responsibilities and it has also given much importance in vital matters to the Council as it did to the Administrator of the university. However, traditionally the annual financial plan is drawn according to the resolution and legal requirements of the Ministry of Finance (Chapter 10.4). Therefore, in comparison to the United Kingdom, administrative involvement in resource allocation is reduced, with fewer members and less comprehensive discussion at the strategic planning level.

It has been found that the role of the Vice-Chancellor in United Kingdom universities influences the efficiency of the university and the way in which it manages its resources. He is the chief academic and administrative figure in the university. Thus he has a very important dual role, dealing with internal affairs and the outside environment. He relies on qualities of leadership or persuasion to influence efficiency in the use of resources and university effectiveness. Accordingly the Report of the Steering Committee (1985) made a number of recommendations regarding his role, a few of these being that he should be recognized as the academic leadership, adopting a clear role with the accompanying authority to carry it out, he should be known by other organizations, e.g. in industry and commerce, who may be sources of alternative funding, and his appointment should continue to be from the senior academic faculty, who should all be given the chance to improve their managerial skills, with training from outside bodies.

In Iraqi universities, the role of the President is comparable with that of the UK university's Vice Chancellor, particularly over financial matters and the allocation of resources. Nevertheless, as the Head of the Council of the university he may have more relation to and be more influential in the public sector. Thus he may have more effect on funds collected from outside because his is the key position in the university hierarchy, whereas in the UK, the Vice-Chancellor's role is subservient to those of the Court and Senate.

It was found that Pro Vice-Chancellors vary in number from one university to another, but usually in the UK there are three to four Pro Vice-Chancellors connected with Vice Chancellors and they serve for a period of three years. They are usually senior professors, but are not line managers as their role is subject to the Vice-Chancellor. They head/sit on the major committees, notably the Academic Board Executive Committee, which meets regularly and influences the informal process of policy development; and the Planning and Building Committee, so they have influence on the allocation of resources and the finance of the university. It can be assumed that this position is equivalent to that of Assistant to the President in Iraqi universities, so there is a similarity between these roles and their relationship towards resource allocation in both countries. There are two Assistants to the President in Iraqi universities; the Assistant to the President for academic affairs, and the Assistant to the President for administrative affairs. The latter is involved in financial and accounting matters and he or the President heads the committee for the budget estimates. Operationally he has greater authority in spending approval and long term planning of manpower than does the head of finance. It seems that he could play an effective role in university financial policy if he has the right financial and administrative background and is sufficiently interested in university efficiency, because

he is largely involved with internal affairs of the university and he is in administrative and financial charge of the university.

Nevertheless, there is a difference in that he is appointed for an unlimited period. He is a line executive reporting to the President and Council, and each Assistant is a specialist with clear responsibility for academic or administrative affairs.

The Dean - as a head of a board of study - is another figure in the governing hierarchy of universities of the United Kingdom. He is elected or appointed for a period of two to three years, besides which he acts as an academic leader at faculty level. Deans play dual roles; it was found that they are budget holders with a degree of authority delegated to them. This dual role creates differing opinions as to whether they should be heavily involved in central university policy formation. However, they have some executive responsibility in budgetary control and resource allocation and they need to operate within a management system appropriate for heads of academic departments.

Heads of academic departments in UK universities hold a vital position and play a crucial role in the allocation of resources. They are a key element for efficient management and have an important role in the overall management of the university. Heads of academic departments are usually appointed by the Council but in some instances they are elected from within the department. They are often responsible for the administration of large sums of money, effective teaching, use of expensive equipment and personnel management. Departments are basic budget units, with the heads of department often being the budget holders, though the Report of the Steering Committee has made many proposals on efficiency of the United Kingdom universities, some of which relate to heads of department, as discussed in detail in Chapter Six.

Responsibility for university administration in the UK is divided mainly between the Registrar and Bursar. The number of tasks undertaken by the central administration in universities includes: servicing the committee system and governing bodies, academic administration including course regulations; student records; awards and welfare services; supporting the strategic planning process; financial administration; personnel work and property maintenance. The Steering Committee felt that university administrations served their universities well. Nevertheless, since the 1981 cuts the administration has suffered increasing staff cuts whilst their workload has increased considerably. In addition, it was found that university administration in the United Kingdom does not always have a clearly defined budget for which it is accountable and it was recommended that they should be treated as all other academic departments, having the same disciplines applied to them with respect to costs, manpower budget and performance indicators.

The previous chapters on Iraqi university administration show a similar decision-making hierarchy - President, two Assistants, and Administration Department. Administration departments are similar in set-up in all the universities in Iraq and they are described in documents called the 'Universities' Authorities' or the 'Goals and Specifics of University Departments' which are held in each university. Administration departments in universities serve the academic departments and do not have separate budgets for which they are accountable, so in this respect the position in Iraq is similar to that in the UK.

In the administration of Iraqi universities, it was found that deans of colleges are different from those of the United Kingdom. In Iraq, the dean is appointed by government ordinance because of the rigidity of the laws of higher education. Nevertheless, the biggest difference is that deans of colleges in centralized administrations, as in the case

of Al Mustansiriya and Technology Universities, have limited decision-making power in the finance of colleges within their authority and they also provide the necessary accounting information to the Assistant of the President, the Councils and external bodies for their decisions in the form of annual reports on the allocation of resources and other items as requested.

Accordingly, deans of colleges must follow the rules and regulations of the government for expenses and the petty cash is the only regular source of money during the year for other expenses. Deans of colleges do not have an internal budget and they are not expected to exceed their petty cash during the year, nor do they have any real influence on the strategic planning of the university budget.

United Kingdom deans have a greater effect on finance, resource allocation and financial efficiency than those of Iraqi colleges, as shown in Figures 6-6 and 10-9 respectively.

Heads of department in Iraqi universities also have a limited decision-making power, and are responsible for the provision of certain information. However their effectiveness in these areas is weakened by lack of financial and management skills, and poor cooperation between themselves and the finance department.

Comparing the governance of UK and Iraqi universities and their effectiveness and efficiency, a number of general points may be made: First: As an application of the Iraqi socialist concept, the universities have a rigid system of governance and similar rules are applied to all universities. However, in view of the deficiencies discovered in administrative and financial operations, there is scope for further investigation.

Second: Regarding the governance of UK universities, a review is required of the top level of strategic planning and especially of the bureaucracy of Court, Council, Senate and membership of committees of universities.

Third: Manpower - academic, administrative and service staff - is the greatest component in university expenditure and has a great effect on the performance of university finance and administration.

Fourth: The findings show that governance of universities, in both the United Kingdom and Iraq have similar problems of inefficiency, whether the universities operate within a capitalist or a socialist framework.

Fifth: It seems that in both countries the top level of the administrative hierarchy is concerned with university effectiveness. Accordingly, Vice-Chancellors and Presidents in both countries play the same role in over-seeing university effectiveness and efficiency.

The difference in the system of resource allocation is that in UK universities it is dealt with by the heads of academic departments, while in Iraq, resource allocation is controlled by the administration department of the Universities (Figures Nos. 6-6 and 10-9). Many criticisms and recommendations have been made in relation to these points, which will be summarised later in this chapter.

13.5 A BRIEF INTRODUCTION TO UNIVERSITY FINANCE, METHODS OF COLLECTION OF FUNDS AND INTERNAL EFFICIENCY

This part is concerned with the comparison of financial planning, the allocation of resources and monitoring of funds in UK and Iraqi universities, and how to improve their efficiency in long-term planning, resource allocation, quality of management information, responsibilities for the allocation process, budgetary control and the process of accountability.

Study of UK and Iraqi universities revealed that the financial affairs of universities are subject to many influences, the foremost being the source of funds. It was found that the primary source in both countries is the central government. However, the United Kingdom has additional funds from local authorities, overseas students, research and consultancy. Thus, UK universities are multi-funded, whereas Iraqi universities are not. Nevertheless in the United Kingdom the central government trend has been to cut funds since 1980, which has caused a deficiency of funds and a need to make the best and most efficient use of resources.

The university financial year begins in August, but the levels of grant are given to the UGC in January and passed by them to the universities in February or March for the next financial year. They are not totally reliable and the White Paper gives only a broad indicator of forthcoming funding. As discussed in the fourth and sixth chapters, first year students apply to UCCA about a year before entry using prospectuses compiled six months previously. The universities, therefore, are required to look beyond the government expenditure horizon. The relationship between government annual expenditure and universities' annual operation is confused and unresponsive to changing needs.

Since 1970, the central government of Iraq has endeavoured to provide yearly guidance on the financial budget for the next year, which gives information on increased estimated expenditure or saving.

UK universities face further uncertainty in forward planning caused by any financial changes, e.g. the decision by the Chancellor of the Exchequer to reduce the cash limits for the financial year 1983/84 at short notice in the late summer of 1983 resulting in a cut in the income of universities for the year 1982/83 by £23 million within two months of

the end of that year (Chapter 6.5). This uncertainty goes back to the first initiative of the government to cut university finances in 1980. Since 1981 the UGC has received much clearer indications from ministers as to how resources should be allocated and how the universities should perform. In particular, there has been pressure to develop such fields as biotechnology and information technology; thus the government has started to shape the development of universities more positively than hitherto. This is likely to continue even though funding is not keeping pace with rising costs. A similar situation applied in Iraq in 1980. Universities faced further cuts of their financial budget and the situation continues because of the conflict between Iraq and Iran.

Two major sources of university income in the UK are the UGC recurrent grant and tuition fees, which together make up the base fund supporting not only teaching, but also the research activity of academic staff and the laboratory facilities representing the UGC contribution to a dual support system for research. Although not ear-marked for specific purposes this money is often accompanied by UGC advice which is usually followed by the universities. Besides these major sources, there are overseas fees for tuition in UK universities, which increase year by year. Nevertheless, overseas student numbers vary between universities and from year to year. A typical university receives 64% of its funds from the UGC and 13% from tuition fees, the rest from overseas and other minor sources.

The Iraqi university resource allocation and accounting system operates in yearly periods (1st January - 31st December) and the fiscal year of the university is different from that of the United Kingdom. The financial year does not operate over the same period as the academic year which starts in early September and ends in June as discussed in chapter eight. The two different cycles, the financial and academic

make it difficult for analysts, researchers, accountants and accounting systems to measure accurately the costs of education in the university - student costs, course costs, etc. In addition the introduction of the Uniform Accounting Systems, side-by-side with the government and commercial system (chapter nine) coupled with the introduction, but not yet full application, of managerial and cost accounting, has caused problems for efficiency.

In UK universities, the financial and academic cycles coincide which makes it easier for the analyst, researcher or accountant to follow. It is, therefore, much better than the Iraqi financial and academic cycles. It was found that universities in both countries have suffered financial cuts by central government. Thus, whatever the government reasons for the cuts, the universities have to find means to improve their efficiency.

13.5.1 Funds Collection System, Potential Internal Changes and Cuts of the United Kingdom: In the United Kingdom, fees are claimed by the universities from individual local education authorities (LEAs) as total amounts for all students from each particular authority, soon after registration at the beginning of each academic year. Nevertheless, payment is sometimes considerably delayed. For example, the Report on University College London highlights the late payment of fees to universities by the LEAs and the effect upon cash flow (see for example Figure 7-9). It has been found that, generally, the system of fee collection used in the United Kingdom is inefficient as it uses two distinct routes to channel funds from the same source to universities.

Universities have been advised to expect proposals for cutting spending on "consumables", laboratory chemicals, equipment and other services. The difficulties arise from the way the central government

intends to divide the science budget between universities and research councils (Figure 7-10). Nevertheless, the funds are distributed between universities and other institutions and are the major source of income for pure research. Additionally, each council shows a steady increase but this does not reflect the implications for future trends in research in which proportionately more money is being spent on service and advanced institutions rather than on particular scientists (Times, March 15, 1984, p.2). Alternative sources of research funding are government department contracts, commercial and industrial contracts and grants from charitable foundations.

Less significantly, some universities with "responsible body status" receive other government funding, e.g. direct DES funding, for extra-mural teaching. The sums are minimal and in the universities concerned amounted to no more than $\pounds 5\frac{1}{2}$ million in 1982/83.

Iraqi university funds come directly from the Ministry of Finance. Collection of the funds depends on university reports: trial balances, bank statements and requests for monthly funds. It was found that Al Mustansiriya and Technology Universities experience no delay in the regular receipt of these funds. Each university must keep within its approved annual estimated budget.

The collection of funds by the university, whether in the United Kingdom or Iraq, depends on the source of those funds. In the case of the United Kingdom it seems that the multiplicity of sources in itself causes difficulties in actually gaining the funds. However, as Iraq has only one source, the government, it seems easier to collect the funds than in a multi-resource situation. As far as the collection of funds from government is concerned, it seems that in both countries organized formal procedures and rules are applied.

In 1981, government funding cuts caused problems to Vice Chancellors and their management teams, for Councils and Senates and for the individual university communities. Universities accustomed to achieving most of their expectations found themselves facing resource limitation, and the difficulty of establishing academic priorities; for the first time in years their financial and academic priorities were potentially in conflict. The funding was reduced across departments pro-rata to their existing expenditure and retiring staff were not replaced, so saving on stipends, but this gave no selective protection to subject areas and resulted in deterioration generally in the effectiveness of resource utilization.

Nevertheless, it was generally believed that financial exigency was not grounds for compulsory redundancy of academic staff. Therefore, universities' governing bodies - and the government - adopted programmes of voluntary redundancy and early retirement to reduce their staff. Major splits between Senates and Councils were avoided whilst the necessary expenditure reductions were achieved by existing management processes.

In the last two decades the universities of the United Kingdom and Iraq have faced changes and cuts of financial funding. Therefore, central government cannot ignore its involvement in the deficiencies in internal administration in the universities of both countries.

13.6 UNIVERSITIES' PLANNING, RESOURCE ALLOCATION AND ACCOUNTABILITY IN PRACTICE

In this area was found the greatest scope for improvement in universities in the United Kingdom and Iraq. In the United Kingdom the competitive feeling between university departments towards their planning and use of resources in practice creates the greatest opportunity to improve efficiency and effectiveness. Seven questions were posed as a

framework for this research, which investigated empirically and reviewed in relevant literature the universities of the United Kingdom and Iraq.

The questions were as follows:

1. How much strategic and long term planning takes place in universities?
2. On what criteria are resources allocated?
3. By what mechanisms are resources allocated?
4. What is the quality and extent of management information?
5. Who, below Council, is responsible for the allocation process?
6. What is the budgetary control mechanism?
7. What is the process of accountability?

13.6.1 Strategic and Long Term Planning: The findings of the empirical investigation, the review of books and articles, the Report of the Steering Committee and the Reports of Edinburgh and University College, London, all show that objectives and goals in the universities are defined only in very broad terms, usually as general statements such as an intent to maintain and improve the quality of teaching and research in all subjects established in the universities. It has been argued that university objectives are not only ambiguous but are destined to remain so since both academic faculty and administration staff feel this to be beneficial. Long-term planning, as opposed to medium-term planning, is largely ignored but should not be. The strategic planning which does take place is a mixture of 'top down' proposals in an effort to give academic leadership and 'bottom up' proposals to coordinate departmental plans and to adopt uncritically the results. The Steering Committee Reports do not show clearly whether universities in the UK successfully apply planning, programming and budgeting systems (PPBS) and research is needed in this field. United Kingdom university planning and budgeting is ripe for improvement and investigation needs to be made of the role PPBS might play.

The findings regarding universities' strategic and long-term planning in Iraq are similar to those for UK universities. Again, in brief, objectives and goals in Iraqi universities are only defined in very broad and ambiguous terms.

Although there is a long term plan (quinquennial plan) for curriculum, students, manpower, etc., in Iraqi universities, this is largely unrelated to the financial plan. It seems that this lack of attention to long term financial plans arises because the method is still relatively new, being first applied by universities in the financial plan of 1974. The universities do not review the plan to discover deviations between the plan and actual execution of non-financial planning. In addition, Iraqi universities are totally funded by central government, and, because central government changes the rules and regulations governing financial affairs, universities face difficulties in drawing up long term plans. Nor should it be forgotten that internal departments in universities face the difficulties of applying multiple accounting systems (government accounting system, uniform accounting system and commercial system, as discussed in chapter nine). Thus, further research and perhaps the application of an efficient planning, programming and budgeting system (PPBS) is needed in both UK and Iraqi universities.

In summary, the following similarities have been found in this research between UK and Iraqi universities.

1. Both UK and Iraqi universities define their goals and objectives broadly.
2. Both UK and Iraqi universities pay little attention to long term financial planning.
3. Universities in the UK and Iraq are behind in the application and development of a number of methods and approaches which may help the development of strategic planning in the long term.

4. From this research, it is recommended that both UK and Iraqi universities pay further attention to the development and application of planning, programming and budgeting system (PPBS), cost benefit analysis (CBA), etc.

13.6.2 Resource Allocation Criteria: In discussing the findings from universities in the UK and Iraq regarding the criteria on which resources are allocated, it was found that there is little relationship between universities' long term objectives and the allocation of resources, especially when the central government and University Grants Committee offer short term planning horizons and universities have virtually no strategic planning, as discussed in the previous section.

In practice the division of resources and manpower between academic and non-academic departments appears to be historically based.

Although UK and Iraqi universities are similar in their attitude towards strategic and long term planning, it was found that there are differences between the UK and Iraq in respect of "Universities' Resources Allocation Criteria", such as the use of many methods of resource allocation and different procedures for approving the allocation of resources. Also the United Kingdom accounting system is more advanced than that in Iraq, is computerised and, unlike Iraq, has only one system of measurement of allocation of resources and one way of presenting accounting and management information.

Nevertheless, it was found that both the United Kingdom and Iraqi universities are using the historical basis in the annual financial and manpower estimates.

Some findings specific to Iraqi administrative and finance officers are that they need more training courses, and the original curriculum could be developed and made relevant to the Iraqi environment in order to

make available to the universities more knowledgeable administrators and finance officers, with wider experience.

13.6.3 Resource Allocation Procedures: In UK universities "the committees of resources" are answerable to the Courts of the universities for financial affairs and represent a stage in the preparation of the comprehensive budget. To commence the process the university assesses the income available to it, particularly from the University Grants Committee (UGC), which normally provides, in respect of the following fiscal year (August 1 to July 31), a provisional indication of funding in October (Chapter 6.6.3 and Chapter 5).

Likewise, the Iraqi resources committees are responsible to the Iraqi universities' Council, which is equivalent to the Court of a UK university. Nevertheless, the differences are (1) that the UK universities' fiscal year coincides with the academic year, while in Iraq funds are given at the beginning of the central government's financial year (January 1st - December 31st) which does not coincide with the academic year. (2) That in the UK universities there is a long chain of intermediaries, such as the UGC which extend the process, whilst the Iraqi universities are not subject to such a long chain of bureaucracy.

A similar situation was found in government funding which is accompanied by rigid rules and regulations, in both the United Kingdom and Iraq. However, it is suggested that for major resource allocation universities should deal direct with central government, rather than through intermediaries as at present, as this would ensure coordination, re-deployment and achievement of goals. Nevertheless, heads of academic departments in the United Kingdom do have more control, compared to Iraq and it is suggested that they be given more flexibility in the operation of their accounts

within agreed set rules. In Iraq this question does not apply, for academic departments do not have control over university financial affairs. The Iraqi case studies suggested that universities should have more power over their financial affairs, involving the academic departments in discussing and dividing the resources over the academic and administration departments and giving them accountability for their operation which they do not currently have.

Similarities appear in coordination of resource allocation, which relies too heavily on the Vice Chancellor and senior administrative officers and the informal and uncertain device of committee cross-membership in the United Kingdom and on the equivalent level of President and Assistant President in Iraqi universities (Chapter 6, figure 6-6 and Chapter 10, figure 10-9).

There are weaknesses in the mechanisms for coordination of the separate revenues and cross-membership of committees is not an efficient way of overcoming deficiencies in the formal system, as it relies on members carrying all relevant considerations with them from one committee to the next. Nevertheless, the research suggests that the effectiveness and efficiency of the allocation process could be improved by combining the function of a number of key committees and formalising the links between three committees, Resources, Education and Policy, and the committee on non-academic expenditure, as shown in Chapter 7.6.3 and figure 7-12. This system would have the advantage of combining the allocation process for capital and operating expenditure and thus ensuring a more coordinated approach.

It was found that the internal process of the estimated financial plan in Iraqi universities is an inadequate and inefficient mechanism as discussed in section 12.5.1 because the finance committee lacks an academic contribution and there is a lack of control and accountability.

Thus, the research recommends an effective mechanism for the preparation of the university financial plan as shown in figure No. 11-3, as a step in the right direction, and as a further step the academic departments should contribute more towards the financial plan, with a more equal division at departmental level.

The deficiency goes further, for the Committee of Finance and Resource Allocation holds the sole responsibility for measuring the financial plan without the full contribution of the academic department and college. This is not helped when the rules and regulations are inflexible and are so general as to make explicit interpretation difficult. Furthermore, the auditing departments are short of staff, especially professionals. However, the problem is not just the shortage by itself, but also the quality of those requiring development training, which in turn affects the quality of information and the time-scale within which it is presented for financial decision-making from year to year.

Generally, it was found that another deficiency in accounting and finance is the lack of understanding of the importance of accounting and financial general knowledge and this may be true of the public sectors as a whole.

13.6.4 Management Information System: An investigation of the quality and extent of management information was made, in view of the fact that management information is believed to be the key to both economic efficiency and the political rationality of a university (Chapter 7.6.4). The Steering Committee considered management information to be an important variable to be studied in order to examine the efficiency of universities in the United Kingdom because it was found that the production of accounting and financial information within the universities was extremely fragmented.

Accounting and financial information provided to department managers varied in quality and often arrived too late to be of use; it did not show forward commitments which are especially important to science departments. In addition, measurements of output were less developed than measurements of input.

Abundant information was collected but mainly for the use of administration, not management, and was received without effective analysis, although the data collected relating to students and staff was normally of good quality.

It was suggested that far more must be done to measure the university's output; the value and quality of research, publication, the number and quality of graduates and their subsequent employability. Comparisons of departmental performance over time are among the most useful indicators but although they may lead to important questions being asked they should be handled with great care.

As in the United Kingdom, it was found that in Iraq management and accounting systems are indeed a key element in planning and making decisions. In addition, there are similarities to the characteristics found in the United Kingdom universities of inadequate quality, inefficient timing, besides an abundance of information collected without efficient analysis.

Nevertheless, in Iraq the external provision of accounting information is more extensive than in the United Kingdom's universities, simply because of the strong control and rigidity of regulations; many directorates of central government issue financial rules and regulations concerning government funds. Accounting information provision should be unified between central government, ministries, financial supreme control, etc.

13.6.5 Responsibility of the Resource Allocation Process: In UK universities there are committee structures for planning and the allocation of resources. Nevertheless, it has been found that their present forms are not effective and need drastic improvement. Often, too many committees are involved with different methods of reporting to Senates and Councils. Different committees perform the functions of allocating funds for staff, running costs, equipment, space and minor works and supporting services, without the necessary coordination. Some planning committees are too large because they are set up to represent sectional interests. Instances also occurred where committee members did not support the recommendations when presented to a superior body. However, it has been suggested that every committee's terms of reference should be reviewed on a regular basis, perhaps every five years (Chapter 7.6.5). It was also found that there is confusion caused by reliance being placed on the informal connection as well as members overlapping between the committees of resources allocation and planning. The creation of a single body with responsibility for planning, resource allocation and accountability was recognised as being essential. Such a body could effectively evaluate alternatives providing that it was small and was recognised as acting in the best interests of universities as a whole (Chapter 7.6.5).

In Iraqi universities, although the resources allocation committee structure differs from that of the United Kingdom universities, it is equally inefficient. Again, committee structures could be improved. Whereas in the UK there are too many committees, there are too few in Iraq. It is necessary to discover the optimum number of committees to gain the desired results.

13.6.6 The Universities' Budgetary Control: It was found that in UK universities, academic departments are the main budgetary units with the heads of departments being seen as the responsible officers (Chapter Six

and 7.6.6). Academic departments in the United Kingdom are responsible for expenditure and non-recurrent items; running costs, departmental equipment allowance.

Nevertheless, all staff expenditure is a central university responsibility although there is occasional and limited freedom with temporary staff. Moreover, it has been recommended that the budget responsibility of the academic department should be extended to include payroll expenditure.

On the other hand, the financial division monitors costs more regularly; salary expenditure, academic and administrative, which accounts for 70% of total expenditure is monitored by means of monthly reports. In addition the division monitors monthly expenditure on recurrent grants, equipment and research grants and the financial performance of self-sufficient units. In budgetary control, the revised estimates prepared in January and June provide the formal means for monitoring progress during the year (see Chapter Five and Chapter 7.6.6).

It has already been mentioned that the head of the academic department is important in resource allocation (Chapter Six). Nevertheless, it was found that the responsibilities and accountabilities of the heads of academic departments are not always clearly defined, e.g. because the academic head might not be kept abreast of the state of the grant. Thus it is suggested that the hierarchy of accountabilities should be more clearly defined. On the other hand, academic departments are allowed to spend their equipment and recurrent grant in whatever way they wish but they are, however, subject to rules to control the total amount they spend. Recurrent grants should not be overspent but should this occur, a department must carry forward the deficit against the next year's allocation. An inherent weakness of the UK universities' budgeting system is a lack of any direct link between input and output whether in

the cost involved or in terms of volume (for greater explanation see Chapter 7.6.6).

Investigation of UK universities' services' departments, telephone costs, etc., showed that a distinction between services over which departments have full control and those which they have not should also be made.

The budgetary control mechanism of Iraqi universities differs from that of the United Kingdom in the accounting and financial rigidity of the centralized mechanism. It is different in that academic departments in Iraqi universities report annually with their financial requirements to the financial committee and the rest of the control mechanism is the responsibility of the financial and auditing department of the university. Therefore, this research recommends that government rules and regulations be classified and that efforts be made to improve the quality and flow of information between government and universities. Further, the budget should be decentralized and academic and administrative departments made accountable for their own finances.

There are many points of difference between the budgetary control in UK and Iraqi universities. The following table points out the differences and similarities between the United Kingdom and Iraqi systems of budgetary control.

The Universities' Budgetary Control of the United Kingdom and Iraq

	Similar	Different
- Academic department as the main influence		X
- Financial department monitors financial report	X	
- The academic head is important in the allocation of resources		X
- Not always clearly defined, responsibility and accountability of academic departments	X	

Because there is a shortage of empirical and theoretical investigation of the financial and accounting aspect of universities in the United Kingdom and Iraq, there is a marked need for further investigation of universities' budgetary control because of the variety of problems in strategic planning and lower level university administration. This applies in both the UK and Iraqi universities.

13.6.7 Accountability in Resource Allocation: It was found that academic departments in the United Kingdom are informally accountable to the Dean or Board of Studies for the use of resources as they have the power to remove resources from departments. There is no formal control of university departments through the use of plans and budgetary control reports.

In addition, in the UK, plans are divided between academic departments. In Iraq, the plan and budget are not divided for academic department purposes nor is there any departmental accountability in the allocation or control of resources. Thus it is recommended that universities in both countries increase departmental accountability, formalised by the monitoring of financial performance against budget.

A move is recommended towards a structured approach to university budget responsibility with clear accountability for the use of resource allocation to the next level in the hierarchy. Figure No. (7-13) illustrates in more detail the structure of responsibility which was recommended to the University of Edinburgh. The level of accounting information necessary for each level of strategic planning, management control and operational control of the university was shown in Chapter Six, figure No. 6-6. The lines of accountability and accounting and non-accounting information should be clearer and there should be annual reports of departmental activity showing performance indicators and

pre-specified performance indicators with planned objectives in the annual report.

Before Iraqi universities can move towards such a structured approach they need to alter their procedures by dividing the plan and budget between the academic departments.

13.7 ACADEMIC DEPARTMENTS AND HOW THEY MANAGE THEIR RESOURCES

This research investigated individually the academic departments and how they manage their resources, in the universities of both countries. (Chapters 7.4 and 11.4 respectively). This section compares the findings on departmental authority, accountability, management style and problems.

There was clear evidence that in the UK real power over resources coincides with the formal authority held by the head of department and the authority is vested at an appropriate level (Chapter 6 and Section 6.3.3.1).

It was found that in the UK, the finance office monitors the amount of recurrent and equipment grant spent. There is no formal accountability for the use of resources at departmental level. They do not need to justify to some higher authority the use of their resources, nor are they given any specific goals to achieve such as the proportion spent between teaching and research.

The United Kingdom universities are more advanced in adopting a formula for allocating recurrent and equipment grants to departments, i.e. the bulk of their disposable revenue which encourages them to seek more outside funds. The departments have been very successful in attracting outside funding and this is shown by the proportion of total resources which outside funds now comprises (see Appendix No. 4). In addition, in the United Kingdom, the head of department monitors the results informally,

i.e. from his own observation and through staff feedback and from the department's student consultative committee. In the main, the judgement of the research group leaders will be accepted, nevertheless he would expect discussion on significant items.

The academic department management style is essentially informal being based on personal contact, headed by the head of department. Academic staff usually organize all teaching and all departmental members are expected to partake in this. Departments in UK universities deal more with management and accounting information to control their activities and for decision making. It has been found that universities of the United Kingdom abound with primary information in statistical and computerised form, as shown in more detail (see Appendix No. 3).

The problems faced by UK universities relating to financial and accounting efficiency of departments have been defined in Figure No. 7-4. The figure shows broadly the shortage of staff, lack of flexibility in the use of financial resources, lack of research students and funds to support them. All these problems are related to a shortage of money and inefficient use of available funds. It is recommended that these deficiencies be the subject of further research.

In Iraqi universities, Law 55 of 1983 defined the colleges' and deans' responsibilities. However, Item 21 of the law which concerned the financial and accounting affairs of colleges is very broadly stated and in practice it was found that only colleges reported annually to the committee for the budget plan based on the college's needs for the following year. Moreover, the accounting system guide does not provide for the accounts of colleges and administrations to be distinguished.

The management structure of academic departments is simple. There is an administrative director who reports on staff performance, promotions,

etc., but financial affairs are centralized.

Academic departments in Iraqi universities suffer from confusion over their power in the allocation of their resources. Academic departments have no clearly limited budget within the university plan, against which their operations can be measured and they are not responsible for the collection of their funds. There is a tendency towards haphazard use of petty cash to meet expenditure. Academic departments need greater power over their resources and a system of monitoring and accountability.

At present their involvement is restricted to an annual report of their manpower and general request for further equipment.

By comparison with the UK the academic departments of Iraqi universities are shown to lag behind in seeking the benefit of outside revenue. In addition, they do not have a strategy for attracting outsiders to use their facilities and in return to gain financial benefit to the academic departments, and academic staff increases through extra funds. The university as a whole would be in a better financial position for the impetus toward financial progress and development other than through rigid government funds.

The main deficiency in the academic departments of Iraqi universities is the inability of heads of departments and deans to monitor their financial affairs because of the primitive method of pre-dividing the financial estimation plan between colleges or departments, losing the financial standard of achievement for each college or department by reducing their accounts and withdrawing the policy of competition throughout all levels of the university hierarchy.

Iraqi academic departments are short of management and accounting information and time. Financial reports are provided monthly and quarterly by the financial department of the university in order to monitor expenditure and efficiency (Chapters Ten and Eleven).

However, without greater objectivity, system and use of measurements of performance, in both the United Kingdom and Iraqi universities' departments, it is impossible to judge whether they are being managed as well as might be possible.

13.8 EVALUATION OF EFFICIENCY IN UNIVERSITIES' PLANNING

It was found that the UK universities' major internal deficiency was that the Council and Senate lack an explicit well-defined corporate planning process, together with the assurance that academic, financial, social and physical aspects of decision will interrelate. A formal planning process requires the existence of effective management information, monitoring and evaluation systems and should structure their use (Chapter 7.5.1 and Figure No. 7-11).

Since 1981, universities have increasingly recognised that they cannot expect to achieve the highest standards in every academic, administrative and financial area. Nevertheless, this research found that universities in the United Kingdom have a strong desire to maintain the traditional distribution of resources. Planning and resource allocation have tended to be incremental rather than dynamic. Methods and procedures suitable to growth have been retained in quite different circumstances. This research has referred to the assessment made in the Steering Committee Report for improved efficiency within United Kingdom universities, which discussed the need of a corporate planning process, a committee strictly limited in size and reporting to the Council and Senate which should be chaired by a Vice-Chancellor and nominated by the Council; sub-committees should be elected and report to planning resources; there is a need for effective central control and leadership, e.g. budget centres should be sizeable enough to ensure flexibility and made aware of the costs of their activities including overheads, and reliable and consistent

performance indicators should be developed urgently for the United Kingdom universities (Chapter 7.5.1).

It has been argued that more research is needed in three areas; 1) the unravelling of the accounting complexities of research grants and contracts and the methods of claiming reimbursements; 2) would PPBS be the answer to the much needed improvement of planning and budgeting systems in UK universities? 3) The exchange of information and the findings of practical experiments is central to all the problems of financial administration and methods must be found to improve the situation.

The difficulties facing UK universities in tackling the problems of planning in a period of unpredictable budgetary reductions, in the absence of guidelines on long-term policy and with the decline in student numbers, are immense.

Iraqi higher education drew up five-year plans, implemented as annual plans for student admissions and postgraduate programmes. Besides the regular quinquennial plans, Iraq has drawn long-term plans with three alternatives that extend to the year 2000, with the aim of building up the modern economy of Iraq. In the last two decades, particularly after nationalization of the oil wealth, there has been a rapid increase in investment in all sectors of the national economy and higher education is one of these. However, it has been suggested that scientific planning in the educational field should accord with the national progressive concept and should bring about harmony with the wider goal of national development. All priority-referenced policies should converge and support one another in creating a comprehensive state of balance and symmetry in the different but interrelated fields of economic, social, cultural and educational change. This naturally places a duty on the administrators

in education, as well as other sectors, to become expert in constructive management whilst incorporating radical changes in a balanced manner.

In addition, it was found that universities' quinquennial plans included estimates of students, manpower, curriculum, etc. However, the role of financial planning for the universities was underestimated. Financial planning is insufficient, there is a lack of cooperation in financial planning, and there is no research or study of actual performance indicators of university achievement. Further study is required to show the achievement of university, students and manpower and to ascertain methods for further administration and financial development. Under the concept of efficiency of this research, UK and Iraqi universities show a lack of corporate financial planning, inappropriate numbers of committees and lack of performance indicators.

At the micro level, Iraqi university financial planning shows a lack of integration firstly in the university financial plan, which is not closely related to the number of students accepted; secondly, even though the universities report to the admission centre of the Ministry of Higher Education giving the capacity in each subject and field, it was found that the admission centre accepted a greater number of students than shown in the report. The achievement of the financial plan is therefore hampered because of :

1. The amount of textbooks and other materials which are distributed to students free of charge;
2. An increase in the number of lecturers leading to an increase in the amount of money to be used on salaries;
3. The increase of fixed assets, building, furniture, etc., for accommodation for students.

In the last few years the policy of the central government of Iraq has been to accept most Iraqi students into universities, colleges and technical education, which has affected university financial planning and implementation.

Although the percentage of transferable amounts may be between 10% to 20% as shown in the regulations and rules of the financial annual budget, the major problems relating to funds facing the university are:

1. To follow-up exactly the regulation of the Ministry of Finance and not to exceed the allocated percentage of the annual and monthly financial provision of the Ministry of Finance.
2. To control finance in the final month of the year and to spend it with care because it can affect the final financial status of the university. There are deficiencies in Iraqi universities' financial planning at the micro level and in the Ministry of Finance. These include regulations which are difficult to apply and to interpret, masses of financial information, and at university level the financial departments' inability to cope with these facts. In addition, the committee of allocation is small, without contribution by academic staff and planning methods are limited.

Another major problem which Iraqi higher education planning faces is the lack of regard to proper management control systems, auditing and a lack of qualified teaching staff for this field to be adequately covered in the universities. However, some literature has discussed aspects of the teaching curriculum of universities and its effect on officers working in the universities.

It was found that the cadre of officers in the middle and lower levels in financial and other administration, required flexibility in their administrative operations. This can be seen, for example, in the

financial regulations and laws relating to resource use. Flexibility is very necessary to implement the financial rules, regulations and laws which affect annual and long term plans in Iraqi universities.

The financial department, as well as the other academic and administrative departments, face difficulties with the Uniform Accounting System because the guidelines of the system are designed for industries, which have different functions and tasks from those of universities. In addition, with the relatively new application of the Uniform Accounting System there has not been enough training of accounting officers in universities.

All of these points have added to the difficulties in the use of the system and have affected the efficient application of the financial budgets of universities and the provision of adequate information to the top level of the university for making efficient decisions.

13.9 BRIEF FINDING OF THE CHAPTER

It is difficult to summarise such a complex series of issues as is raised by the topic of this thesis and to give a general answer to the questions posed in chapter two, and reiterated in the introduction to the present chapter. Therefore Figure No. (13-1) was devised which summarises the differences and similarities between accounting and financial management in UK and Iraqi universities, and their efficiencies. The broad similarities and differences shown have been highlighted by this empirical investigation and by a review of literature. Figure 13-1 also shows that in both United Kingdom and Iraqi universities, accounting and financial management is often inefficient. However, recommendations and suggestions for further investigation, empirically and theoretically, have been offered by the researcher.

Figure No. (13-1)

The United Kingdom and Iraqi Universities' Accounting and
Financial Management; Broad Similarities and Differences
and Their Efficiency

THE CHARACTERISTICS OF THE UNITED KINGDOM AND IRAQI UNIVERSITIES' ACCOUNTING AND FINANCIAL MANAGEMENT	BROAD SIMILARITIES	BROAD DIFFERENCES	Y EFFICIENCY	N
- THE EXTERNAL INFLUENCES ON THE EFFICIENCY OF UNIVERSITIES				
- Administration Universities' Finance				
- Governance		X		X
- Funded by central governments	X			X
- Financial quinquennial budget		X		X
- Other, curriculum, manpower, etc	X		X	
- Universities after 1980				
- Instability of funds after 1980	X			X
- Multi-funded, UK only		X		X
- Simple method, shortage of research	X			
- Recommendations and suggestions	X			
- UNIVERSITIES' INTERNAL ADMINISTRATION				
- Objectives and goals of the universities				
- Multi-purposes and complexity	X			
- output measurement analysis, etc	X			X
- input statistics abundancy	X		X	
- purpose	X	X		
Universities' Function				
- Range of activities				
- variety of activities	X			
- number of departments in total		X		X
- Professional loyalties				
- Professional employee		X		X
- working to common purpose		X		X
- required further investigation and study				
- Participation and the tenure issue				
- problem of job satisfaction	X			X
- tenure issue		X		X
- university expenses highest account	X			X
- influence on university's efficiency	X		X	

- THE GOVERNANCE OF UNIVERSITIES AND THEIR EFFICIENCY
IN THE USE OF THEIR RESOURCES

- Council and Senate

- strategic planning⁽¹⁾ X
- membership of Council and Senate X
- resource allocation and involvement X
- recommendations mentioned X

- Committee system and informal processes

- number of committees handling efficiency matters X
- committee members; too many or too few X
- influence on accounting and finance X

- Vice Chancellors (President) Pro-Vice
Chancellor and Deans⁽²⁾

- influence the efficiency, effectiveness, dual job X
- resources allocation X
- relation and influential in public sector X
- pro-vice chancellor (assistant president) influential on finance, allocation resources X
- V.C. appointment, role, line manager X
- Dean budget holder X
- Dean executive responsibility X
- Dean authority on finance and allocation resources X

- Head of Department and Academic Staff

- a vital position and role in allocation of resources X
- a vital role on equipment expenses X
- a basic budget unity X
- many proposals discussed in Chapters 6, 10 and recommendations X

- BRIEF INTRODUCTION TO UNIVERSITY FINANCE, METHOD OF
COLLECTION OF FUNDS AND INTERNAL EFFICIENCY

- financial fund subject to many influences (multi-funded) X
- most important is government fund X
- correspondence between financial and academic cycle X
- uncertainty of forward fund X
- long term cut 15 - 16 year X
- recommendation for further means, methods, etc. X

- Funds collection system			
- payment considerably delayed		X	X
- inefficiencies of method of collection		X	X
- collecting government funds depend on adequate accounting information annually	X		X
- collection accounting system efficiency		X	X
- recommended organisation of collection	X		
- Evaluation of efficiency in University planning			
- define corporate planning process by top level	X		X
- existence of effective management and accounting information	X		X
- consistent performance indicators	X		X
- further application to PPBS, CBA	X		X
- UNIVERSITIES' PLANNING, RESOURCES ALLOCATIONS AND ACCOUNTABILITY IN PRACTICE			
- The universities' strategic and long-term planning			
- objective and goals defined in very broad terms	X		X
- long term is largely ignored (financial plan)	X		X
- major obstacles; a proper strategic plan; i.e. top down, bottom up	X		X
- recommendation further application empirically and theoretically, PPBS, CBS, corporate planning	X		
- Universities' resources allocation criteria			
- little relationship between long term plan and goal and objective	X		X
- thus, obstructed deficiencies, national and internal	X		X
- historical based plan	X		X
- method of plan is academic and non-academic		X	X
- accounting information and system		X	X
- The universities' habitual resources allocation			
- committee of resources (estimation plan)	X		X
- external governance; UGC, etc.		X	X
- fiscal year and match or not match education cycle		X	X
- fund of government money is major	X		X
- academic department is basis of plan control		X	X
- vice-chancellor (president) is mainly responsible for efficiency and effectiveness of the university	X		
- recommendations for further application	X		

- Management information system				
- management and accounting information is important, economy, political rationality and decision making	X			X
- accounting and financial information is inadequate, too late for use	X			X
- abundant input information and less use of output	X			X
- recommendation for further empirical and theoretical investigation	X			
- Responsibility of the resource allocation process				
- committee structures for planning and allocation resources	X			X
- number of committees and membership		X		X
- recommendations for further application is required; PPBS, CBA, etc.	X			
- The universities budgetary control				
- academic departments are main budgetary units		X	X	X
- monthly reports monitors, costs, salaries, etc.	X		X	
- responsibility, accountability not always clear; should be more defined		X		X
- financial department of university main budgetary control	X			X
- recommendations for further research, study	X			
- Resources allocation accountability process				
- academic department accountable to the dean financially		X		
- suggestion to formalize by monitoring of financial performance against budget (academic department)		X		X
- structure approach budget responsibility with clear accountability		X		X
- accounting and financial information inadequate to hierarchal levels	X			X
- recommendations for further investigation, i.e. more accountable, formalised by monitoring of financial performance against budget. Also standard approach	X			
- clear annual reports of financial activity with plan objectives	X			
- THE DEPARTMENT AND HOW IT MANAGES IT RESOURCES				
- Authorities of academic department				
- power over resources with formal authority of head of department		X		X
- monitors the amount of recurrent, equipment grant spent		X		X

- Accountability of academic departments
 - no formal authority for the use of resources at departmental level X
 - no justification to some higher colleges authority how it uses its resources . . . X
 - not given any specific goal to achieve, i.e. proportion spent between teaching and research X
 - recommendation for further investigation. . X
- Management style of academic department
 - head of department organise all teaching and all departmental academic staff . . . X
 - head dealing with accounting and financial information for decision making X
 - abundance of primary accounting and financial information X X

13.10 THE LESSONS TO BE LEARNED FROM UK AND IRAQI UNIVERSITIES

United Kingdom universities have faced a financial crisis since 1981 with repeated central government cuts in funds as mentioned in chapters six and seven and as discussed in the previous part of this chapter. Similar uncertainties and changes in financial affairs occurred in Iraq in 1970 and 1980, when Iraqi universities became fully supported by central government.

Universities, whether in developed or underdeveloped countries, must perform their own mission effectively and efficiently. Approaches to the measurement of this performance in the United Kingdom and Iraq have been examined in detail. In both countries a similar need was found for the application of a method of measurement of performance. Universities do not as yet use performance indicators or management and accounting cost centre approaches, which might be important in dealing with financial stringency and the consequent need for improved efficiency. These methods were discussed in Chapter 7.5 and 11.5, and their application in both countries might affect the results of universities, leading to better use of their resources, more effective financial management, fewer but more qualified employees and improved financial accounting systems.

The rest of this chapter is concerned with the following points.

- (1) The implications of the study for Iraqi and UK universities and
- (2) what the two countries can learn from each other.

The efficiency concept in this research has implications in many areas. University funding from government is inefficient, and methods of improving the situation have been suggested. Efficiency is also related to the way goals, objectives and functions are defined and contribute to the university as a whole. In addition, it is concerned with mechanisms of planning and allocation of resources throughout the hierarchy. Special emphasis was placed on the efficiency of procedures for strategic planning, resource allocation, and the process of accountability. This in turn raises questions of management information and control.

The general finding was that there is inefficient funding and that the mechanism of resource allocation is also inadequate. Therefore, suggestions have been made for improving the efficiency of the UK and Iraqi universities.

The UK universities have entered a period of change which is reflected in new internal demands on their academic departments, relating to planning, resource allocation, funding avenues and accountability. There is a need for a consistent approach to efficiency to be applied to UK universities. Departments in similar circumstances may differ in the efficiency with which they handle their resources and a systematic approach is needed.

In Iraq, the drive towards improving the universities is long-standing, yet since their absorption into the public sector, there has been little sign of systematic improvement. In 1980 the Uniform Accounting System was introduced, but its usefulness is limited in view of the

failure to monitor, improve and update the planning process, or to define aims and accountability. Therefore accounting in Iraqi universities is inefficient in application, if not in theory.

13.10.1 The Brief Lessons from UK Universities: The current situation of higher education suggests that the present trends in university finance will continue with financial cuts and harsher economies.

Having reviewed the situation, this thesis recommends that for the time being universities concentrate on reviewing their internal operations with the aim of improving their financial management and allocation of resources. The researcher has considered the difficulties facing the universities and suggested methods of improvement which could feasibly be adopted.

In view of the instability of funding and the difficulty of control in a multi-funding situation, attention has been focussed on the possible advantages of devolution of accounting, allocation of resources and planning. This research has therefore examined the cost centre approach as a current trend in UK universities.

University goals and objectives are very complex. They are stated in university constitutions, but not analysed in simple practical terms, or identified for individual schools and departments, which are not linked with overall university planning. University goals could be sub-divided for individual academic departments with considerable implications for university efficiency, for it is the academic staff who execute the university plans.

Staff loyalties are another factor influencing efficiency. There is a danger that the outside interests of staff may create difficulties in identifying and achieving a common purpose and may have an adverse effect on financial efficiency.

Academic participation, tenure and loyalties are important because they affect individual goals and motivation and the contribution of staff to the efficiency of the university. The cost centre approach would give staff greater impact on resource allocation, because they would hold and execute the budget. Furthermore they would be encouraged to attract funds to their departments.

The governing structure of UK universities is complex. Organisational structure affects the performance of the university, its planning processes, allocation of resources, chain of command and the spread of decision making.

This research found that university organisational structure required to be reviewed in view of the complexity of the hierarchy. The relationship between levels and their roles need further definition, while the planning and resources committee also offers scope for change. A number of recommendations are therefore made.

1. A joint committee should be established between the council and senate to review the plan and its progress in achieving it, with specific regard to management information and performance indicators.
2. The Vice-Chancellor is the chief executive of the university and has an important role in its efficiency. Both he and the resources allocation committee need the appropriate managerial skills to cope with the demands of university financial devolution. Therefore, there is a need for special training to clarify the responsibilities of these members of staff and enable them to meet the needs of the changing university situation.
3. Reviewing the plan and resources committee, it may be appropriate for the vice-chancellor to become the head of the resources allocation committee, acting as an intermediary between the senate and council on the one hand and the deans on the other. Because of the importance of

the allocation of resources in university management, it is necessary to establish an effective mechanism with a strong link between different levels of the hierarchy, and effective communication.

The major internal deficiency of United Kingdom universities is the lack of an explicit corporate planning process, or the assurance that academic, financial, social and physical decision-making will interrelate. A formal planning process requires the existence of effective management information, monitoring and evaluation systems and should structure their use. This research has referred to the assessment made in the Steering Committee Report for improved efficiency within United Kingdom universities, which discussed the need of a corporate planning process; there is a need for effective central control and leadership, e.g. budget centres should be sizeable enough to ensure flexibility and made aware of the costs of their activities, and further consideration given to the possibility of establishing performance indicators.

We have seen that objectives and goals in universities are defined only in very broad and ambiguous terms. There is little relationship between universities' long term objectives and the allocation of resources, in view of the short term planning horizons of government and the UGC, and the virtual absence of university strategic planning.

It is recommended that UK universities pay further attention to the development and application of planning, programming and budgeting system (PPBS), cost benefit analysis (CBA), etc.

Management information is the key to economic efficiency, yet the production of accounting and financial information within universities is not always adequate for efficiency. Its quality and timing may limit its usefulness and it is not effectively analysed.

The committee structures for planning and resource allocation are also ineffective. A large number of committees perform various aspects of the allocation process without the necessary coordination, and some planning committees are too large. Further, there is undue reliance on the informal connection.

The effectiveness and efficiency of the allocation process could be improved by combining the function of a number of key committees and formalising the links between them.

In UK universities, although academic departments are the main budgetary units, the responsibilities and accountabilities of their heads are not always clearly defined.

Nor is there any direct link between input and output in the budgetary system, whether in the cost involved or in terms of volume.

It is recommended that the accountability of academic departments be formalised by the monitoring of financial performance against budget. A move is recommended towards a structured approach to university budget responsibility, with a clear chain of accountability for the use of resource allocation.

In summary, reduced funds and increased public interest in university activities, have highlighted the importance of maximising efficiency. To satisfy this need, there is a requirement for the application of performance indicators and consideration of management information requirements. The competitive feeling between university departments towards planning and the use of resources, creates a significant opportunity to improve efficiency, but in order for this to be achieved, further attention must be paid to accounting complexities, fund collection, the possible benefit of applying PPBS, CBA, etc., to the universities, and methods of defining information needs and improving communication.

13.10.2 University Cost and Responsibility Centres:* There is a difference between the classification used in the statistical information provided to external bodies, such as the UGC, and that used in university internal accounts and reports, creating problems for accounting and control. The harmonization of these classifications is therefore important.

Within universities, budgetary devolution would spread the load of financial responsibility, improve resource allocation and provide a framework for planning. Such a system would permit faster, more flexible responses to changes in the conditions by influencing the allocation of resources among academic departments. This approach aims to increase both the power and the responsibility of schools or academic departments as sub-units able to make decisions about resource allocation and planning at the school level.

The cost centre is any school or academic department which is recognized by the university for which costs may be separately accumulated by its central accounts.

The cost centre approach takes account of varying responsibilities, student/staff ratios and the relative sizes and importance of departments. It offers scope for the exercise through pre-planning, of discretion and judgement. Thus it meets the challenge of fund shortage because it focuses on economy and dynamic movement.

The study of the financial management of Edinburgh and UCL looked closely at budgetary matters. The ensuing recommendations were couched in terms of a central planning and resources committee, with a system of budget centres. Each budget centre would be accountable to the university central management for meeting an annual plan within the resources allowed it, with delegated authority to administer the plan, and reporting within a unified reporting framework. A suggested programme for

* NOTE: Sections 13.10.2 and 13.10.3 draw on information and opinions expressed to the researcher in interview with the finance officers of the Universities of Edinburgh.

implementing such a system is discussed below.

Effective use of decentralised university budget systems requires a good understanding of its environmental and organisational characteristics. These are discussed in the following sections.

Under the cost centre system, schools and academic departments will be motivated to change certain procedures, such as the long chain of command and decision making. They would increase their authority and responsibility with a move towards obtaining funds for their schools, more autonomy in decision-making, resource allocation and planning. The following recommendations are made in order to establish efficient planning and resource allocation.

1. There should be a review of budget holders aimed at establishing responsibilities.
2. Heads of department must be given sufficient training to enable them to understand the role of the cost centre, the new accounting system, and reporting processes, so that the budget holder will not lose sight of accountability and the need to assess performance against budget.
3. The cost centre must be familiar with performance indicators. It will be necessary to develop a way of incorporating the use of these indicators into an integrated system of planning, resource allocation, budget control and accountability. Performance indicators could be grouped in order to satisfy external demands and compare the resources.
4. The cost centre approach means in practice an increased number of line managers throughout the organisation. Responsibilities will increase. Reporting and decision making will be part of the cost centre head's responsibilities in addition to his academic responsibilities.
5. The increased accountability of heads of schools or academic departments will give them greater influence over staffing and bring

about a reappraisal of the staff tenure issue.

It is clear that an altered scheme of resource allocation and budgeting such as the cost centre approach is workable. It is, of course, also possible that too mechanistic an application of funding allocations by formula, with insufficient provision for pre-plan changes from time to time, may also lead to high variances or failure to meet changing needs. Poor cooperation between academics and managers could defeat the plan.

A change in the budgetary process may help to bring about more conscious and informed control by academic staff who are at present not involved directly in resource allocation and planning, and at the same time encourage a greater degree of accountability. Thus, academic schools face a radical change in their internal procedures. A number of points may be made in relation to individual academic schools.

1. It should be possible for a system of resource allocation and planning to be operated successfully by academic departments if they are prepared to accept the ideals of the school cost centre, which is new to them, and also to devote a modest amount of time and effort to it.
2. Since the approach requires the division of the university into school cost centres, goals should be identified for each school. There is no point in creating a school unless there is some measure of agreement as to what its goals are. Clarifying the goals of schools would also help to identify the specific activities necessary to achieve them.
3. The school cost centre system is well-structured and would be likely to operate increasingly smoothly with the passage of time. It is characteristic of academic staff that they share, contribute and look at proposals at least in a general way - though it would be necessary for a manager to examine whether suggestions are worthy of implementation, classifying activities in monetary terms and measuring the outcome.

4. Suitable rules regarding the accountability of each school, preferably related every year to each school's budget, would both permit and encourage schools to act creatively and to develop improved approaches towards all activities, including academic work.

5. Since the present university accounting system has presented many problems of application, e.g. unsatisfactory classifications of accounts, the schools centre of devolution method should be regarded as a move towards a new classification of accounts and an incentive to reviewing the entire administrative system.

The question arises as to whether there may be conflict between cost centres and responsibility centres. A responsibility centre is defined as "an organisational unit with responsibility for control of costs and in some cases revenue." (Estes, 1981). This need not be the same as the cost centre - one responsibility centre may include a number of cost centres. Whether or not conflict arises will depend upon the exact arrangement of cost and responsibility centres within the university, and on clearly understood patterns of accountability.

In UK universities which are moving towards a cost centre approach, one system used is for individual academic departments to be designated cost centres. Departments are grouped into schools, and it is the school which is the responsibility centre. The dean of the school is acknowledged as having the responsibility for the activities and costs of the school. The school might involve more than one cost centre but no two deans share the responsibility for the one cost centre. The deans, through their departments, are responsible for most of the academic cost centres.

There is no real conflict between departments as they each have a responsibility as a cost centre answerable to the dean of the school. Professors do not have the overall responsibility of the cost centre. This rests with the Dean of School.

A school may comprise several departments, all under the responsibility of the Dean, but still interested in their individual figures and performance indicators arising from them.

Deans recognise that they are theoretically and practically responsible for their cost centres, although they usually delegate some of this authority to the individual cost centres which make up their schools. They leave the responsibility to the heads of departments but are there to give advice or to monitor and assess when investigation is needed.

Heads of departments or cost centre keep manual books to aid their cost control and spending and an effort is made to keep these accurate and up-to-date.

It is the responsibility of the school to answer requests from the university to raise independent money for the school. It is not the responsibility of the finance officer to raise extra money.

The only exception to the dean's responsibility is the salaries account, which is covered by the university.

The role of the accountants is as a control loop to the dean, just as he, in turn, acts as a control loop to the subsidiary departments, to ensure that they keep within their budgets.

Policies should be divided into cost centres. The policy system is devolved into the school and department so it naturally falls into cost centres, although most of the schools might have departments across cost centres. Most of the larger spending areas are in their own cost centre.

The finance office does not break down the information by cost centre but by function, such as a section for research grants, a section for general departmental matters, and a section for payroll. Costs are also controlled by this method.

An important factor is a good relationship between the Deans and the accounting and finance office, so that all information is available to the Dean and the department heads.

Conflict can arise with the person responsible for the cost centre because if, for example, the department or school tries to allocate more money to a particular account than is funded by the university it is the finance officer's responsibility to say it cannot be done. Again, if the school overspends, it is the finance officer's responsibility to bring this to the attention of the dean. The time factor involved tends to limit this function, but reaction is quicker in matters of research grants.

Problems of efficiency may arise if the accounting system is inadequate to handle the growth in activities of the university. Information to heads of department may be inadequate. Historic paperwork may be two or three weeks late, and may not contain commitments such as standing orders. A possible solution is computerisation with appropriate software to enable interactive displays of information to be given, rather than a monthly print-out which does not cover commitments. Improvement in this area would release the resources of the finance office to develop their skills in communicating with deans.

Ideally, then, deans and their delegates would control their costs with the aid of information from, and monitoring by, the finance officers. With an appropriate accounting system and the development of good relations and communication, there need not be a conflict between cost centres and responsibility centres.

13.10.3 University Accounting and the School System: Before the cost centre approach can be satisfactorily applied in universities, a number of problems need to be resolved, in order to harmonize university accounting with the school system. In addition the introductory period will demand the understanding of both administrative and academic staff. Three main factors are likely to affect the success or otherwise of cost centre application. These are (1) the role of the dean and the departmental heads, who will need to understand the aims and procedures of cost centre sub division for resource allocation, financial policies and their accounting duties related to the application of cost centres. (2) The role of the accounting department in monitoring resource allocation to departments and classifying and controlling financial affairs and ensuring coordination throughout the system. (3) Accounting and non-accounting information must be adequate to meet the needs of bodies such as the UGC, and the university's annual financial reporting.

Deans are academics whose main function is teaching and research, and their academic interests and abilities differ from one to another. Their concentration on their own fields has been at the expense of developing managerial skills. The trend towards rapid introduction of the cost centre approach brings with it new demands with which academic staff are not as yet equipped to deal.

For UGC purposes the finance office is required to keep information of expenditure by cost centres, specifically designated by the UGC, Form 3 being the financial element and the USR statistics being the student and staff numbers. The schools have to be broken down into departments to coincide with Form 3. There is no match and it creates situations whereby a school with four departments may find itself divided into four UGC cost centres for Form 3.

That is one problem but when a school is created it tends to want to develop areas which might bring together departments from different schools to produce some exercise and the net result of this is that a simple accounting technique cannot be proposed to record this.

Another aspect is that in a unitary degree system where a student can study a number of units in different schools, the information is collected by department, but students actually appear somewhere else in the statistics because students are matched to costs. So Form 3 is breaking down in any university that is introducing degrees by credits.

The responsibility of the administration is to administer the system by allocating the resources to schools, after which it is the school's responsibility to sub divide its allocation to its departments. The schools would like to keep a portion of the allocation for the administration of the school, but they cannot do this as there is no provision in Form 3 for placing school administration across three cost centres.

Accounting does not match the schools and Form 3 should be redesigned or even abandoned, in order to achieve a better management-related accounting system. Currently Form 3 is pulling university administrations in two directions. There is a need for an efficient system that results in providing rapid information and accounting by school. Then if a school wanted a central budget for administration it would be possible. At the moment the problem of across-school costing makes it impossible to allow a central budget for administration.

There is no problem with the allocation of resources. Once a formula has been achieved the actual process of allocation is just a simple matter of exercise. In the case of equipment grants, a system of asking for submissions is in operation, these submissions are then collated by the finance office and put to a sub-committee for review. Once they have

been to the sub-committee and recommendations are made, they proceed through the normal university channels and after they are ratified by the council the finance office allocates the amounts to the schools for sub-division.

There is no problem with the allocation but there is a problem with getting the schools to give information to the finance office as to what the divisions are. For example, if a school does not give adequate information to the finance office then the matrix for that school will not be sufficiently broken down and the analysis of departmental grants will not be sufficiently detailed. A department might query that its grant is not shown even though it has been granted. All the finance office can do is to refer the department back to the dean to ask for the details to be furnished. The main problem during the dislocation period is lack of understanding on the part of the schools of the finance office requirements.

The classification of allocations causes a problem in that both the departments and the schools claim the allocations as their own. There is a problem in the communication between department and school. It is not the place of the finance office to approach departments on behalf of the school. This puts an extra tier on the management structure.

It would be helpful if the schools understood a little of the accounting system, and training and presentations should be provided to this end. However there is always the danger that after the introduction, academic staff will revert to their former level of interest and awareness, and every effort must be made to prevent this and to maintain their cooperation with the system.

13.10.4 The Brief Lessons from Iraqi Universities: Since their absorption into the public sector in 1970, Iraqi universities have become dependent on government funding, and thus subject to its planning and resource allocation procedures. The introduction by government of the Uniform Accounting System in 1980 was intended to improve these procedures by providing adequate financial and accounting information. However, in practice, the expected benefits have not materialised.

Previous chapters have shown Iraqi universities to face problems in relation to government funds because of the continuing restrictions of government regulations aimed at limiting unnecessary expense, because of the effects of the war on Iraq, and because of expanding student numbers.

Central government funding depends on the annual plan which is based on the previous year's spending without reference to academic needs and plans. Financial planning, being annual, is out of step with the long-term planning which takes place in other areas, and the budget is nothing more than financial and accounting reporting.

Central government through the Ministries of Higher Education, Finance and Planning, finances universities from several funds so that university planning depends on providing information according to the accounting fund concerned.

There have been heavy demands on accounting, resource allocation and planning in Iraq, with a multiplicity of funds, operating various different accounting systems, and a lack of coordination between them. Thus, it is difficult to apply and measure cost accounting and academic school budgets. The inefficiency in accounting, resource allocation and planning is exacerbated by the difficulty in measuring university output; set against the output of graduates are the dropouts, weak or dated curricula, poor deployment of academic staff, etc., which have a

bearing on university efficiency yet are largely ignored.

Iraqi universities have no satisfactory way of estimating the funds they require, and their resources are not always used efficiently, because of the inadequacy of the accounting system. Government accounting and planning is not divided into schools or departments. Central government may have an overall view of university spending but internally, universities suffer from the lack of linkage between various plans and related funds, and an accounting system which cannot provide the necessary information.

The problem is compounded by the fact that recent laws are establishing another four universities, Tikreet, Qadisid, Alanbar and Al Qufa, with the same accounting system and planning procedures, without considering the experiences and problems of the existing universities. No alternative system has been proposed.

Iraqi statistical information is inadequate for the analysis of university efficiency. The information provision to ministries concerns university academic activities, student numbers, etc., but it does not cover financial aspects and there is no link between university output and annual budgets. The university economy is global rather than classified, plans of activities are divided rather than coordinated. It has become impossible to calculate student costs or to monitor university efficiency.

Goals and objectives have not been analysed and linked to the financial plan. The position of the university as compared with other public sector enterprises, is unique. It could be said that there are university goals and individual academic staff goals. University goals include, for example, the graduation of sufficient students to meet the

needs of society, but individual goals are more complex, e.g. research, individual publications, consultancy, seminars and national conferences. These goals have been ignored by the Ministry of Education, so that funding is not linked to productivity. University accounts do not carry enough detail to show the productivity of each academic department. Academic staff who fulfil complex functions, become public employees with no decision-making role. They make little contribution to the achievement of the university's complex goals.

Academic staff are not involved in funding and resource allocation, and their outside activities bring no funds into the university. It seems that their only function is teaching in order to enable numbers of students to graduate. There is no professional loyalty outside the campus, staff write textbooks and articles but even these are minor activities, subordinate to their teaching function. Universities have thus far been unable to link their complex function to the outside environment in such a way as to obtain funds for the university or to benefit the individual academic.

The subsidy introduced as an incentive to academics to concentrate on teaching rather than engage in outside interests has contributed to the limitation of their activities and experience, and the possibility of attracting funding to the university. If the academic role were to be widened, staff could influence the economic position of the universities by using external activities such as consultancy, to attract outside funding, at the same time contributing to improved university efficiency. In other words, economic efficiency is not necessarily imposed from above, but arises from the effective participation of those lower in the university hierarchy.

The governance of Iraqi universities is a simple structure consisting of council, university president, deans and heads of academic departments. Administration departments are centralized under the president and his assistants to serve the vertical and horizontal structure of the university. The president and his vice president have great financial authority and responsibility in university affairs. However, the greatest influence is that of the government minister. Deans and heads of department have no influence on financial affairs within the university, and no monetary responsibilities except for petty cash.

The planning process depends on a single committee headed by the president or his assistant in order to set up the financial plan in accordance with the accounting system code. The committee has no representative from the academic staff and the plan is a simple report to satisfy external demands. The university plan is a simple accounting code which is largely confined to details of manpower. This code makes no provision for classification into different administrative levels. It estimates overall expenditure and is no more than a safeguard of government funds. The committee has no further responsibility for monitoring the plan.

We have seen that the committee is too small and its members inadequate, especially considering the absence of academic contribution.

The accounting system in practice is adequate only for the provision of accounting information on a cash basis, rather than the accrual basis, and is unable to show depreciation or inventory, as well as being inadequate in that it fails to show financial details for individual departments. Thus the system needs considerable improvement to meet the needs of planning and resource allocation. The application of adequate accounting procedures needs to be viewed seriously alongside other aspects of

the planning and resource allocation process, and in addition, university internal planning should be organized on a school or departmental basis.

The planning system is inadequate for many reasons. Since the university plan is not divided into schools and academic departments, there is no control on the amount of the budget spent by each college and no accounts for each school or department. Equitable distribution in relation to efficiency therefore is impossible to measure.

Management control too is applied only in a rudimentary form, namely auditing. It is not the purpose of this work to investigate the details of management control but to highlight its relation to the planning process and its execution through the petty cash. The auditing purpose is to investigate whether the spending of the committees is in accordance with the rules and regulations governing the public sector, and to satisfy the authorities that public money is safe. It cannot investigate the spending of each school or even concern itself with whether spending has exceeded the approved estimate. Management control is thus both limited in meaning and inefficient in application.

This thesis has evaluated financial planning, resource allocation and fund monitoring in Iraqi universities and has considered ways of improving efficiency in these areas.

The Iraqi university resource allocation and accounting system operates in yearly periods, but the financial year does not operate over the same period as the academic year. The two different cycles make it difficult to measure accurately the costs of education in the university. In addition the introduction of the Uniform Accounting System and the continuation of the government and commercial system (Chapter Nine) coupled with the introduction, but not yet full application, of managerial and cost accounting, cause problems for efficiency.

Collection of funds from the Ministry of Finance depends on university reports: trial balances, bank statements and requests for monthly funds. Each university must keep within its approved budget estimate, but quinquennial plans cover student numbers, manpower, curricula, etc., without regard to financial planning.

Failure to relate the university financial plan to the number of students accepted, hampers its attainment, while the complexity of the system places excessive burdens on university financial departments.

Another major problem is lack of regard to proper national management control systems, auditing and a lack of qualified official teaching staff for this field to be adequately covered in the universities.

The lack of adequate management information highlights the need for strong university accounting departments and suitably trained personnel. However, many departments suffer from weak and data curricula.

Planning, resource allocation and monitoring of funds present great opportunities for universities to improve their efficiency. These areas were evaluated with reference to the same seven questions posed by the Steering Committee in the UK.

It was found that there is still a lack of financial planning and such planning as does take place is hampered by the inconsistency of funding, together with lack of training. There is insufficient involvement of academic departments, coordination relying too heavily on the president and his assistant.

Auditing departments are short of staff, and their lack of training affects the quality of information and the time-scale within which it is presented for financial decision-making. In addition, there is a general lack of understanding of the importance of accounting and financial planning.

Management information systems are in many ways inadequate. External provision of accounting information is extensive because of government regulations, but these are difficult to interpret, and the information produced is not always accurate.

The resource allocation committee structure is not efficient, having too few members, and little financial experience. Academic departments need to be more involved in the accountability process, and attention should be paid to the possible roles of PPBS and CBA in defining goals and monitoring the success with which they are met.

Lack of budgetary control is evident in Iraqi universities. Heads of department are uncertain of their responsibilities in this respect, too many different financial plans and systems exist, and the lack of a link between auditing departments and the university council also contributes to lack of control.

The financial department cannot perform its functions effectively because of shortage of staff, lengthy processes, and inadequate training, though Technology University has made some steps forward in staff development and more efficient communication and coordination.

Financial efficiency could be improved by dividing the financial budget in advance and defining the authority and goals of departments. PPBS, CBA and corporate planning, which are not currently applied, may have a useful role to play, and their value should be investigated.

PPBS is an accounting and administrative system which aims to increase the efficiency of public sector administration in decision making, to increase use of performance indicators and emphasize results. Therefore it requires improvement in methods of preparing budgets, accounting systems and statistics. In addition, it emphasises management control of performance as a method of directing operations. It highlights

the weaknesses in the government's original concept of budgeting, which does not link goals and expenses, and fails to give adequate importance to cost accounts. This system must be reviewed, the accounting system developed and statistics improved to provide adequate information for administrative purposes.

The accounting system for PPBS would need to be changed to emphasise the provision of information for planning and decision making. Therefore, it must include:

- Types of expense for each academic department and college.
- Actual costs of academic departments and colleges.
- Costs for the university as a whole.
- The actual average of each department.

Comparison between the present budget system and PPBS shows that the original budget system depended on functional expenses and determined adherence to financial targets as the sole objective, while the PPBS classification is based on programmes and highlights the importance of the results achieved. While the present system allocates resources on the basis of the previous year with a percentage increase, PPBS requires estimation based on the desired results. Control in the light of PPBS is concerned with performance, the use of available funds and manpower, to achieve specific goals, rather than on financial and accounting control alone, as at present.

13.10.5 Iraqi Universities and the Application of PPBS: Although Law No. 55 for 1983 broadly defines the responsibilities of Iraqi universities, it has not been implemented effectively. Universities do not fully apply the financial rules and regulations. There is a failure to subdivide the university accounts into colleges and departments, no link between the various financial plans and insufficient coordination between

units within the university.

Iraqi universities seem not to give any consideration to the problem of wastage. Improper use of public sector resources affects the costs of the university as a whole. It is necessary to investigate means of eliminating unnecessary expenditure and it may be desirable to increase the number of administrative staff to examine and report on university efficiency. Reports on university expenditure and benefits could be made to all involved.

An important aspect of general efficiency is the quality of personnel. There is still a serious lack of competent personnel with knowledge of accounting and planning or relevant experience which can be brought to bear on the management of an important area of the public sector. The poor overall quality of personnel in the component bodies of the system seems to indicate that selection procedures, preparation of the profession and in-service training are not effective. Staff in charge of academic departments need not only qualifications in their academic field, but also accounting and managerial skills.

The two main objectives of a university, college or academic department are teaching and research and the balance between these objectives is the subject of debate among professionals and planners in higher education. Whilst the universities were first established to teach students, they now have to conduct research as well. The irony is that while academic staff are appointed to teach they are promoted on their research rather than on their success in teaching.

Teaching functions differ among subjects; some subjects, e.g. medicine are particularly high in student costs. Inadequate teaching causes wastage of students which affects the departmental budget and consequently

its resources. Academic department heads have little understanding of accounting and thus they do not link departmental planning of student numbers and study levels, or expected wastages, with departmental costs.

Resources are accounted for in several separate funds. Each fund has its own set of accounts, that are self-balancing, and each fund is therefore a separate entity, almost as if it were a separate business. The purpose of this is to ensure that the university uses the resources made available to each fund only for the purpose designated for that fund. This practice causes many problems. There is no link between these funds, no inventory can be made, there are separate plans and accounting practices, and separate allocation of resources to each fund. Hence it is impossible to measure the costs of colleges.

Performance indicators have not been developed except in the form of the fiscal monthly trial balance accounts and annual fiscal budget of university. If these are considered as performance indicators they are still not analysed and compared with those of previous years, because of the delay and difficulties in some accounts, i.e. inventories and issuing the budget by the Diwan.

The financial organization structure of universities has no cost accounting unit to analyse and aggregate the cost of the university or individual college.

The application of PPBS needs a review of university organisation in order to fit the structure to PPBS programmes as closely as possible. PPBS uses programming and planning as a method of control of government funds. As an administrative system it depends on delegation of authority to middle management, developing their administrative capabilities and giving them responsibility for achieving goals efficiently. At present,

the Ministry of Finance is directly responsible for the fund, accounting and planning. The Ministry should apply PPBS and support and improve it to make it work in universities.

Since universities have academic specialists in management accounting and economics, it could be said that they have the facilities and abilities needed to operate the PPBS. Training and development of the accounting and administrative system are the most important criteria for successful application of PPBS.

The universities should review their structure and establish committees from the council and members of the academic, finance and administration staff to monitor the application of PPBS. There is also a need for a cost accounting unit.

13.10.6 Universities' Inventories and Stores: Iraqi universities face difficulties in their inventory and control system. University inventories include much more than textbooks, furniture, chemicals, agricultural equipment, etc. They have more to deal with than many industries because of the variety of their activities. In addition some of these resources have been purchased from Iraqi social or private organisations and some from outside the country. Although some of these have been accounted, some present difficulty. Some inventories need more care than others, e.g. animals for scientific research. Iraqi universities have a problem with inventories at the end of the year, in terms of cost and the system of handling. Therefore it would be desirable to review the inventory system with reference to the following points:

First: A committee should be set up to review the inventory system and make suggestions as to how to facilitate the operation of universities.

Second: Inventory and storage have been recognized as inadequate. The staff handling inventory and storage are untrained, and therefore are not included in university organisational procedures. Their handling of the

stores is not systematic, and there is a lack of coordination between their system and the needs of the university management.

Third: In addition to the lack of trained personnel, there is the further problem that there is no clearly formulated policy or procedure for handling inventory and stores. Unless the system is reviewed, clear guidelines established and staff trained to manage the system efficiently, the cost centre system will be hampered, for inventory and stores are vital aspects of university management.

13.11 WHAT THE UK AND IRAQ LEARN FROM EACH OTHER

This thesis has argued for a change in the structures of accounting, resource allocation and planning for schools and academic departments. In most cases, reorganisation of academic department structures are justified on the grounds of increasing efficiency and improving academic quality, although such application clearly serves a number of other purposes, e.g. definition of goals. In UK universities the decision to cut funds came as a surprise to universities, with no period of notice, explanation or research on the effects of such cuts on the universities. The present need to restructure university procedures and departments presents difficulties and faces resistance as it involves departure from tradition, and the unravelling of a very complex structure. There is a danger that restructuring might cause a lack of stability and lower morale of staff. Opposition from certain quarters, e.g. AUT, THES, may slow down the application of cost centres and academic schools.

In contrast, in Iraqi university departments, cost centres could be easy to introduce because the existing structure is very simple, leaving scope for further classification of the Uniform Accounting System. Nevertheless, it requires the cooperation of the academic staff - deans and heads of departments - and their interest in improving the efficiency of resource allocation within colleges and departments, coordinating with

the accounting department. Even with this cooperation, changes will not be successful unless the universities make an intensive and comprehensive effort to train personnel in accounting rules and policies, enabling them to prepare their departmental plan and control their operation.

One of the most difficult aspects of Iraqi university management is cost accounting in relation to the inventories and stores, which is disorganised due to a lack of a formalized system and lack of training. Inefficient inventory and costing of stores such as chemicals, animals, land, etc., has a serious effect on university financial affairs. Attention needs to be paid to improving the system of handling stores and relating this system to the accounting system of the university as a whole.

However, universities in both countries suffer similar problems of funding and if the situation continues to worsen, universities will have to make a number of changes.

1. The university system needs to respond quickly to the external environment and to experience no obstacles in doing so; the UK system reacts slowly toward the external environment and in making positive efforts to apply the necessary solutions. The universities in Iraq seemed more reactive to their external environment and more responsive since joining the public sector.
2. UK universities have several types of academic staff with different conditions of service and tenure: appointed full time, part-time, etc. This creates added difficulty in adapting their circumstances to fit financial requirements without compromising the tenure position. Because salaries are one of the largest expenses in a university, financial stringency creates the difficulty of trying to reduce staff numbers without compromising tenure; and complex schemes of early retirement,

etc., have resulted. Universities have not evolved the notion of staff efforts contributing to the department's funds. The traditional role of academic departments is not productive and structurely does not serve cost centre requirements.

In Iraq there is only one type of appointment, that is, full-time staff, with a fixed salary scale, although when university finances fluctuated, staffing was not cut because of increased student admissions. In addition, there was a shortage of academic staff in many subjects. However, a primitive method is still used to handle academic departments, as in Iraq too, they are unproductive in the accounting sense, in that they do not obtain funding to aid the fluctuating finances of the university.

3. Although decisions were becoming more decentralized in UK universities, the long chain of command made it difficult to handle the pressures of financial cuts. The budget process, both formal and informal, could be described as inflexible as there is no opportunity to obtain alternative funds from different sources, while in Iraqi universities, decisions are centralized at the level of the council and president. Again, there is no academic departmental contribution to funding. Departments have not managed their resources effectively and operated as independent productive units within the university system.

4. Since 1980, UK universities have responded effectively to the crisis in higher education caused by funding cuts. It was impossible to respond quickly and decisively because of the lengthy chain of command, complex procedures and difficulties of coordination.

In Iraq, universities seem to be less affected by cuts, the university structure is simple and the decision-making process clear.

5. It is unfortunate that in both countries, universities suffer from difficulties of timing in their resource allocation process, but the greater complexity of the process in the UK means that the difficulty is greater there. Both countries need to make changes in order to meet the demands of the crisis and improve the management of funds. Universities in both countries will need to place more emphasis on efficient systems of resource allocation, commanding departmental confidence, enabling decisions to be taken quickly, comprehensively and consistently, ensuring that decisions are in line with overall objectives and aims for effectiveness in resource allocation. Universities in both countries could improve their allocation of existing resources and increase the effectiveness in the generation of new funds for academic departments.

The study has important implications for developing countries which are seeking to establish new finance and management systems, or to overcome the deficiencies of those already in operation. Iraq and other developing countries should be aware that developed countries have their own administrative difficulties. Further, developing countries are subject to different influences and constraints. Therefore, developing countries would be well advised to analyse their financial and administrative difficulties independent of developed countries, rather than automatically using their systems as models to be followed.

This research investigated university goals and objectives, organisational structure, accounting, resource allocation and planning, showing the relationship between these and the external influences, goals and objectives and governance of universities. In addition, it discusses the move to decentralized cost centres in university departments, which appears to be the area of most immediate development. The research has examined both UK and Iraqi universities in order to create a broad base for further

research, whether of a general nature or focussing on specific features in the UK, Iraq or other Arab countries.

13.12 IMPLICATIONS AND SCOPE FOR FURTHER STUDY

This section attempts to indicate the implications of the present study, identifying scope for further research and aspects which could be applied to individual countries (e.g. Iraq or the UK) or in further comparisons. These suggestions and recommendations may be broadly classified into two types, those concerned with theoretical approaches, and those concerned with the application of this research in other areas. Within the first group are the development and significance of the concept of efficiency, study of the possible significance and usefulness of such techniques as PPBS and CBA, and quantification of the research.

The second category, that of applications of the study, would include its implications for other countries, and the scope for applying the research to other sectors of the economy.

Finally, consideration is given to the wider area of accounting for economic development, in which lies scope for considerable further study, in order that the full implications of this research for developing countries be understood, and the concepts defined here be applied to facilitate the achievement of development goals.

Although the previous chapters investigated the inefficiency of accounting and financial management, and resource allocation in the UK and Iraq, both individually and in comparison, a number of areas may be briefly indicated, in which the concepts considered here may be developed and applied.

A significant aspect of the present study has been its attempt to define the term "efficiency" and to develop it as a theoretical concept,

in order that the theory may in the future be expanded for further development, both in the public sector and elsewhere. There is a great shortage in developing countries of theoretical and empirical work on the efficiency concept in general, and particularly in relation to accounting and resource allocation.

For further study the concept of efficiency could be built up in relation to the purposes of the individual organization and their connection with the satisfactory behaviour of departmental units and the effectiveness and efficiency of individual employees. This could be applied at the departmental unit level of accounting.

In addition, theories of efficiency have important implications in a wide range of activity. Future studies might consider the application of the concept built up here, to a variety of administrative and other situations outside the field of accounting.

In investigating efficiency as it relates to the administration of universities in the UK and in Iraq, this research has revealed the lack of attention paid by these institutions to such concepts as PPBS, CBA, etc.

University administration, accounting and finance need to be analysed further as a system in a broad sense, developing a scientific approach to management, accounting and finance and applying interest in efficiency to the development of higher education. A comprehensive approach would entail the analysis of both administration of education and financial planning. This analysis could take account of Project Programming Budget System (PPBS), Cost Benefit Analysis (CBA), the critical path method and other techniques which derive from systems analysis, the object of all of which is to improve the general quality and efficiency of administration and financial planning.

Study of the possible implications of PPBS for universities would be an important development from the present research.

From this definition it may be seen that the application of PPBS would make significant differences to university administration. Whether, or the extent to which, such an approach would provide the solution to the deficiencies revealed in the present study, is a matter worthy of investigation.

Similarly, this research has recommended that attention be paid to the concepts of key variables, critical success factors, and performance indicators.

A recent theoretical article, "Using Critical Success Factors in Planning", introduces a strategic planning and control process, which is tightly integrated with the organization's information system. This design method incorporates nine steps: (1) Provide structure for design process; (2) Determine the general forces influencing strategic planning, (3) Develop a strategic plan or review/modify the current plan; (4) Identify a selected number of critical success factors (CSFS); (5) Determine who is responsible for which critical areas; (6) Select the strategic performance indicators (SPIs); (7) Develop and integrate appropriate reporting procedures; (8) Implement and initiate system use by the senior personnel; (9) Establish evaluation process and procedures (Jenster, P. 1987, p.102).

The application of performance indicators and critical success factors is tightly integrated with accounting and non-accounting information and is important in both the external and internal environments. It would provide a detailed description and methods of application for developing, monitoring and integrating critical information into effective strategic decision support for universities, or for other institutions.

Further study could develop these theories and investigate their implications either for a single country, or in further comparative research.

As a basis for further theoretical study, a quantitative approach could be applied to the concept of this research and the question guide used for a cross section of public sector organizations such as the financial and accounting department of the health, industrial and agricultural sectors of developing countries.

Government, local authorities and the public sector including universities, need to be investigated comprehensively because of the constraints facing them, and the importance of these sectors in the life of the nation as a whole. This study compared higher education in the UK and Iraq. A similar approach could be used in order to investigate other Arab countries, either individually or in comparison with the UK or each other.

By developing concepts of this type it becomes possible to judge the extent to which it is valid to apply western theory to the accounting and financial administration efficiency of developing countries. Many such conceptual theories could be set up from the literature of developed countries and implemented in developing countries.

The theories applied in this study have application also to the accounting and financial administration of other sectors such as health, agriculture and industry, as well as to higher education.

More study and investigation is required in the area of accounting for economic development. Empirical research is required in both developed and developing countries to contribute to a full understanding and analysis of accounting in relation to the needs of the economic environment. However, more particularly, empirical investigation is

required of the relationship between economic concepts and accounting and into the possibility of adopting more economic techniques into accounting. Investigation is required into the accounting requirements of economic development planning and budgeting. Finally more empirical investigation is required on the Uniform Accounting Systems which are presently being used, to see how the efficiency concept, PPBS and Uniform Accounting can be improved to the benefit of the public sector.

APPENDICES

APPENDIX NO. 1

Questions Guide

CONFIDENTIAL

IRAQI UNIVERSITY NAME:

HIKMAT A. ALRAWI
Doctorate Student at
The University of Hull
Cottingham Road

Accounting, Allocation of Resources, Planning
and Efficiency of Iraqi Universities

Dear Sir

I am very pleased that you are taking part in this study. The information gained by interviews will be treated in the strictest confidence as the dissertation will be presented in such a way as to keep the individual anonymous.

Please answer the attached questions as honestly as possible. If you feel that any of the questions need further explanation, or if you want to make a comment about the general research area, please let me know or contact me at my address listed below.

Thank you for the time and effort involved in answering the questions.

Yours faithfully:

HIKMAT A. ALRAWI
Doctorate Student,
The University of Hull
Cottingham Road

Questions Guide:

Sections on Interview Schedules and Questions Guide

Questions GuideInstitutional Background

1. To what extent are Universities independent self-governing bodies?
 - 1.1- The degrees of autonomy embodied?
 - 1.2- Which are the bodies influencing them?
 - 1.3- Do some external bodies have a greater effect than others on student admissions and University funds?
2. How complex are the University's objectives and functions?
 - 2.1- Are they too complex to be achieved?
 - 2.2- Does the function help to achieve the complex goals of Universities?
3. Does the University have features which complicate the managerial and administrative process?
 - 3.1- Through the range of academic activity?
 - 3.2- Through professional loyalties?
 - 3.3- Through participation?
 - 3.4- The tenure issue of staff service?
4. What major crisis, if any, has the University recently encountered?
When?
 - 4.1- What major effect did it have on University objectives?
5. What major effect did it have on the level of funds and costs?
 - 5.1- What was the effect on salaries?
 - 5.2- What was the cost effect?
 - 5.3- What was the cost of stationery and text books?
 - 5.4- What changes occurred in tax?
6. What changes have taken place in the distribution of external bodies?
 - 6.1- What was the main effect on teaching and research?
 - 6.2- Is the administration also affected?
7. Does cost depend on the students, teachers, etc?
8. Does the University try to maximize its effectiveness in changing situations?
9. Does the University have a clear view of what it wants to do within its situation?

II. THE GOVERNANCE OF UNIVERSITIES AND EFFICIENCY IN THE USE OF THEIR RESOURCES IN PROCESSES

1. The governance of universities and their efficiency in the use of their resources in processes.
 - 1.1 To what extent is the council and senate involved in the strategic planning of the university?
 - 1.2 To what extent does the council and senate membership affect planning efficiency?
 - 1.3 What is the involvement of 1.1 and 1.2 in resource allocation?
 - 1.4 Have you any suggestions and recommendations?
2. What contribution do the committee system and informal processes make to efficiency?
 - 2.1 What is the committee structure?
 - 2.2 What influence do committees have on accounting and finance?
3. To what extent do the Vice-Chancellor (President of University), Pro-Vice-Chancellor (Assistant to President) and Dean influence efficiency and effectiveness?
 - 3.1 What is their role in resource allocation?
 - 3.2 What is their relationship with outsiders in respect of funds and accounting matters?
 - 3.3 What is the level of management control and reporting in the university hierarchy?
 - 3.4 To what extent is the Dean involved in setting the budget, executive and resource allocation of colleges or academic departments?
4. To what extent are the heads of department and academic staff involved with:
 - 4.1 Resource allocation of academic departments?
 - 4.2 Deciding on equipment expenses and budget units for the departments?
 - 4.3 Further suggestions and recommendations?
5. To what extent do departments or colleges have power over their resources formally and
 - 5.1 How do they manage their resources?
 - 5.2 How is the amount of recurrent equipment of the plan monitored?
 - 5.3 What is their accountability over their resources?
 - 5.4 What specific goal is to be achieved in relation to resources?
 - 5.5 Further recommendations and suggestions.
 - 5.6 What is the major role of academic departments?
 - 5.7 What is their involvement in accounting and financial information?

III Universities at WorkBackground to planning

1. Are University funds influenced by many external bodies?
2. What are the resources?
 - 2.1- What are its procedures?
 - 2.2- What percentage of annual effect and years?
3. What are major problems of funds facing the University?
4. Does the University face a shortage of planning?
 - 4.1- Does it lead to managerial crisis?
 - 4.2- Does the University try to cope with this crisis?
5. Is information from external bodies to universities clear and on time? (e.g. regarding students, funds, regulations, etc.)
6. Do external bodies give clear objectives as guide lines to the University?
7. Is there a mediator between the external bodies and Universities which may affect Universities' funds, students, roles, etc?
8. Does the student number, for example, affect Universities' funds?
9. Does the University accept students over and above their relevant target and what is the effect on Universities' tuition, fund, etc?
10. Are there many major external bodies providing funds to the University?
11. What is the viewpoint of Universities toward external and mediator funds being interchangeable?
12. Are the funds collected from external and mediator bodies sufficient?
13. Are the funds difficult to collect by the University?
14. Does the University have funds other than those mentioned above?
15. Do reductions within the University affect its operation?
Such as
 - Academic
 - Administration and University structure
 - Others

16. Does it affect the tenure issue of Universities?
17. Do the problems of funds affect academic redundancy and to what extent?
18. Do Universities actively seek to increase their income from resources other than the formal funds?
19. Do the Universities render a service?
 - 19.1- What is the service?
 - 19.2- Does it help in providing University funds?
20. Does the University try to increase its income through taking overseas students, etc?
21. From the above, does the University face the crucial task of setting up and reviewing its procedures and maximising its effectiveness, etc?

IV. Planning, Resource Allocation and Accountability in Individual Universities

1. How much strategic and long term planning takes place in Universities?
 - 1.1- Are the University's objectives defined accurately?
 - 1.2- Does the University set up long term financial planning?
 - 1.3- Does the University have an established long term academic plan?
 - 1.4- Does the University have the means to achieve its objectives?
 - 1.5- Does the University have meetings to discuss academic strengths and weaknesses?
 - 1.6- Are there reports and research to study the process plan regularly?
2. On what criteria are resources allocated?
 - 2.1- Is there a relation between long term objectives and the allocation of resources?
 - 2.2- Does resource allocation depend on the previous year?
Please give details.
 - 2.3- Is the academic department's and administration department's report co-ordinated for the estimation budget?

- 2.4- Does resource allocation appear to take into explicit account the relative strengths of departments?
 - 2.5- Is there any difficulty in dividing resources between teaching and research?
 - 2.6- Is there any lack of systematic use of performance indicators?
3. By what mechanisms are resources allocated?
- 3.1- Are resources often allocated indiscriminately among various costs divisions, departments, department cost, equipment, salaries, etc?
 - 3.2- Is there enough co-ordination between the committees involved in the allocation process?
 - 3.3- Does the Council discuss the details of resource allocation?
 - 3.4- Does the co-ordination of resource allocation involve persons other than the Vice-Chancellor and Senior Administrative Officers?
 - 3.5- Are there difficulties in allocating resources according to the Uniform Accounting System code, between academic and administrative departments?
 - 3.6- Is the qualitative judgement made by colleagues on allocation of resources subject to political pressures in the short term?
 - 3.7- Does the University need to retain control over the annual allocation of major resources? Does it need more co-ordination to ensure the plan's success?
4. What is the quality and extent of management information?
- 4.1- Are the University's requirements for management information clearly defined?
 - 4.2- To what extent do you have information concerning students, Staff? Is it of good quality?
 - 4.3- Does departmental recommendation include facts and indicators?
 - 4.4- Does measurement of input fare better than output? Why?
 - 4.5- Does the use of planning models reduce the flexibility of decisions?
 - 4.6- Does financial information provided for departmental management have the right quality, is it too late to be useful, show forward communication, have their own sets of accounts, give line communication of accounting information?
 - 4.7- Is there consistency in the form of accounts for departments within a single University?

- 4.8- Does the academic department have detailed budgets and why?
5. Who, below Council, is responsible for the allocation process?
- 5.1- Is the present committee structure for planning and allocation effective/non-effective/need improvements, etc?
- 5.2- How does the committee structure affect communication?
(e.g. too large, adequate, too small, etc.)
- 5.3- Is there confusion between the central committee for planning role and that of the financial committee of council?
- 5.4- Besides the committee with responsibility for planning resource allocation and accountability, does it need to involve the council with these responsibilities?
- 5.5- Do you think that administration and academic departments should serve on central committees for planning and allocation of resources?
6. What is the budgetary control mechanism?
- 6.1- Is your academic department the main budgetary unit?
Does your head of department share the responsibilities?
- 6.2- Are the responsibilities and accountabilities of the heads of departments clearly defined and what do they contain?
- 6.3- Which practical service is most expensive and widely used?
(Telephone, power, cleaning, etc?)
- 6.4- Do you have department 'profit and loss' (or similar) statements? If not why not?
- 6.5- What percentage cost are the overheads of the department within the University budget?
7. What is the process of accountability?
- 7.1- What level is there accountability for the use of resources?
Is it examined retrospectively by the allocating authorities?
Is it easy to measure space, equipment, other resources?
- 7.2- Are there a number of recommendations that the lines of accountability and reporting should be clearer? i.e. Annual reports of each department, etc?
8. Academic Department/School as Cost Centres.
- 8.1- What problems, if any, arise from financial accounting at departmental level?

- 8.2- Who sets the budget?
 - 8.3- Where does the money come from?
 - 8.4- How is the role of academics changed?
 - 8.5- How do academics feel about their new role?
 - 8.6- Is the timing and accuracy of information adequate to enable the schools to keep their accounts effectively?
 - 8.7- Who arranges the division into schools and on what basis?
 - 8.8- What implications will the new approach have for staffing?
 - 8.9- How should money be allocated among the schools?
 - 8.10- Could the school obtain money from other sources, e.g. consultancy, contracts, hiring out facilities?
 - 8.11- What level of correspondence is there between accounting inside and outside the university?
 - 8.12- What problems arise from any discrepancy between systems?
9. Accounting Department Views of Cost Centres
- 9.1- What were the problems of the old system?
 - 9.2- Is the system to be modified? If so, how?
 - 9.3- How will the cost centre approach affect planning and control?
 - 9.4- Will any change in the number or qualifications of staff be needed?
 - 9.5- How adequate is the information you receive from school?
 - 9.6- Who is responsible for budgeting control?
 - 9.7- What changes will the new system bring?
 - 9.8- Will the cost centre approach help UGC requirements, or is it more a matter of internal structure?

APPENDIX NO. 2

THE EXCHEQUER AND AUDIT
DEPARTMENTS ACTS

The Exchequer and Audit Departments Acts

PREFACE

The method of presentation adopted is to show separately the texts of the Exchequer and Audit Departments Acts of 1866 and 1921 but to omit any matter which is not now in force.

The Act of 1866 (the 'principal Act') set out the basic framework of the system of Parliamentary control, including accounting and audit, of expenditure out of voted moneys. Later Acts, notably the Exchequer and Audit Departments Act, 1921, have repealed, modified and replaced various provisions of the original 1866 Act and have added others. As a result the 1866 Act appears in places to lack continuity.

Where a repealed section of the principal Act has been replaced by a provision of the 1921 Act a narrational 'linking' note to this effect has therefore been inserted in distinctive type by way of explanation.

Repealed provisions of the Acts are indicated by the normal regnal references; but in the case of repeals dating from 1921 onwards the short titles of the repealing statutes are added for ease of reference.

Source: Government Accounting

A Guide on Accounting and Financial
Procedures for the use of Government
Departments, H.M.S.O., 1974.

THE EXCHEQUER AND AUDIT DEPARTMENTS ACT, 1866 29 & 30 Vict. c.39

An Act to consolidate the Duties of the Exchequer and Audit Departments, to regulate the Receipt, Custody and Issue of Public Moneys, and to provide for the Audit of the Accounts thereof.

[28th June, 1866.]

Short title.

1 This Act may be cited for all purposes as 'The Exchequer and Audit Departments Act, 1866'.

Definition of terms.

2 In this Act . . . 'principal accountants' shall mean those who receive issues directly from the accounts of Her Majesty's Exchequer at the Banks of England and Ireland respectively; 'sub-accountants' shall mean those who receive advances, by way of imprest, from principal accountants, or who receive fees or other public moneys through other channels; . . .

Terms of Comptroller and Auditor General.

3 . . . The Comptroller and Auditor General shall hold office during good behaviour, subject, however, to removal therefrom by Her Majesty, on an address from the two Houses of Parliament; and shall not be capable of holding office together with any other office to be held during pleasure under the Crown, or under any officer appointed by the Crown; nor be capable while holding office of being elected or of sitting as a member of the House of Commons; nor shall any peer of Parliament be capable of holding the said office.

[S.4, dealing with the Salary and Superannuation of the Comptroller and Auditor General, was repealed by the *Exchequer and Audit Departments Act, 1950 (14 & 15 Geo. 6, C.3)* which in turn was amended by the *Exchequer and Audit Departments Act, 1957 (5 and 6 Eliz. 2, c.45)*.]

Duties of Comptroller General of the Exchequer and Commissioners of Audit.

5 . . . the person appointed to be Comptroller and Auditor General shall have and perform all the powers and duties conferred or imposed on the Comptroller General of the Exchequer and the Commissioners for auditing the Public Accounts respectively by any enactments relative to those authorities respectively, as far as the same are not repealed or altered by this Act or any other Act of the present session of Parliament. . . .

Vacancy in office of Comptroller and Auditor General.

6 On the death, resignation, or other vacancy in the office of the Comptroller and Auditor General Her Majesty may, by letters patent as aforesaid, nominate and appoint a successor, who shall have the same powers, authorities, and duties.

[Ss. 7-9 *rep. Exchequer and Audit Departments Act, 1921 (11 & 12 Geo. 5, c.52)*.]

Gross revenues to be paid to Exchequer, and daily returns to be sent to Comptroller and Auditor General.

10 The Commissioners of Customs and Excise and the Commissioners of Inland Revenue shall, after deduction of the payments for drawbacks, repayments, and discounts, cause the gross revenues of their respective departments to be paid, at such times and under such regulations as the Treasury may from time to time prescribe, to accounts, to be intituled 'The Account of Her Majesty's Exchequer', at the Bank of England and at the Bank of Ireland respectively; and all other public moneys payable to the Exchequer shall be paid to the same accounts; and accounts of all such payments shall be rendered to the Comptroller and Auditor General daily, in such form as the Treasury may prescribe: Provided always, that this enactment shall not be construed to prevent the collectors and receivers of the said gross revenues and moneys from cashing, as heretofore, under the authority of any Act or regulation, orders issued for naval, military, air force, revenue, civil, or other services, repayable to the Revenue Departments out of the Consolidated Fund, or out of moneys provided by Parliament.

11 All moneys paid into the Bank of England and the Bank of Ireland on account of the Exchequer shall be considered by the Governor and Company of the said Banks respectively as forming one general fund in their books; and all orders directed by the Treasury to the said Banks for issues out of credits to be granted by the Comptroller and Auditor General, as hereinafter provided, for the public service, shall be satisfied out of such general fund; and with a view to economise the public balances, the Treasury shall restrict the sums to be issued or transferred from time to time to the credit of accounts of principal accountants at the said Banks, as hereinafter provided, to such total sums as they may consider necessary for conducting the current payments for the public service intrusted to such principal accountants; and the said principal accountants may consider the sums so transferred to their accounts as constituting part of their general drawing balance, applicable to the payment of all the services for which they are accountable; but such sums shall be carried in the books of such accountants to the credit of the respective services for which the same may be issued, as specified in such orders: Provided always, that this enactment shall not be construed to empower the Treasury or any authority to direct the payment, by any such principal accountant, of expenditure not sanctioned by any Act whereby services are or may be charged on the Consolidated Fund, or by a vote of the House of Commons, or by an Act for the appropriation of the supplies annually granted by Parliament.

[S.12 *repeated Finance Act, 1954 (2 and 3 Eliz. 2, c.44)*.]

13 The Comptroller and Auditor General shall grant to the Treasury, from time to time, on their requisitions authorizing the same credits on the Exchequer accounts at the Banks of England and Ireland, or on the growing balances thereof, for services payable under any Act out of the Consolidated Fund, and the issues or transfers of moneys required from time to time by the principal accountants to be made out of such credits on orders issued to the said Banks, signed by one of the Secretaries of the Treasury, or in their absence by such officer or officers as the Treasury may from time to time appoint to that duty; and in all such orders the services for which the issues may be authorized shall be set forth.

Daily notices of issues.

A daily account of all issues or transfers made from the Exchequer accounts, in pursuance of such orders, shall be transmitted by the said Banks to the Comptroller and Auditor General.

Royal orders for issue of sums granted by resolution or Act of Parliament for expenses of specified public services.

14 When any sum or sums of money shall have been granted to Her Majesty by a resolution of the House of Commons, or by an Act of Parliament, to defray expenses for any specified public services, it shall be lawful for Her Majesty from time to time, by her royal order under the Royal Sign Manual, countersigned by the Treasury, to authorize and require the Treasury to issue, out of the credits

to be granted to them on the Exchequer accounts as hereinafter provided, the sums which may be required from time to time to defray such expenses, not exceeding the amount of the sums so voted or granted.

Credits for ways and means granted to make good supplies granted by Act or resolution.

15 When any ways and means shall have been granted by Parliament to make good the supplies granted to Her Majesty by any Act of Parliament or resolution of the House of Commons, the Comptroller and Auditor General shall grant to the Treasury, on their requisition authorizing the same, a credit or credits on the Exchequer accounts at the Bank of England and Bank of Ireland, or on the growing balances thereof, not exceeding in the whole the amount of the ways and means so granted. Out of the credits so granted to the Treasury issues shall be made to principal accountants from time to time on orders issued to the said Banks, signed by one of the Secretaries of the Treasury, or in their absence by such officer or officers as the Treasury may from time to time appoint to that duty; and the services or votes on account of which the issues may be authorized shall be set forth in such orders: Provided always, that the issues for Army and Navy and Air Force services shall be made under the general heads of 'Army', 'Navy' and 'Air Force' respectively.

Issues to principal accountants out of such credits.

Daily advices of issues to be sent to Comptroller and Auditor General.

A daily account of all issues made from the Exchequer accounts in pursuance of such orders shall be transmitted by the said Banks to the Comptroller and Auditor General.

[S.16 rep. 38 & 39 Vict. c.45. S.17 rep. 52 & 53 Vict. c.53.]

Banks at which accountants are to keep public moneys, etc.

18 The Treasury may from time to time determine at what banks accountants shall keep the public moneys entrusted to them, and they may also determine what accounts so opened in the names of public officers or accountants in the books of the Bank of England, of the Bank of Ireland, or of any other bank, shall be deemed public accounts; and on the death, resignation or removal of any such public officers or accountants the balances remaining at the credit of such accounts shall, upon the appointment of their successors, unless otherwise directed by law, vest in and be transferred to the public accounts of such successors at the said Banks, and shall not, in the event of the death of any such public officers or accountants, constitute assets of the deceased, or be in any manner subject to the control of their legal representatives.

Consolidation of public accounts at the Bank of England or Ireland.

19 It shall be lawful for the Treasury, whenever they shall consider it for the advantage of the public service, to direct that the accounts of any public officer or department, which by any Act or Acts are required to be kept under separate heads at the Bank of England or at the Bank of Ireland, shall be consolidated in such manner as they shall judge most convenient for the public service.

20 It shall be lawful for the Bank of England and Bank of Ireland, at the request of the Treasury, signified by one of their Secretaries, for the public convenience, to open and keep accounts of Government stock and annuities in the books of the said Banks under the official description of any public officer for the time being, without naming him; and the dividends on such stock and annuities may from time to time be received, and the stock and annuities or any part thereof to the credit of such account may from time to time be transferred, by the officer for the time being holding such office, as if such stock and annuities stood in his own name; and upon the death, resignation, or removal of any such public officer the stock and annuities standing to the credit of such account, and all dividends thereon, including any dividends not theretofore received, shall become vested in his successor in office, and be receivable and transferable accordingly. And any such public officer in whose official description such Government stock and annuities may be standing may by letter of attorney authorize the Bank of England or the Bank of Ireland, or all or any of their cashiers, to sell and transfer all or any part of the stock or annuities from time to time standing in the books of the said Banks on such account, and to receive the dividends due and to become due thereon; but no stock or annuities shall be sold or transferred at the said Banks under the authority of such general letter of attorney, except upon an order in writing, signed by one of the Secretaries of the Treasury, directed to the proper officers of the said Banks.

Accounts of stock may be opened in the books of the Banks under official description of public officers.

Authority to Banks to receive dividends and sell stock.

APPROPRIATION ACCOUNTS

[S.21 was repealed by the National Loans Act 1968 and was in effect replaced by Section 21 of that Act. Under Section 21 of the National Loans Act 1968 the Treasury are required to prepare an annual account of payments into and out of the Consolidated Fund and an annual account of payments into and out of the National Loans Fund, and to send them to the Comptroller and Auditor General not later than the end of November following the year to which they relate. The Comptroller and Auditor General is required to certify and report on the accounts and to lay copies of them, together with his Report, before each House of Parliament.]

Annual accounts of the appropriation of the several supply grants comprised in the Appropriation Act.

22 On or before the days specified in the respective columns of Schedule A¹ annexed to this Act, accounts of the appropriation of the several supply grants comprised in the Appropriation Act of each year shall be prepared by the several departments, and be transmitted for examination to the Comptroller and Auditor General and to the Treasury, and when certified and reported upon . . . they shall be laid before the House of Commons; and such accounts shall be called the 'appropriation accounts' of the moneys expended for the services to which they may respectively relate; and

¹Schedule A was replaced by the First Schedule to the Exchequer and Audit Departments Act, 1921. This in turn was modified by S.I. 1965, No. 1126. The revised Schedule is at the end of this Appendix.

the Treasury shall determine by what departments such accounts shall be prepared and rendered to the Comptroller and Auditor General; and the Comptroller and Auditor General shall certify and report upon such accounts . . . ; and the reports thereon shall be signed by the Comptroller and Auditor General: Provided always, and it is the intention of this Act, that the Treasury shall direct that the department charged with the expenditure of any vote under the authority of the Treasury shall prepare the appropriation account thereof: Provided also, that the term 'department' when used in this Act in connexion with the duty of preparing the said appropriation accounts, shall be construed as including any public officer or officers to whom that duty may be assigned by the Treasury.

Books and mode of keeping accounts may be prescribed.

23 A plan of account books and accounts, adapted to the requirements of each service, . . . shall be designed under the superintendence of the Treasury; and the Treasury may prescribe the manner in which each department of the public service shall keep its accounts.

Charge and discharge sides of account.

24 An appropriation account of supply grants shall exhibit on the charge side thereof the sum or sums appropriated by Parliament for the service of the financial year to which the account relates, and on the discharge side thereof the sums which may have actually come in course of payment within the same period; and no imprest or advance, of the application of which an account may not have been rendered to and allowed by the accounting department, shall be included on the discharge side thereof.

Balance sheet or statement showing the disposition of balance.

25 The department charged with the duty of preparing the appropriation account of a grant shall, if required so to do by the Comptroller and Auditor General, transmit to him, together with the annual appropriation account of such grant, a balance sheet so prepared as to show the debtor and creditor balances in the ledgers of such department on the day when the said appropriation account was closed, and to verify the balances appearing upon the annual appropriation account: Provided always, that the Comptroller and Auditor General may, if he thinks fit, require the said department to transmit to him in lieu of such balance sheet a certified statement showing the actual disposition of the balances appearing upon the annual appropriation account on the last day of the period of such account.

Appropriation account to be accompanied by statement explaining disposal of balances and cause of excess.

26 Every appropriation account when rendered to the Comptroller and Auditor General shall be accompanied by an explanation showing how the balance or balances on the grant or grants included in the previous account have been adjusted, and shall also contain an explanatory statement of any excess of expenditure over the grant or grants included in such account; and such statement, as well as the appropriation account, shall be signed by such department.

[S.27 was repealed by the *Exchequer and Audit Departments Act, 1921* and in effect replaced by Section 1 of that Act. The reference in Section 28 below to 'such examination' should be read accordingly.]

The Comptroller and Auditor General to have access to books of account, etc in the accounting departments.

28 In order that such examination¹ may as far as possible proceed, *pari passu*, with the . . . transactions of the several accounting departments, the Comptroller and Auditor General shall have free access, at all convenient times, to the books of account and other documents relating to the accounts of such department, and may require the several departments concerned to furnish him from time to time, or at regular periods, with accounts of the . . . transactions of such departments respectively up to such times or periods.

[Ss. 29, 30 *rep. Exchequer and Audit Departments Act, 1921* (11 & 12 *Geo. 5, c. 52*).]

Objections by Comptroller and Auditor General to be reported to the accounting department, and in certain cases to the Treasury.

31 If during the progress of the examination by the Comptroller and Auditor General hereinbefore directed any objections should arise to any item to be introduced into the appropriation account of any grant, such objections shall, notwithstanding such account shall not have been rendered to him, be immediately communicated by him to the department concerned; and if the objections should not be answered to his satisfaction by such department, they shall be referred by him to the Treasury, and the Treasury shall determine in what manner the items in question shall be entered in the annual appropriation account.

Reports of the Comptroller and Auditor General.

32 . . . If the Treasury shall not within the time prescribed by this Act present to the House of Commons any report made by the Comptroller and Auditor General on any of the appropriation accounts, or on the accounts of issues for Consolidated Fund services, the Comptroller and Auditor General shall forthwith present such report.

ACCOUNTS OTHER THAN APPROPRIATION ACCOUNTS

[S.33 was repealed by the *Exchequer and Audit Departments Act, 1921*, and is in effect replaced by Sections 2 and 3 of that Act. The reference in Section 34 below to 'the last preceding section' should therefore be read as applying to Section 3 of the 1921 Act.]

By whom such accounts shall be rendered.

34 The accounts which by the last preceding section the Treasury are empowered to subject to the examination of the Comptroller and Auditor General shall be rendered to him by the departments or officers who may be directed so to do by the Treasury; and the term 'accountant', when used in this and the following sections of this Act with reference to any such accounts, shall be taken to mean the department or officer that may be so required by the Treasury to render

¹ Applies to any examination made by the Comptroller and Auditor General of any accounts.

the same; and every accountant shall, at such times and in such form as the Treasury shall determine, render an account of his receipts and payments together with the authorities and vouchers relating thereto to the Comptroller and Auditor General; and it shall be the duty of the Treasury to inform him of the appointment of every such officer.

[Ss. 35, 36 *rep. Exchequer and Audit Departments Act, 1921 (11 & 12 Geo. 5, c.52).*]

Vouchers may be allowed, though not stamped.

37 It shall be lawful for the Comptroller and Auditor General, in the examination of any accounts, to admit and allow, in cases where it shall appear to him to be reasonable and expedient for the public service, vouchers for any moneys expressed therein, although such vouchers be not stamped according to law.

[S.38 *rep. Exchequer & Audit Departments Act, 1921 (11 & 12 Geo. 5, c.52).*]

Statements of account to be recorded in office of Comptroller, etc.

39 . . . every statement of an account made out and certified as aforesaid,¹ shall be recorded in the office of the Comptroller and Auditor General, and the recording of such statement of account in his office shall be as valid and effectual for enabling any process in the law against the party chargeable, and any other proceeding for the recovery of any balances and any interest thereon, and for all other purposes, as the enrolment of a declared account in the office of Her Majesty's Remembrancer would have been if this Act had not been passed; and a copy, certified under the hands of the Comptroller and Auditor General, of the record of any such statement of account, shall be taken notice of and proceeded upon in the like manner as the record of any such declared account, enrolled as aforesaid, might have been if this Act had not been passed.

[S.40 *was repealed by the Exchequer and Audit Departments Act, 1921, and in effect replaced by Section 4 of that Act, relating to stock and store accounts.*]

Payment over of balances on accounts, and recovery of balances improperly retained.

41 Every accountant shall, on the termination of his charge as such accountant, or in case of a deceased accountant his representatives shall forthwith pay over any balance of public money then due to the public in respect of such charge to the public officer authorized to receive the same; and in all cases in which it shall appear to the Comptroller and Auditor General that balances of public money have been improperly and unnecessarily retained by an accountant, he shall report the circumstances of such cases to the Treasury; and the Treasury shall take such measures as to them may seem expedient for recovering by legal process, or by other lawful

¹The words 'certified as aforesaid' should here be linked with Section 3(2) of the Exchequer and Audit Departments Act, 1921.

ways and means, the amount of such balance or balances, together with interest thereon, upon the whole or any part of such balance or balances, for such period of time and at such rate, not exceeding five pounds per centum per annum, as to the Treasury may appear just and reasonable.

42 In all cases where any estate belonging to a public accountant shall be sold under any writ of extent or any decree or order of the Courts of Chancery or Exchequer, and the purchaser thereof or of any part thereof shall have paid his purchase money into the hands of any public accountant authorized to receive the same, such purchaser shall be wholly exonerated and discharged from all further claims of Her Majesty for or in respect of any debt arising upon the account of such accountant, although the purchase money so paid be not sufficient in amount to discharge the whole of the said debt.

Provision where the estate of a public accountant is sold under writ of extent, etc.

43 In all cases in which an accountant may be dissatisfied with any disallowance or charge in his accounts made by the Comptroller and Auditor General, such accountant shall have a right of appeal to the Treasury, who, after such further investigation as they may consider equitable, whether by viva voce examination or otherwise, may make such order, directing the relief of the appellant wholly or in part from the disallowance or charge in question, as shall appear to them to be just and reasonable; and the Comptroller and Auditor General shall govern himself accordingly.

Accountants to have in all cases of disallowance or charge a right of appeal to the Treasury.

44 It shall be lawful for the Treasury from time to time, if they see fit so to do, to dispense with the transmission to the Comptroller and Auditor General of any accounts not being accounts of the receipt and expenditure of public money, and with the audit of such accounts by him, any law, usage, or custom to the contrary notwithstanding: Provided always, that copies of any Treasury minutes dispensing with the audit of such accounts shall be laid before Parliament.

The Treasury may dispense with the examination of certain accounts by the Comptroller and Auditor General.

45 Nothing in this Act contained shall extend to abridge or alter the rights and powers of Her Majesty to control, suspend, or prevent the execution of any process or proceeding, under this Act or otherwise, for recovering money due to the Crown.

Saving of existing rights of the Crown.

46 . . . all accounts required or directed to be audited by the Board of Audit shall be audited according to the provisions of this Act: But nothing herein shall be deemed to confer upon the Treasury the powers with respect to audit vested in the Admiralty by the Greenwich Hospital Act, 1865. . . .

Audit of accounts directed to be audited by Board of Audit. 28 & 29 Vict. c.73.

[S.47 *rep. 56 & 57 Vict. c.14 (S.L.R.).*]

THE EXCHEQUER AND AUDIT DEPARTMENTS ACT, 1921
11 and 12 Geo. 5, c.52

An Act to amend the Exchequer and Audit Departments Acts, 1866 and 1889,¹
[19th August, 1921.]

*Examination of
appropriation
accounts.*

- 1 (1) Every appropriation account shall be examined by the Comptroller and Auditor General on behalf of the House of Commons, and in the examination of such accounts the Comptroller and Auditor General shall satisfy himself that the money expended has been applied to the purpose or purposes for which the grants made by Parliament were intended to provide and that the expenditure conforms to the authority which governs it.
- (2) The Comptroller and Auditor General, after satisfying himself that the vouchers have been examined and certified as correct by the accounting department, may, in his discretion and having regard to the character of the departmental examination, in any particular case admit the sums so certified without further evidence of payment in support of the charges to which they relate:
Provided that, if the Treasury desire the vouchers or any of them to be examined in greater detail, the Comptroller and Auditor General shall take action accordingly.

(3) If at any time the Comptroller and Auditor General is required by the Treasury to ascertain whether any expenditure included in any appropriation account is supported by the authority of the Treasury, he shall examine that expenditure with that object, and shall report to the Treasury any expenditure which appears upon the examination to have been incurred without such authority, and any such unauthorized expenditure shall, unless sanctioned by the Treasury, be regarded as not being properly chargeable to a Parliamentary grant, and shall be so reported to the House of Commons.

(4) The Comptroller and Auditor General shall report to the House of Commons any important change in the extent or character of any examination made by him.

*Examination of
accounts of
receipts of
revenue.*

- 2 (1) The accounts of the receipt of revenue by the Departments of Customs and Excise, and Inland Revenue, and the accounts of every receiver of money which is by law payable into the Exchequer, shall be examined by the Comptroller and Auditor General on behalf of the House of Commons in order to ascertain that adequate regulations and procedure have been framed to secure an effective check on the assessment, collection, and proper allocation of revenue, and the Comptroller and Auditor General shall satisfy himself that any such regulations and procedure are being duly carried out.

¹There was no separate E. & A.D. Act of 1889; the Army and Navy Audit Act, 1889, repealed by the above Act, and the E. & A.D. Act, 1866, were cited collectively, under Section 2 of the 1889 Act, as the E. & A.D. Acts, 1866 and 1889.

(2) The Comptroller and Auditor General shall make such examination as he thinks fit with respect to the correctness of the sums brought to account in respect of such revenue as aforesaid, and shall, together with his report on the appropriation accounts of the departments concerned, present to the House of Commons a report on the results of any such examination.

*Examination of
other cash
accounts.*

3 (1) The Comptroller and Auditor General shall examine, if so required by the Treasury and in accordance with any regulations made by the Treasury in that behalf, the accounts of all principal accountants and any other accounts, whether relating directly to the receipt or expenditure of public funds or not, which the Treasury may, by minute to be laid before Parliament, direct.

(2) The Comptroller and Auditor General shall examine any such accounts so required to be examined by him as aforesaid with as little delay as possible, and when the examination of each account has been completed shall sign a certificate to the account recording the result of his examination, and a copy of the account so certified shall be sent to the accountant.

(3) If in the course of any such examination any question arises between the Comptroller and Auditor General and the accountant, it shall be referred to the Treasury, whose decision thereon shall be final.

(4) A list of all accounts so certified shall be submitted by the Comptroller and Auditor General to the Treasury not later than the first week in February and the first week in August in every year.

*Examination of
stock and store
accounts.*

4 (1) Stock or store accounts shall be kept in all cases where, in the opinion of the Treasury, the receipt, expenditure, sale, transfer or delivery of any securities, stamps, provisions, or stores the property of His Majesty in any Government department is of sufficient amount or character to require the keeping of such accounts, and the Comptroller and Auditor General shall, on behalf of the House of Commons, examine any such accounts so required to be kept in order to ascertain that adequate regulations have been made for control and stocktaking, and that the regulations are duly enforced and that any requirements of the Treasury have been complied with.

(2) The Comptroller and Auditor General shall report to the House of Commons the result of any such examination.

*Preparation and
examination of
trading, etc
accounts.*

5 (1) There shall be prepared in each financial year, in such form and by such Government departments as the Treasury may from time to time direct or approve, statements of account showing the income and expenditure of any shipping, building, manufacturing, trading, or commercial services conducted by the department, together with such balance

sheets and statements of profit and loss and particulars of costs as the Treasury may require.

(2) All such accounts shall be transmitted to the Comptroller and Auditor General and presented to Parliament on or before the dates specified in that behalf in the First Schedule to this Act.

(3) All such accounts as aforesaid shall be examined by the Comptroller and Auditor General on behalf of the House of Commons and in his examination he shall have regard to any programme of works, shipbuilding or manufacture which may have been laid before Parliament, and shall certify and report on them to the House of Commons.

6 The provisions of the First Schedule to this Act, relating to supply grants, shall be substituted for Schedule A to the Exchequer and Audit Departments Act, 1866 (in this Act referred to as 'the principal Act'), which specifies the dates on or before which accounts of the appropriation of supply grants comprised in the Appropriation Act of each year are to be prepared by the several departments and transmitted for examination to the Comptroller and Auditor General and to the Treasury, and section 22 of the principal Act shall have effect accordingly.

[S.7 *rep. Miscellaneous Financial Provisions Act, 1946 (9 & 10 Geo. 6, c.40).*]

Staff of Department.

8 (1) The Comptroller and Auditor General may appoint such officers and servants as he may, with the sanction of the Treasury, determine.

(2) There shall, out of moneys provided by Parliament, be paid to the officers and servants appointed under this section such salaries as the Treasury may determine.

[Subsection (3) of Section 8 was repealed by the *Exchequer and Audit Departments Act, 1957 (5 and 6 Eliz. 2, c.45)*. Section 2 of that Act substituted for the repealed subsection a provision one effect of which is to permit a principal officer of the Exchequer and Audit Department, if authorized for the purpose by the Comptroller and Auditor General, to do anything which under any act is required to be done by the latter. The provision, however, imposes limitations on the exercise by the principal officer concerned of any authority given to him by the Comptroller and Auditor General to certify or report on accounts for the House of Commons, or for each House of Parliament.]

[Section 9 set out minor amendments to the *Exchequer and Audit Departments Act, 1866*. They are incorporated in the version of that Act shown above.]

*These functions were transferred to the Civil Service Department by Article 2(1) of the Minister for the Civil Service Order, 1968 (S.I. 1968, No. 1656).

First Schedule

SCHEDULE TO BE SUBSTITUTED FOR SCHEDULE A TO PRINCIPAL ACT

Account	Dates after the termination of every Financial Year to which the Accounts relate on or before which they are to be made up and submitted		
	To the Comptroller and Auditor General by the Departments ¹	To the Treasury by the Comptroller and Auditor General	To the House of Commons by the Treasury
<i>Supply Grants</i>			
Defence Services ²	31 Dec.	31 Jan.	15 Mar.
Civil Services and Revenue Departments	30 Nov.	15 Jan.	31 Jan.
All other services voted in Supply			
<i>Trading, etc., Accounts</i>			
Army Ordnance Factories	31 Jan.	15 Mar.	31 Mar.
Navy Expense and Manufacturing accounts			
All other shipbuilding, manufacturing, trading or commercial accounts	30 Nov.	15 Jan.	31 Jan.

If Parliament is then sitting, and if not sitting, then within one week after assemblies

¹The dates for submission of accounts (except Defence Services) to the Comptroller and Auditor General have been modified in practice to the dates indicated below on the recommendation of the Public Accounts Committee, or for other reasons.

Supply grants
Civil Services and Revenue Departments. Revised date 30 September.
All other Services voted in Supply.

Trading, etc. Accounts
Army Ordnance Factories, Navy Expense and Manufacturing Accounts. 31 December (to conform to the date for Defence Services Accounts).
All other shipbuilding, manufacturing, trading or commercial accounts. 31 August

²Substituted S.I. 1965, No. 1126.

Extracts from the National Loans Act 1968

*The National
Loans Fund.*

1 (1) The Treasury shall have an account at the Bank of England, to be called the National Loans Fund.

(2) Money paid into the National Loans Fund shall form one general fund to meet all outgoings from the Fund, and daily statements of all money paid into and out of the Fund, in such form as the Treasury may direct, shall be sent by the Bank of England to the Comptroller and Auditor General.

(3) The Comptroller and Auditor General shall from time to time at the request of the Treasury grant credits on the National Loans Fund for sums payable out of the Fund under this or any other Act and, subject to section 18 of this Act, all payments out of the National Loans Fund shall be made by the Treasury in accordance with credits so granted.

*1936 c.34,
1866 c.39.*

(4) Section 34 of the Finance Act 1936 (signature of requisitions for credits under the Exchequer and Audit Departments Act 1866) shall apply to a request for a credit under subsection (3) above as it applies to such a requisition.

1911 c.13.

(5) In section 1(2) of the Parliament Act 1911 (which defines a Money Bill as one dealing exclusively with subjects which include the imposition of charges on the Consolidated Fund) after 'Consolidated Fund' there shall be inserted 'the National Loans Fund'.

1889 c.63.

(6) In section 22 of the Interpretation Act 1889 (definition of financial year) after 'Consolidated Fund' there shall be inserted 'the National Loans Fund'.

(7) No provision in any Act requiring money to be paid into the Exchequer shall be construed as requiring or authorizing money to be paid into the National Loans Fund.

(8) Where the intention is that money be paid into the Consolidated Fund it shall be sufficient to enact that it be paid into the Consolidated Fund (instead of enacting that it be paid into the Exchequer).

[Sections 2 to 11 omitted.]

Power of Treasury to borrow.

National debt

- 12 (1) Any money required—
 (a) for providing the sums required to meet any excess of payments out of the National Loans Fund over receipts into the National Loans Fund, and
 (b) for providing any necessary working balance in the National Loans Fund,
 may be raised in such manner and on such terms and conditions as the Treasury think fit, and money so raised shall be paid into the National Loans Fund.
- (2) For the purpose of raising money under this section the Treasury may create and issue such securities, at such rates of interest and subject to such conditions as to repayment, redemption and other matters (including provision for a sinking fund) as they think fit.
- (3) For the avoidance of doubt it is hereby declared that the power to raise money under this section extends to raising money either within or outside the United Kingdom and either in sterling or in any other currency or medium of exchange, whether national or international.
- (4) The principal of and interest on any money borrowed under this section, and of any money due under securities issued under this section, and—
 (a) any sums required to be set aside for the purpose of any sinking fund established under this section,
 (b) any other sums to be paid by the Treasury in accordance with the terms on which they borrow,
 (c) any expenses incurred in accordance with the raising of money or the issue, repayment or redemption of securities under this section,
 shall be charged on and paid out of the National Loans Fund with recourse to the Consolidated Fund.
- (5) The power to raise money under this section extends—
 (a) to raising money through the Post Office, and in particular by the issue through the Post Office of national savings certificates, and by the issue of the stamps and tokens described in section 35 of the Finance Act 1961 (national savings stamps and gift tokens), and
 (b) to raising money by the issue of Treasury Bills under the Treasury Bills Act 1877.
- (6) In raising money under this section by the creation and issue—
 (a) of tax reserve certificates, national development bonds, or premium savings bonds, or
 (b) of national savings certificates,
 any stock of forms prepared before the passing of this Act may be employed, pending the printing and issue of new forms, notwithstanding that the forms were prepared by reference to the raising of money under the National Loans Act 1939 or, as the case may be, section 7 of the National Debt Act 1958, and any security so issued shall be valid and effectual as if purporting to be issued in pursuance of this section instead of purporting to be issued in pursuance of the said Act of 1939 or the said Act of 1958.

1939 c.117.
 1958 c.6
 (7 & 8 Eliz. 2.
 c.6).

(7) The Bank of England may lend any sums which the Treasury have power to borrow under this section, and section 1 of the Bank of England Act 1819 (loans by Bank to Crown to require authority of Parliament) shall cease to have effect.

[Finance Act 1969 (ch. 32)—

52.—(1) It is hereby declared that the power to raise money under Section 12 of the National Loans Act 1968 includes power to raise money through trustee savings banks as defined in the Trustee Savings Banks Act 1954 or through any bank or department certified by the Treasury for the purposes of Section 9 of the Finance Act 1956 (savings banks under local Acts).

Post Office Act 1969 (ch. 48)—

109. The power conferred by Section 12 of the National Loans Act 1968 on the Treasury to raise money shall extend to raising money under the auspices of the Director of Savings and, in particular, by the issue, under his auspices, of national savings certificates; and, accordingly, as from the appointed day, references in Sections 19(1) (interest on United Kingdom savings certificates to be exempt from tax) and 193(4) (interest on certain Ulster, colonial and other savings certificates issued to local residents to be exempt from tax) of the Income Tax Act 1952 to savings certificates issued by the Treasury through the Post Office shall be construed as including references to savings certificates issued by the Treasury under the auspices of the Director of Savings.]

Existing national debt.

13 (1) All payments to be made in respect of existing national debt, being payments which are charged on the Consolidated Fund, shall be charged on and paid out of the National Loans Fund.

(2) Subsection (1) of this section shall not be in derogation of the said charge on the Consolidated Fund, or of the provisions of section 1 of the Consolidated Fund Act 1816 (which makes the national debt a prior charge on the Consolidated Fund), and accordingly all such payments shall be charged on the National Loans Fund with recourse to the Consolidated Fund.

(3) In this section 'existing national debt' means all securities of Her Majesty's Government in the United Kingdom outstanding on 31 March 1968, including Treasury Bills and Ways and Means advances, and all other liabilities in respect of money borrowed by Her Majesty's Government in the United Kingdom and outstanding on 31 March 1968, and those liabilities include, as well as payments in respect of principal and interest, payments for the purpose of any sinking fund and any other payments due under the terms on which any such security was issued, or any such money was borrowed.

(4) Any expenses incurred in connection with the raising of money or the issue, repayment or redemption of securities

1816 c.96.

1939 c.117

which represent expenses incurred, whether before or after the coming into force of this section, in respect of existing national debt shall be paid out of the National Loans Fund, with recourse to the Consolidated Fund.

(5) Section 4 of the National Loans Act 1939 (power of trustees and others to invest in government securities) shall cease to have effect, but not so as to invalidate anything done before the coming into force of this Act.

(6) Schedule 5 to this Act shall have effect for the purpose of making amendments consequential on this and the last foregoing section.

(7) Any reference in any enactment passed before this Act to securities which are charged on the Consolidated Fund shall include a reference to securities which are charged on the National Loans Fund with recourse to the Consolidated Fund; and any reference in any such enactment to securities which are directly charged on the Consolidated Fund shall be construed in a corresponding manner.

[Section 14 omitted.]

Payments out of
Consolidated
Fund for
service of
national debt.

1866 c.39.

15 (1) The Treasury shall from time to time pay out of the Consolidated Fund into the National Loans Fund sums equal to the excess of the amounts required to meet charges on the National Loans Fund for the service of national debt over the amounts paid into the National Loans Fund which represent interest on loans by the Government or which, in the opinion of the Treasury, ought to be treated in the same way as interest on loans by the Government.

(2) Notwithstanding the provisions of section 13 of the Exchequer and Audit Departments Act 1866, payments under this section shall be effected without the granting of credits by the Comptroller and Auditor General.

(3) In this section 'charges on the National Loans Fund for the service of national debt' means all payments to be made out of the National Loans Fund which represent—

- (a) interest on debt charged on the National Loans Fund,
- (b) expenses incurred in connection with the raising of money or the issue, repayment or redemption of securities,
- (c) money required for the purpose of carrying out any arrangement under the last foregoing section, or
- (d) sums payable under subsection (6) or (7) of section 16 of this Act.

[Sections 16 and 17 omitted.]

Relations of the two Funds

Daily balancing of
Consolidated
Fund.

18 (1) At the commencement of business on 1 April 1968 the Treasury shall pay out of the Consolidated Fund into the National Loans Fund any balance in the Consolidated Fund at the close of business on the last previous working day.

(2) On any day (from 1 April 1968 onwards) on which payments into the Consolidated Fund exceed payments out of

the Consolidated Fund the Treasury shall pay out of the Consolidated Fund into the National Loans Fund sums equal to that excess.

(3) On any day (from 1 April 1968 onwards) on which payments out of the Consolidated Fund exceed payments into the Consolidated Fund the Treasury shall pay out of the National Loans Fund into the Consolidated Fund sums equal to that excess.

(4) All payments made on any day (from 1 April 1968 onwards) into the Consolidated Fund by way of payment into the Exchequer Account at the Belfast branch of the Bank of Ireland shall be paid at the close of business on that day into the Exchequer Account at the Bank of England.

(5) Notwithstanding the provisions of section 13 of the Exchequer and Audit Departments Act 1866 and of section 1(3) of this Act, payments under this section shall be effected without the granting of credits by the Comptroller and Auditor General.

1866 c.39.

Liabilities and
assets of National
Loans Fund.

19 (1) The excess for the time being of the liabilities of the National Loans Fund over its assets shall be a liability of the Consolidated Fund to the National Loans Fund.

(2) Sums paid under section 15 of this Act shall be deemed for all purposes to be in satisfaction of the payment of interest in respect of the liability of the Consolidated Fund to the National Loans Fund imposed by subsection (1) above.

(3) The Treasury shall prepare a statement in such form as they see fit showing, as at the commencement of business on 1 April 1968, the liabilities of the National Loans Fund and its assets, including the liability of the Consolidated Fund to the National Loans Fund imposed by subsection (1) above, and shall lay copies of the statement before each House of Parliament not later than 31 December 1968.

(4) For the purposes of this section the liabilities of the National Loans Fund shall be the nominal amount of the debt outstanding and charged to that Fund, as determined by the Treasury, and the assets of that Fund shall be the amount of principal, as so determined, of advances, loans and other payments outstanding and due to that Fund.

[Section 20 omitted.]

Supplemental

21 (1) For the financial year ending on 31 March 1969 and each subsequent financial year the Treasury shall prepare in such form as they may prescribe an account of payments into and out of the Consolidated Fund and an account of payments into and out of the National Loans Fund during the year.

(2) The Treasury shall send the accounts to the Comptroller and Auditor General not later than the end of November following the end of the financial year to which they relate, and the Comptroller and Auditor General shall examine, certify and report on the accounts and lay copies of them, together with his report, before each House of Parliament.

Audit and
accounts.

(3) For each such financial year the Treasury shall also prepare in such form as they may determine statements containing additional information regarding the transactions, assets and liabilities of the Consolidated Fund and of the National Loans Fund, and shall lay copies of the statements before each House of Parliament not later than 31 December next following the end of the financial year to which the statements relate.

(4) No accounts or statements shall be prepared for any financial year after that ending on 31 March 1968 under—
 section 22 of the Consolidated Fund Act 1816,
 section 2 of the Public Revenue and Consolidated Fund Charges Act, 1854,
 section 21 of the Exchequer and Audit Departments Act 1866, or
 section 4 of the Sinking Fund Act 1875.

1816 c.98.
1854 c.94.

1866 c.39.

1875 c.45.

[Sections 22 to 24, and Schedules, omitted.]

Extracts from a Treasury Minute (14.8.1872)

Extracts from a Treasury Minute (14.8.1872)

[The Accounting Officer] signs the Appropriation Account, and thereby makes himself responsible for its correctness. This Officer is the person whom Parliament and the Treasury regard as primarily responsible for the balance in the custody of the Department, although he himself may not hold one farthing of it...

It cannot be too distinctly announced that responsibility for the proper conduct of financial business cannot be delegated to the subordinate officers who may be placed in charge of the Departmental Accounts. The signature appended to the Appropriation Account would be otherwise an idle form, calculated only to mislead Parliament.

... Technical knowledge of accounts is not necessary to enable the representative of the Department, as above described, to discharge himself of the responsibility which his signature implies...

... It is incumbent upon such officers, before making or allowing payments, to satisfy themselves, by means of statements duly certified by the officers entrusted with the detailed duties of the account, as to the correctness and propriety of the transactions...

If they can show that they have not acted except on such statements, that they have not failed in a due exercise of their own common sense and administrative experience, and that in case of serious doubt or difficulty they have consulted the officers deputed by this Board for the purpose, they will be considered to have discharged themselves of their responsibility.

APPENDIX NO. 3

FORM 3

UNIVERSITY / COLLEGE

SPECIFIC INCOME		
9.	Income from the Manpower Services Commission for special employment measures	
10.	Research Grants and Contracts	
a.	Grants from Research Councils	
b.	Contracts from Research Councils	
c.	From other UK Central Government bodies	
d.	From UK Local Authorities	
e.	From UK Public Corporations	
f.	From other UK industry and commerce	
g.	From UK-based charitable bodies	
h.	From overseas	
j.	From other sources	
k.	Total (= 10a + +10j)	
11.	Other Services Rendered	
a.	For special and short courses (from all sources)	
b.	Course validation fees (from all sources)	
c.	From UK Central Government Bodies	
d.	From UK Hospital Authorities	
e.	From other UK universities	
f.	Other	
g.	Total (=11a+ +11f)	
12.	Total General And Specific Income (= sum of Heads 1-11)	
13.	Withdrawals from unexpended balances	
a.	Earmarked grants balances	
b.	Reserves and other balances	
c.	TOTAL (= 13a + 13b)	
14.	DEFICIT ON YEAR'S WORKING	
15.	GRAND TOTAL (= sum of Heads 12, 13 and 14)	

UNIVERSITY / COLLEGE

GENERAL EXPENDITURE	SALARIES OF WAGES OF:										TOTAL EXPENDITURE £
	STAFF ON NON-CLINICAL ACADEMIC OR RELATED SALARY SCALES		CLINICAL STAFF	TECHNICAL STAFF	SECRETARIAL AND CLERICAL STAFF	OTHER STAFF	ALL STAFF	OTHER EXPENDITURE £	TOTAL EXPENDITURE £		
	TEACHERS & RESEARCHERS	OTHER									
	1	2	3	4	5	6	7	8	9		
	COST CENTRE CODE										
	ACADEMIC DEPARTMENTS (Cont'd)										
(26) Architecture											
(27) Other Technologies											
(28) Planning											
(29) Geography											
(30) Law											
(31) Other social studies											
(32) Business management studies											
(33) Accountancy											
(34) Language-based studies											
(35) Humanities											
(36) Creative Arts											
(37) Education											
TOTAL ACADEMIC DEPTS (1-37)											
(45) Adult Education (Responsible Body)											
(46) Adult Education (Other)											
TOTAL ACADEMIC DEPTS (1-37, 45 & 46) AND ADULT EDUCATION											

UNIVERSITY / COLLEGE

GENERAL EXPENDITURE	SALARIES OF WAGES OF:								TOTAL EXPENDITURE	
	STAFF ON NON-CLINICAL ACADEMIC OR RELATED SALARY SCALES		CLINICAL STAFF	TECHNICAL STAFF	SECRETARIAL AND CLERICAL STAFF	OTHER STAFF	ALL STAFF	OTHER EXPENDITURE		
	TEACHERS & RESEARCHERS	OTHER								
COST CENTRE CODE	1	2	3	4	5	6	7	8	9	
2. ACADEMIC SERVICES										
(a) Libraries										
(1) Operating costs (Includ- ing salaries & wages)										
(11) Books										
(111) Periodicals										
(1v) Other documents										
(v) Binding										
(vi) Total (=sum(i) - (v))										
(b) Museums										
(c) Observatories										
(c) Central Computers										
(1) In own Institution										
(11) In other Institutions										
(e) Central Educational Technology Units										
(f) Other										
(g) Total (= 2a + + 2f)										
3. GENERAL EDUCATIONAL EXPENDITURE										
(a) Examinations										
(b) Fellowships, prizes etc										
(1) Undergraduate										
(11) Postgraduate										
(c) Other										
(d) Total (=3a + 3b + 3c)										

RESEARCH GRANTS AND CONTRACTS EXPENDITURE AND INCOME

COST CENTRE	EXPENDITURE ON LOCAL DIRECT COSTS					TOTAL INCOME ²
	TOTAL EXPENDITURE ¹	SALARIES AND WAGES		OTHER EXPENDITURE		
		RESEARCH COUNCIL GRANTS	OTHER RESEARCH GRANTS & CONTRACTS	OF RESEARCH COUNCIL GRANTS	OF OTHER RESEARCH GRANTS & CONTRACTS	
	1	2	3	4	5	6
a) ACADEMIC DEPARTMENTS						
1. Clinical Medicine						
2. Clinical Dentistry						
3. Pre-Clinical Studies						
4. Anatomy/Physiology						
5. Pharmacology						
6. Pharmacy						
7. Nursing						
8. Other Studies Allied to Medicine						
9. Biochemistry						
10. Psychology						
11. Other Biological Sciences						
12. Agriculture and Forestry						
13. Veterinary Science						
14. Chemistry						
15. Physics						
16. Other Physical Sciences						
17. Mathematics						
18. Computing						
19. General Engineering						
20. Chemical Engineering						
21. Civil Engineering						
22. Electrical/Electronic Engineering						
23. Mechanical, Aero & Production Engineering						
24. Mineral Engineering						
25. Metallurgy / Materials						
26. Architecture						
27. Other Technologies						
28. Planning						
29. Geography						
30. Law						
31. Other Social Studies						
32. Business Management						
33. Accountancy						
34. Language-based Studies						
35. Humanities						
36. Creative Arts						
37. Education						
TOTAL ACADEMIC DEPTS (1-37)						
45. Adult Education (Responsible Body)						
46. Adult Education (Other)						
TOTAL ALL ACADEMIC DEPTS (1-37, 45, & 46)						
b). ACADEMIC SERVICES						
1. Libraries						
2. Museums						
3. Observatories						
4. Central Computers						
5. Central Education Tech.Units						
6. Other Services						
TOTAL ACADEMIC SERVICES						
c). OTHER						
d). TOTAL (= a + b + c)						

NOTES: 1. Figures in Column 1 must equal the sum of columns 2-5

2. Figures in Column 6 must equal the sum of columns 7-15 (Page 2)

RESEARCH GRANTS AND CONTRACTS EXPENDITURE AND INCOME

COST CENTRE	SOURCES OF INCOME								
	RESEARCH COUNCIL GRANTS	RESEARCH COUNCIL CONTRACTS	OTHER UK CENTRAL GOVT.	UK LOCAL AUTH'S	UK PUBLIC CORP'NS	OTHER UK INDUSTRY AND COMMERCE	UK BASED CHARIT-ABLE BODIES	OVERSEAS	ALL OTHER SOURCES
	7	8	9	10	11	12	13	14	15
a) ACADEMIC DEPARTMENTS									
1. Clinical Medicine									
2. Clinical Dentistry									
3. Pre-Clinical Studies									
4. Anatomy/Physiology									
5. Pharmacology									
6. Pharmacy									
7. Nursing									
8. Other Studies Allied to Medicine									
9. Biochemistry									
10. Psychology									
11. Other Biological Sciences									
12. Agriculture and Forestry									
13. Veterinary Science									
14. Chemistry									
15. Physics									
16. Other Physical Sciences									
17. Mathematics									
18. Computing									
19. General Engineering									
20. Chemical Engineering									
21. Civil Engineering									
22. Electrical/Electronic Engineering									
23. Mechanical, Aero & Production Eng.									
24. Mineral Engineering									
25. Metallurgy / Materials									
26. Architecture									
27. Other Technologies									
28. Planning									
29. Geography									
30. Law									
31. Other Social Studies									
32. Business Management									
33. Accountancy									
34. Language-based Studies									
35. Humanities									
36. Creative Arts									
37. Education									
TOTAL ACADEMIC DEPTS (1-37)									
45. Adult Education (Responsible Body)									
46. Adult Education (Other)									
TOTAL ALL ACADEMIC DEPTS (1-37, 45, 46)									
b) ACADEMIC SERVICES									
1. Libraries									
2. Museums									
3. Observatories									
4. Central Computers									
5. Central Education Tech.Units									
6. Other Services									
TOTAL ACADEMIC SERVICES									
c) OTHER									
d) TOTAL (= a + b + c)									

NOTE: The sum of columns 7-15 must equal column 6 (Page 1)

OTHER SERVICES RENDERED EXPENDITURE AND INCOME

COST CENTRE	EXPENDITURE ON LOCAL DIRECT COSTS			TOTAL INCOME
	TOTAL EXPENDITURE	SALARIES AND WAGES	OTHER EXPENDITURE	
	16	17	18	
a) ACADEMIC DEPARTMENTS				
1. Clinical Medicine				
2. Clinical Dentistry				
3. Pre-Clinical Studies				
4. Anatomy/Physiology				
5. Pharmacology				
6. Pharmacy				
7. Nursing				
8. Other Studies Allied to Medicine				
9. Biochemistry				
10. Psychology				
11. Other Biological Sciences				
12. Agriculture and Forestry				
13. Veterinary Science				
14. Chemistry				
15. Physics				
16. Other Physical Sciences				
17. Mathematics				
18. Computing				
19. General Engineering				
20. Chemical Engineering				
21. Civil Engineering				
22. Electrical/Electronic Engineering				
23. Mechanical, Aero & Production Engineering				
24. Mineral Engineering				
25. Metallurgy / Materials				
26. Architecture				
27. Other Technologies				
28. Planning				
29. Geography				
30. Law				
31. Other Social Studies				
32. Business Management				
33. Accountancy				
34. Language-based Studies				
35. Humanities				
36. Creative Arts				
37. Education				
TOTAL ALL ACADEMIC DEPTS (1-37)				
45. Adult Education (Responsible Body)				
46. Adult Education (Other)				
TOTAL ACADEMIC DEPTS (1-37, 45, & 46)				
b) ACADEMIC SERVICES				
1. Libraries				
2. Museums				
3. Observatories				
4. Central Computers				
5. Central Education Tech.Units				
6. Other Services				
TOTAL ACADEMIC SERVICES				
c) OTHER				
d) TOTAL (= a + b + c)				

NOTES: 1. Figures in Column 16 must be the total of those in columns 17 and 18

FORM 3 TABLE 4

1986/87

CATERING AND RESIDENCE ACCOUNTS

UNIVERSITY/COLLEGE _____

Number of Residential places for staff and students

INCOME	University Catering	Student Residences inclusive of Board	Student Residences exclusive of Board	TOTAL
	1	2	3	4(=1+2+3)
1. Sales receipts/residence fees				
2. Non-student lettings, conference and outside functions				
3. Net contributions from other units				
4. Miscellaneous, including College fees				
5. TOTAL INCOME (1 to 4)				
EXPENDITURE CHARGED TO USERS				
6. Cost of Provisions				
7. Labour Costs				
8. Heat, light, power and water				
9. Internal maintenance of building				
10. Replacement and repair of movable furniture and equipment; eg bedding and bed linen				
11. Miscellaneous				
12. Loan charges for: (a) UGC supported scheme (b) Other schemes				
13. Other expenditure charged to users				
14. TOTAL EXPENDITURE CHARGED TO USERS (6-13)				
15. TOTAL EXPENDITURE CHARGED TO OTHER ACCOUNTS				
Surplus/Deficit (5 minus 14). 16. Deficit to be shown in brackets				

Is the "Column 4" *SURPLUS/DEFICIT* to be:- (a) carried forward* (b) Surplus transferred to Item 8a (i) of Table 1* (c) Deficit transferred to Subhead 6e of Table 2* (d) Treated in an other way - please specify

.....

.....

Footnote: * Delete whichever does not apply.

FORM 3 TABLE 5

BALANCES, PROVISIONS AND RESERVES

UNIVERSITY / COLLEGE

	BALANCE AT 1 AUGUST	ADDED DURING YEAR			WITHDRAWN DURING YEAR		BALANCE AT 31 JULY
		INCLUDED IN TABLE 2		OTHER ¹	INCLUDED IN TABLE 1 HEADS 13, 14	OTHER ²	
		Expenditure in* Heads 1-17	Additions to* Balances Heads 18-19				
1. BALANCES OF UGC EARMARKED GRANTS (A)	1 -	2	3	4	5	6	7
2. BALANCES OF RETAINED PROCEEDS OF SALES (B)							
3. PROVISIONS (C)							
4. RESERVES (D)							
5. ACCUMULATED SURPLUS/DEFICIT							
6. OTHER BALANCES (E)							
7. TOTAL							

1. For example, monies not included in Table 1 as Income.

2. For example, monies included in Table 2 (to match column 2).

*Please note these columns were previously the opposite way round.

FORM 3 TABLE 5 (SUPPLEMENT A)

BALANCES OF UGC EARMARKED GRANTS

UNIVERSITY / COLLEGE

	BALANCE AT 1 AUGUST	ADDED DURING YEAR			WITHDRAWN DURING YEAR		BALANCE AT 31 JULY
		INCLUDED IN* Expenditure Heads 1-17	IN TABLE 2 Additions to Balances Heads 18-19	OTHER ¹	INCLUDED IN TABLE 1 HEADS 13, 14	OTHER ²	
	1	2	3	4	5	6	7
Maintenance/Minor Works							
X							

1. For example, monies not included in Table 1 as Income.
 2. For example, monies included in Table 2 (to match column 2).

* Please note these columns were previously the opposite way round.

RETAINED PROCEEDS OF SALE

UNIVERSITY / COLLEGE

	BALANCE AT 1 AUGUST	ADDED DURING YEAR		OTHER ¹	WITHDRAWN DURING YEAR		BALANCE AT 31 JULY
		INCLUDED IN TABLE 2 Expenditure in* Heads 1-17	INCLUDED IN TABLE 2 Additions to* Balances Heads 18-19		INCLUDED IN TABLE 1	OTHER ²	
	1	2	3	4	5	6	7
Maintenance/ Minor Works	X						

* Please note these columns were previously the opposite way round.

1. For example, monies not included in Table 1 as income.
2. For example, monies included in Table 2 (to match column 2).

PROVISIONS

UNIVERSITY / COLLEGE

	BALANCE AT 1 AUGUST	ADDED DURING YEAR			OTHER ¹	INCLUDED IN TABLE 1 HEADS 13, 14	OTHER ²	BALANCE AT 31 JULY
		INCLUDED IN TABLE 2	Expenditure in* Heads 1-17	Additions to* Balances Heads 18-19				
Maintenance/Minor Works								
X	1	2	3	4	5	6	7	

1. For example, monies not included in Table 1 as Income.
 2. For example, monies included in Table 2 (to match column 2).

* Please note these columns were previously the opposite way round.

RESERVES

UNIVERSITY / COLLEGE

	BALANCE AT 1 AUGUST	ADDED DURING YEAR			OTHER ¹	WITHDRAWN DURING YEAR		BALANCE AT 31 JULY
		INCLUDED IN TABLE 2 Expenditure in* Heads 1-17	INCLUDED IN TABLE 2 Additions to* Balances Heads 18-19	OTHER ²		INCLUDED IN TABLE 1 HEADS 13, 14		
Maintenance/ Minor Works	1	2	3	4	5	6	7	
X								

1. For example, monies not included in Table 1 as income.

2. For example, monies included in Table 2 (to match column 2).

* Please note these columns were previously the opposite way round.

OTHER BALANCES

UNIVERSITY / COLLEGE

	BALANCE AT 1 AUGUST	ADDED DURING YEAR		OTHER ¹	WITHDRAWN DURING YEAR		BALANCE AT 31 JULY
		INCLUDED IN TABLE 2 Expenditure in* Heads 1-17	ADDITIONS TO* Balances Heads 18-19		INCLUDED IN TABLE 1 HEADS 13, 14	OTHER ²	
Maintenance/ Minor Works	1	2	3	4	5	6	7
X							

1. For example, monies not included in Table 1 as income.
 2. For example, monies included in Table 2 (to match column 2).

* Please note these columns were previously the opposite way round.

FORM 3: TABLE 6 AND 6A

1986/87

MAINTENANCE OF PREMISES
AND CAPITAL SPEND MET FROM INCOME

UNIVERSITY / COLLEGE

TABLE 6: OVERALL SUMMARY OF ACTUAL SPEND

EXPENDITURE HEADING	TOTAL ACTUAL SPEND £	SOURCE OF FUNDS		
		UGC EARMARKED*	RETAINED PROCEEDS OF SALES	OTHER INCLUDING GENERAL REVENUE
		£	£	£
	1	2	3	4
1. Day to Day Maintenance (Code A)				
2. Long Term Maintenance (Code B)				
TOTAL OF 1 AND 2				
3. Minor Works (Code C)				
4. Overspending Major Contracts				
TOTAL OF 3 AND 4				

* Including Repairs and maintenance Grant and Capital in recurrent

TABLE 6A: INDIVIDUAL PROJECTS OVER £100,000 STARTED IN THE YEAR

Description of Project	Table 6 Category	Total Cost from Table I Income (£)
	1	2

L160487A(1)

FORM 3 TABLE 7AEQUIPMENT AND FURNITURE GRANT 1986/87

GRANT AND COMMITMENTS

Balance of equipment grant as at 31 July (as from Head 2ci and ii of Table 7)

i. held by University:

£

ii. held by Paymaster General:

£

TOTAL

£

Commitments as at 31 JulyA. Firm orders placed but not yet
paid for:

£

B. Comments:

--

Person to contact:Mr F R Copper
University Grants Committee
14 Park Crescent London W1N 4DH

01-636-7799 Ext 289

UNIVERSITY / COLLEGE :

1. INCOME	
a. Balance From Previous Year	£
i. held by University	
ii. held by Paymaster General	
b. Interest accrued during year	
c. Grant for the University financial year, August-July	
d. Transfer from general income	
e. Other Income, including that from sales of Equipment and Furniture	
GRAND TOTAL	
2. EXPENDITURE	
a. PURCHASE OF EQUIPMENT FOR ACADEMIC DEPARTMENTS AND ELSEWHERE	
i. ACADEMIC DEPARTMENT COST CENTRES	
1. Clinical Medicine	
2. Clinical Dentistry	
3. Pre-clinical Studies	
4. Anatomy/Physiology	
5. Pharmacology	
6. Pharmacy	
7. Nursing	
8. Other Studies Allied to Medicine	
9. Biochemistry	
10. Psychology	
11. Other biological Sciences	
12. Agriculture and Forestry	
13. Veterinary Science	
14. Chemistry	
15. Physics	
16. Other Physical Sciences	
17. Mathematics	
18. Computer Science	
19. General Engineering	
20. Chemical Engineering	
21. Civil Engineering	
22. Electrical/Electronic Engineering	
23. Mechanical, Aeronautical & Production Engineering	
24. Mineral Engineering	
25. Metallurgy and Minerals	

UNIVERSITY / COLLEGE :

		£
26.	Architecture	
27.	Other Technologies	
28.	Planning	
29.	Geography	
30.	Law	
31.	Other Social Studies	
32.	Business Management Studies	
33.	Accountancy	
34.	Language-based studies	
35.	Humanities	
36.	Creative Arts	
37.	Education	
TOTAL OF 1 TO 37		
45.	Adult Education (Responsible Body)	
46.	Adult Education (Other)	
TOTAL OF 1 TO 37, 45 AND 46		
ii.	ACADEMIC SERVICES	
	1. Libraries	
	2. Museums	
	3. Observatories	
	4. Central Computers	
	5. Central Educational Technology Units	
	6. Other Academic Services	
iii.	OTHER	
iv.	TOTAL EQUIPMENT EXPENDITURE (i) + (ii) + (iii)	
b.	PURCHASE OF FURNITURE	
	i. For new or adapted accommodation	
	ii. For other purposes	
c.	BALANCES CARRIED TO FOLLOWING YEAR	
	i. held by university	
	ii. held by Paymaster General	
GRAND TOTAL		

I/we have examined the figures in the foregoing Table 1, Head totals of Column 9 of Table 2 & Table 7 in conjunction with the Financial Statements of the Institution and in my opinion the income and expenditure for the year ended 31 July 1987 have been fairly stated.

Date

.....
Professional Status

APPENDIX NO. 4

REPORT OF THE AUDITORS TO THE MEMBERS OF
COURT OF THE UNIVERSITY OF HULL

BALANCE SHEET at 31st JULY, 1986

	<i>NOTE</i>	1986 £000	1985 £000
FUNDS			
Capital Funds	2	27,858	26,209
Trust Funds	3	1,271	1,204
Unexpended Balances	4	1,361	1,615
Provisions	5	820	746
Reserves	6	529	576
Income and Expenditure Account — Adverse Balance		(969)	(451)
		<u>30,870</u>	<u>29,899</u>
 <i>Represented by:</i>			
Land, Buildings and Equipment At 1st August, 1985		22,718	21,140
Additions, less sales 1985-86		1,495	1,578
		<u>24,213</u>	<u>22,718</u>
 Investments		 4,386	 3,847
 Market Value at 31st July			
1986		1985	
£000		£000	
5,717		4,828	
Trust Funds	3	1,271	1,204
Net Current Assets	7	1,000	2,130
		<u>30,870</u>	<u>29,899</u>

Report of the Auditors to the Members of Court of the University of Hull

We have audited the accounts on pages 31—49 in accordance with approved Auditing Standards.

In our opinion the accounts give a true and fair view of the state of the University's affairs at 31st July, 1986 and of the deficit and the source and application of funds for the year then ended.

We have confirmed that every non-recurrent grant received from the University Grants Committee during the year has been duly applied to the purpose for which it was made to the University.

HULL: 20th November, 1986

Hodgson Impey
Chartered Accountants

INCOME AND EXPENDITURE ACCOUNT

for the year ended 31st July, 1986

	<i>NOTE</i>	1985-86 £000	1984-85 £000
INCOME			
Treasury Grants		15,964	15,814
Local Authority Grants:			
Humberside		—	1
Tuition Fees		3,873	3,548
Grants for Research		2,193	1,604
Grants for Special Purposes		119	90
Investment Income	8	761	677
Other Income		303	265
		<u>23,213</u>	<u>21,999</u>
 EXPENDITURE			
Academic Departments and Services	9	16,372	15,070
Administration	10	1,748	1,535
Buildings and Grounds	11	3,505	3,253
General Educational Expenditure	12	489	422
Staff and Student Facilities	13	637	636
Miscellaneous Expenditure	14	866	859
Revenue Contributions to Capital Expenditure	15	708	739
		<u>24,325</u>	<u>22,514</u>
 (Deficit)		 (1,112)	 (515)
Allocation to Reserves		(51)	(56)
Transfer from Reserves		107	122
Transfer from Capital Appreciation Funds to offset Severance Costs . . .		538	—
 (Deficit) for the year		 (518)	 (449)
Balance brought forward		<u>(451)</u>	<u>(2)</u>
 (Deficit) carried forward		 <u>(969)</u>	 <u>(451)</u>

T.H.F. FARRELL, *Chairman* } *Members of Council*
 W.L. BLACK, *Treasurer* }
 D.A. CROSS, *Finance Officer*

STATEMENT OF SOURCE AND APPLICATION OF FUNDS

	1985-86		1984-85	
	£000		£000	
SOURCE OF FUNDS				
(Deficit) for the year		(1,112)		(515)
Adjustment for items not involving the movement of Funds:				
Decrease in Unexpended Balances	(254)		(757)	
Increase in Provisions	447		303	
Increase/(Decrease) in reserve for Residences and Refectories ...	9	202	(16)	(470)
		<u> </u>	<u> </u>	<u> </u>
		(910)		(985)
 FUNDS FROM OTHER SOURCES				
Increase in Capital Funds:				
Gifts and Benefactions including Capital Appreciation	672		811	
Appeal Funds	56		84	
H.M. Treasury non-recurrent Grant	744		783	
Student Residences Loan Financed	21		27	
Revenue Contributions to Capital Expenditure	694	2,187	633	2,338
		<u> </u>	<u> </u>	<u> </u>
		1,277		1,353
 APPLICATION OF FUNDS				
Net additions to Fixed Assets	(1,495)		(1,578)	
Net increase in Investments (book cost)	(539)		(703)	
Provisions Utilised	(373)	(2,407)	(165)	(2,446)
		<u> </u>	<u> </u>	<u> </u>
		(1,130)		(1,093)
 (INCREASE)/DECREASE IN WORKING CAPITAL				
Furniture and Equipment Grant				
balance with H.M. Paymaster General	101		(11)	
Stocks	22		(10)	
Debtors	(420)		204	
Creditors	79	(218)	342	525
		<u> </u>	<u> </u>	<u> </u>
		(1,348)		(568)
 REDUCTION IN NET LIQUID ASSETS				
Cash at Bank and in Hand	(23)		33	
Short Term Loans and Deposits	(1,319)		(601)	
Bank Overdraft	(6)	(1,348)	—	(568)
		<u> </u>	<u> </u>	<u> </u>

NOTES ON THE ACCOUNTS

1. ACCOUNTING POLICIES

- a. The accounts have been prepared under the historical cost accounting rules and in accordance with Recommended Accounting Practice in United Kingdom Universities.
- b. Land, buildings and equipment are shown at cost. Assets purchased from the furniture and equipment grant and with sponsored research monies are excluded.
- c. Proceeds of sale of University Grants Committee funded property have been expended on capital assets in accordance with University Grants Committee rules.
- d. No depreciation has been written off fixed assets as their replacement is provided for by way of grants and provisions from income.
- e. Stocks on hand are valued at cost or net realisable value, whichever is the lower. Stocks held in teaching and service departments are excluded.
- f. Classification of income and expenditure in the Income and Expenditure Account is based generally on the requirements of the financial return made annually to the University Grants Committee.
- g. Investment income derived from General Investments is net of management fees and charges.
- h. Where specific allocations for expenditure have been made, any under or over spending has been carried forward to future years.
- i. No apportionment is made for periodic charges relating to such expenditure as telephones, lighting and heating.
- j. Income from research grants and contracts has been brought into account to the extent of expenditure incurred during the year.
- k. Allocations to provisions have been charged under the relevant expenditure head.
- l. Where a reserve has been created in an earlier year, expenditure in the current year is not charged against it but to the income and expenditure account, the equivalent amount being transferred from reserves.
- m. Additional student residential places have been financed by internal loans which are being repaid by annual and special charges against residential fees.

BALANCE SHEET	£000	1986 £000	1985 £000
2. CAPITAL FUNDS			
Gifts and Benefactions including Capital Appreciation	5,521		
Less Transfer to Revenue for Severance Costs	538	4,983	4,849
Appeal Funds		945	889
H.M. Treasury non-recurrent Grant		18,459	17,715
Student Residences Loan Financed:			
Expenditure to 31st July 1986	285		
Balance to be repaid	50	235	214
	—		
Revenue Contributions to Capital Expenditure		3,236	2,542
		<u>27,858</u>	<u>26,209</u>
3. TRUST FUNDS			
Capital Funds		1,079	1,036
Income Balances		192	168
		<u>1,271</u>	<u>1,204</u>
Represented by:			
Investments		1,041	999
Market Value at 31st July			
1986	1985		
£000	£000		
1,149	1,088		
Short Term Loans and Deposits		230	205
		<u>1,271</u>	<u>1,204</u>

NOTES ON THE ACCOUNTS

BALANCE SHEET		1986	1985
		£000	£000
4. UNEXPENDED BALANCES			
Departmental Funds		592	508
Grants and Donations Received in Advance		687	905
Other Purposes		80	181
Student Residences and Refectories		—	21
University Laundry		2	—
		<u>1,361</u>	<u>1,615</u>
5. PROVISIONS			
	<i>Balance</i>	<i>Additions</i>	<i>Expended</i>
	<i>31st July 85</i>		<i>during year</i>
	£000	£000	£000
University	353	321	235
Student Residences and Refectories	393	126	138
	<u>746</u>	<u>447</u>	<u>373</u>
			<u>820</u>
6. RESERVES			
	<i>Balance</i>	<i>Additions</i>	<i>Released</i>
	<i>31st July 85</i>		<i>during year</i>
	£000	£000	£000
University:			
Specific	88	1	28
General	453	50	79
Student Residences and Refectories:			
Specific	11	1	3
General	24	40	29
	<u>576</u>	<u>92</u>	<u>139</u>
			<u>529</u>
7. NET CURRENT ASSETS			
CURRENT ASSETS		1986	1985
		£000	£000
Furniture and Equipment Grant — balance with H.M. Paymaster General		4	105
Cash at Bank		32	55
Cash in Hand		4	4
Short Term Loans and Deposits		975	2,294
Stocks		136	158
Grants Receivable		927	819
Income Tax Recoverable		63	65
Loans to Staff for House Purchase		2	4
Sundry Debtors		659	378
Student Residences and Refectories		35	—
		<u>2,837</u>	<u>3,882</u>
CURRENT LIABILITIES			
Trade and Other Accounts		1,816	1,737
Loans from H.M. Treasury on Purchase of Property		15	15
Bank Overdraft		6	—
		<u>1,837</u>	<u>1,752</u>
Net Current Assets		<u>1,000</u>	<u>2,130</u>

NOTES ON THE ACCOUNTS

INCOME AND EXPENDITURE ACCOUNT	1985-86 £000	1984-85 £000
8. INVESTMENT INCOME		
Special Purposes	54	56
General Investments	445	355
Short Term Loans and Deposits	247	246
Rents	15	19
Loan Interest	—	1
	<u>761</u>	<u>677</u>
9. ACADEMIC DEPARTMENTS AND SERVICES		
Salaries of Teaching and Research Staff	9,444	9,111
Salaries and Wages of Technical and Clerical Staff	1,953	1,871
Departmental and Laboratory Maintenance and Scientific Equipment	913	729
Expenditure met by Research Grants	2,193	1,604
Library	1,139	1,126
Computer Facilities	545	476
Audio Visual Aids Unit	100	97
Language Teaching	61	56
Computer Aided Design Facilities for Teaching — Software Licences	24	—
	<u>16,372</u>	<u>15,070</u>
10. ADMINISTRATION		
Salaries	1,274	1,134
Advertising, Printing, Stationery and Postages	233	227
Other Expenses	241	174
	<u>1,748</u>	<u>1,535</u>
11. BUILDINGS AND GROUNDS		
Rent, Rates and Insurance	949	917
Heat, Light, Water, Power and Cleaning	744	681
Repairs and General Maintenance	994	865
Telephones	108	125
Salaries and Wages of Cleaners, Porters and Attendants	710	665
	<u>3,505</u>	<u>3,253</u>

NOTES ON THE ACCOUNTS

INCOME AND EXPENDITURE ACCOUNT	1985-86 £000	1984-85 £000
12. GENERAL EDUCATIONAL EXPENDITURE		
Examinations	66	56
Fellowships, Scholarships and Prizes	50	65
Course Fees for Students Abroad	5	5
Department of Adult Education	180	111
Public Lectures and Recitals	10	14
Subscriptions	60	53
Vacation Study Grants	107	107
Expedition Fund	2	2
Teaching Practice Vacation Expenses	9	9
	<u>489</u>	<u>422</u>
13. STAFF AND STUDENT FACILITIES		
Careers and Appointments Service	136	135
Contribution to Students' Union	246	236
Contributions to Students' Activities	95	91
Salaries of Wardens	40	38
Contributions to Central Catering Services	28	52
Accommodation Office	29	27
Student Health Service	63	57
	<u>637</u>	<u>636</u>
14. MISCELLANEOUS EXPENDITURE		
Pensions to Staff	157	158
Early Retirement and Severance Costs	538	600
Founder's Day and Congregation	15	10
Convocation	9	1
Schools Liaison Committee	11	11
External Liaison	80	57
Industrial and Commercial Development Agency	33	—
Other Expenses	23	22
	<u>866</u>	<u>859</u>
15. REVENUE CONTRIBUTIONS TO CAPITAL EXPENDITURE		
Minor Works	<u>708</u>	<u>739</u>

SCHEDULE OF TRUST FUNDS at 31st JULY, 1986

CHAIRS AND LECTURESHIPS

	£	£
The Ferens Chair	228,705	
The G.F. Grant Endowment	54,912	
The Ferens Lectureship in Fine Art	28,122	
The Ida Teather Memorial Fund	147	
The Hull University Extension Society Fund	1,588	
The Chair in Genetics	48,800	
The Sydney Smith Fund	4,629	
	<hr/>	366,903

SCHOLARSHIPS

The Ferens Birthday Scholarship	7,280	
The Ferens Scholarship	219,200	
The Ferens Schools Scholarships	35,200	
The Frank Finn Scholarship	312	
The Principal A.E. Morgan Scholarship	410	
The Commercial Scholarship	781	
The W.H. Slack Jubilee Scholarship	190	
The Amy Johnson Scholarship	7,776	
The Joseph Henry Noble Scholarship	4,511	
The William Wilberforce Scholarship	1,246	
The Usher Scholarship	3,928	
The Frederick Atkinson Scholarship	20,361	
The T.R. Ferens Bursary Fund	28,388	
The Dora Leggott Scholarship	1,405	
The G.F. Grant Trust	16,219	
The Wilberforce Scholarship	8,055	
	<hr/>	355,262

PRIZES

The Andrew Marvell Jackson Prize in Law	439	
The British Medical Association Prize	604	
The Pearlman Gold Medal	35	
The Groves Gift	443	
The Marchant Prize	61	
The Hull Radium Trust Book Prize	300	
The Walter Firth Prize	200	
The Kingsley Prize	1,000	
The Steward Prize in Mathematics	766	
The Prince Delphus Adebayo Odubanjo Prize Fund	86	
The A.M.S. Prize in Accountancy	91	
The J.J. Kipling Memorial Prize	1,772	
The Classical Greek Prize	973	
The Dr. C. Meggitt Prize	354	
The Barrow/Hepburn Prize in Operational Research	150	
The White Fish Authority Prize in Operational Research	157	
The Margaret 'Espinasse Language Prize	1,048	
The Lewenstein Prizes	1,000	
The Slater Prize in Applied Mathematics	238	
The Sir Cyril Lucas Prize	200	
The Professor F.W. Taylor Fund	1,065	
The Pryce Jones Prize	213	
The Carol Kaplan White Prize in Family Law	136	
	<hr/>	11,331
<i>Carried forward</i>		<hr/> 722,165

SCHEDULE OF TRUST FUNDS at 31st July, 1986

PRIZES (<i>continued</i>)	£	£
	11,331	722,165
<i>Brought forward</i>		
The Professor R.K. Murton Prize in Zoology	426	
The Lionel Rosen Memorial Prize in Law	266	
The Sir Brynmor Jones Prize for Experimental Chemistry	213	
The Lionel Thomas Essay Prizes	639	
The D.A. Bell Prize in Telecommunications	213	
The Idwal Jones Prize in Experimental Physics	813	
The John Shergold Memorial Prize	230	
The Fred Maddison Memorial Grant	1,128	
The Brian Showler Prize in Social Administration	557	
The Prize in Economics, Politics and Sociology	250	
The Professor J.S.G. Wilson Prize in S.E.A.S.	250	
The Elaine Machin Prizes	3,000	
The Dora Jones Prize in Drama	300	
The Andrew Brown Memorial Prize in Music	805	
The Josephine C. Onoh Memorial Prizes in Public International Law	5,278	
The H.W. Robinson Bursary in Economics and Statistics	12,542	
The Martin Beale Prize	200	
The Vice-Chancellor's Prize	1,000	
The C.W. Chilton Memorial Prize in Classics	500	
The Ann Drayton Memorial Prize in Economic and Social History	500	
		40,441
OTHER FUNDS		
The Needler Travel Fund		320
		<u>762,926</u>
Accumulated net gain on sale of investments		316,021
		<u><u>1,078,947</u></u>

TRUST FUNDS INCOME AND EXPENDITURE ACCOUNTS

for the year ended 31st July, 1986

FUND	<i>Balance of Income from Previous Year</i>	<i>Income for the year</i>	<i>Expenditure during the year</i>	<i>Added to Capital</i>	<i>Balance of Income carried forward</i>
	£	£	£	£	£
The Ferens Chair	—	39,571	39,571	—	—
The G.F. Grant Endowment	—	8,140	8,140	—	—
The Ferens Lectureship in Fine Art	12,663	6,369	1,228	—	17,804
The Ida Teather Memorial Fund	—	—	—	—	—
The Hull University Extension Society Fund	—	212	212	—	—
The Chair in Genetics	—	6,133	6,133	—	—
The Sydney Smith Fund	846	666	100	—	1,412
The Ferens Birthday Scholarship	13,265	2,708	—	—	15,973
The Ferens Scholarship	59,105	44,108	40,000	—	63,213
The Ferens Schools Scholarships	10,663	7,337	8,359	—	9,641
The Frank Finn Scholarship	3,113	384	—	—	3,497
The Principal A.E. Morgan Scholarship	1,015	166	—	—	1,181
The Commercial Scholarship	2,594	390	—	—	2,984
The W.H. Slack Jubilee Scholarship	1,767	220	—	—	1,987
The Amy Johnson Scholarship	—	837	—	837	—
The Joseph Henry Noble Scholarship	5,112	1,343	100	—	6,355
The William Wilberforce Scholarship	1,723	352	—	—	2,075
The Usher Scholarship	5,973	1,243	500	—	6,716
The Frederick Atkinson Scholarship	20,816	6,436	4,500	—	22,752
The T.R. Ferens Bursary Fund	11,167	6,079	4,500	—	12,746
The Dora Leggott Scholarship	3,545	563	—	—	4,108
The G.F. Grant Trust	1,014	3,643	300	—	4,357
The Wilberforce Scholarship	415	932	700	—	647
The Andrew Marvell Jackson Prize in Law	841	116	200	—	757
The British Medical Association Prize	—	68	20	48	—
The Pearlman Gold Medal	32	8	—	—	40
The Groves Gift	—	51	10	41	—
The Marchant Prize	—	8	15	(7)	—
The Hull Radium Trust Book Prize	2,249	291	—	—	2,540
The Walter Firth Prize	191	50	30	—	211
The Kingsley Prize	1,385	297	50	—	1,632
The Steward Prize in Mathematics	—	87	40	47	—
The Prince Delphus Adebayo Odubanjo Prize Fund	(3)	12	—	—	9
The A.M.S. Prize in Accountancy	2	12	10	—	4
The Classical Greek Prize	—	100	—	100	—
The J.J. Kipling Memorial Prize	—	206	40	166	—
The Dr. C. Meggitt Prize	1,658	233	—	—	1,891
The Barrow/Hepburn Prize in Operational Research	107	33	50	—	90
The White Fish Authority Prize in Operational Research	90	32	—	—	122
The Margaret 'Espinasse Language Prize	—	121	60	61	—
The Lewenstein Prizes	1,245	260	225	—	1,280
The Slater Prize in Applied Mathematics	308	64	25	—	347
The Sir Cyril Lucas Prize	122	38	25	—	135
The Pryce Jones Prize	18	29	30	—	17
The Professor F.W. Taylor Fund	627	201	116	—	712
The Carol Kaplan White Prize in Family Law	42	22	25	—	39
The Professor R.K. Murton Prize in Zoology	323	88	50	—	361
The Lionel Rosen Memorial Prize in Law	109	45	25	—	129
The Sir Brynmor Jones Prize for Experimental Chemistry	29	29	30	—	28
<i>Carried forward</i>	<u>164,171</u>	<u>140,333</u>	<u>115,419</u>	<u>1,293</u>	<u>187,792</u>

TRUST FUNDS INCOME AND EXPENDITURE ACCOUNTS

for the year ended 31st July, 1986

FUND	<i>Balance of Income from Previous Year</i>	<i>Income for the year</i>	<i>Expenditure during the year</i>	<i>Added to Capital</i>	<i>Balance of Income carried forward</i>
	£	£	£	£	£
<i>Brought forward</i>	164,171	140,333	115,419	1,293	187,792
The Lionel Thomas Essay Prizes	266	108	40	—	334
The D.A. Bell Prize in Telecommunications	116	39	10	—	145
The Idwal Jones Prize in Experimental Physics	465	152	35	—	582
The John Shergold Memorial Prize	70	36	20	—	86
The Fred Maddison Memorial Grant	907	288	—	—	1,195
The Brian Showler Prize in Social Administration	210	92	40	—	262
The Prize in Economics, Politics and Sociology	73	39	25	—	87
The Professor J.S.G. Wilson Prize in S.E.A.S.	79	40	25	—	94
The Elaine Machin Prizes	910	471	273	—	1,108
The Andrew Brown Memorial Prize in Music	—	93	50	43	—
The Dora Jones Prize in Drama	15	35	20	—	30
The Josephine C. Onoh Memorial Prizes in Public International Law	220	606	943	—	(117)
The C.W. Chilton Memorial Prize in Classics	—	55	30	—	25
The Vice Chancellor's Prize	—	110	—	—	110
The Martin Beale Prize	—	22	—	—	22
The Needler Travel Fund	—	43	43	—	—
	<u>167,502</u>	<u>142,562</u>	<u>116,973</u>	<u>1,336</u>	<u>191,755</u>

SCHEDULE OF INVESTMENTS at 31st July, 1986

GENERAL FUNDS

Government and Fixed Interest Stocks

£		Market Value £
300,000	9% Treasury Conversion Stock 2000 'A'	288,486
300,000	American Brands — 12½% Loan Stock 2009	354,492
41,250	C.H. Beazer Holdings — 8½% Convertible Unsecured Loan Stock 2000	69,300
400,000	B.A.T. Industries — 12½% Unsecured Loan Stock 2008	466,000
50,000	Electricite De France — 12½% Guaranteed Loan Stock 2008	59,771
25,000	Hunting Associated Industries — 9½% Convertible Loan Stock 2003/8	33,750
200,000	Republic of Iceland — 14½% Loan Stock 2016	255,000
150,000	Inco — 15½% Unsecured Loan Stock 2006	195,234
22,500	Micro Business Systems — New 6% Convertible Unsecured Loan Stock 1987/97	11,925
150,000	Midland Bank — 14% Subordinated Unsecured Loan Stock 2002/7	191,250
125,000	Polly Peck International — 9% Convertible Unsecured Loan Stock 2003/8	95,000
400,000	Trans-Canada Pipelines — 16½% 1st Mortgage Bonds 2007	605,484

Equities

Number		
45,000	B.I.C.C. — 50p Ordinary Shares	123,750
70,000	Blagden Industries — 25p 'A' Non-Voting Ordinary Shares	87,500
25,000	British Petroleum — 25p Ordinary Shares	142,500
20,000	British Printing and Communications — 25p Ordinary Shares	53,000
15,000	Britoil — 10p Ordinary Shares	15,750
22,500	B.T.R. — 25p Ordinary Shares	65,925
40,000	Dalgety — £1 Ordinary Shares	104,000
28,125	Dee Corporation — 5p Ordinary Shares	67,219
5,882	Dee Corporation — 5p New Ordinary Shares	5,706
40,000	European Ferries Group — £1 6¼% Convertible Redeemable Preference Shares	41,600
34,378	J.H. Fenner — 25p Ordinary Shares	44,004
15,750	F.K.I. Electricals — £1 7% Redeemable Convertible Preference Shares	43,312
65,000	G.E.I. International — 20p Ordinary Shares	65,650
11,627	Grand Metropolitan — 50p Ordinary Shares	43,950
37,500	Glynwed International — 25p Ordinary Shares	118,500
1,949	Hawley Group — U.S. \$0.01 Common Shares	1,910
20,000	I.C.I. — £1 Ordinary Stock Units	197,500
100,000	International Leisure Group — £1 7¼% Convertible Cumulative Redeemable Preference Shares	107,000
20,000	Ladbroke Group — 10p Ordinary Shares	68,600
10,000	Lex Service — 25p Ordinary Shares	30,000
20,000	Marks and Spencer — 25p Ordinary Shares	39,000
30,000	National Westminster Bank — £1 Ordinary Shares	155,100
1	Pacific — £5 Ordinary Shares	—
1,341	Peninsular and Oriental Steam Navigation Co. — £1 Deferred Stock	6,531
61,560	Parkfield Group — £1 7% Cumulative Convertible Preference Shares	127,737
77,546	Pleasurama — £1 7% Convertible Cumulative Redeemable Preference Shares 2005	117,094
20,000	Powell Duffryn — 50p Ordinary Shares	55,200
40,000	Rank Hovis McDougal — 25p Ordinary Shares	84,000
10,000	Shell Transport and Trading — 25p Ordinary Shares	80,000
12,500	Steeley Company — 25p Ordinary Shares	59,000
15,000	Trinity International Holdings — 50p Ordinary Shares	62,250
50,000	Turner and Newall — £1 Ordinary Stock Units	97,000
50,000	Unigate — 25p Ordinary Shares	139,000
25,000	United Newspapers — 25p New Ordinary Shares	93,750
20,000	Vickers — £1 Ordinary Stock	84,200
15,000	Woolworth Holdings — 50p Ordinary Shares	94,500

Investment and Property Unit Trusts

£60,000	Fleming American Investments — 7% Convertible Unsecured Loan Stock 1999	81,000
140	Lazards Income and Growth Property Unit Trust — £1,000 units	138,880
5,000	New Court American Property Fund — Units	35,702
70,000	New Court Property Fund — Units	113,575

5,716,587

SCHEDULE OF INVESTMENTS at 31st July, 1986

		<i>Market Value</i>
TRUST FUNDS		
<i>Government, Corporation and Fixed Interest Stocks</i>		
£		£
29,100	13½% Exchequer Stock 1992	35,530
45,000	15½% Treasury Loan 1998	65,125
2,500	10% Treasury Stock 1992	2,553
5,043.83	9% Treasury Stock 1994	4,918
2,325.56	10% Exchequer Stock 1995	2,407
2,150	Agricultural Mortgage Corporation — 9½% Debenture Stock 1983/6	2,150
140,000	Barclays Bank — 16% Unsecured Capital Loan Stock 2002/07	199,500
10,000	Cigna Overseas Finance — 13% Unsecured Loan Stock 2008	11,650
60,000	Inco — 15¼% Unsecured Loan Stock 2006	78,094
120,000	Province of Nova Scotia — 16¼% Loan Stock 2011	188,066
100,000	Midland Bank — 14% Subordinated Unsecured Loan Stock 2002/07	127,500
200,000	Pearson — 13% Unsecured Loan Stock 2007	243,000
160,000	Slough Estates — New 12¼% Unsecured Loan Stock 2009	184,800
<i>Equities</i>		
Number		
8,000	A.E.B. Finance — 25p Ordinary Shares	—
978	Metal Box — £1 Ordinary Stock	1,672
400	T.I. Group — £1 Ordinary Stock	2,024
		<u>1,148,989</u>
Market Value at 31st July		
	1986	1985
	£	£
General Funds	5,716,587	4,827,630
Trust Funds	1,148,989	1,088,532
	<u>6,865,576</u>	<u>5,916,162</u>

SCHEDULE OF SHORT TERM LOANS AND DEPOSITS at 31st July, 1986

	£	£
British Credit Trust		200,000
Hill Samuel and Co.		350,000
Manchester Exchange Trust		200,000
N.M. Rothschild and Sons		200,528
Midland Bank — Deposit Accounts		254,433
		<u>1,204,961</u>
Held for Trust Funds	230,141	
Held for General Funds	<u>974,820</u>	
		<u>1,204,961</u>

TEACHING AND RESEARCH EQUIPMENT AND FURNITURE for the year ended 31st July 1986

	1985-86 £	1984-85 £
Balance brought forward	123,935	256,451
H.M. Treasury — Grant	872,000	770,000
University Contribution	271,057	—
	<u>1,266,992</u>	<u>1,026,451</u>
<i>Deduct Expenditure during the year</i>	<u>1,134,387</u>	<u>902,516</u>
Balance carried forward	<u>132,605</u>	<u>123,935</u>

APPEAL FUNDS for the year ended 31st July 1986

	1985-86 £	1984-85 £
Contributions during the year, less Operating Costs	73,679	83,281
<i>Deduct Allocations for Capital and Revenue</i> Purposes	73,679	83,281
	<u>—</u>	<u>—</u>

EXPENDITURE MET BY RESEARCH GRANTS AND CONTRACTS

for the year ended 31st July, 1986

SOURCE	£	£	DEPARTMENT
<i>Brought forward</i>	332,915	369,681	
RESEARCH COUNCILS (continued)			
Science and Engineering Research Council	171,367		Electronic Engineering (10)
	112,647		Engineering Design and Manufacture (6)
	21,143		Biochemistry (4)
	2,483		Plant Biology
	43,685		Zoology (3)
	1,781		Applied Mathematics
	515		Computer Sciences
	13,492		Statistics
	26,009		Pure Mathematics (3)
	170,065		Applied Physics (11)
	214,222		Chemistry (12)
	200,119		Physics (6)
	93		Psychology
Science and Engineering Research Council/ Alvey Directorate	5,539		Electronic Engineering
	57,202		Chemistry
Science and Engineering Research Council/ Imperial Chemical Industries	1,108		Applied Physics
		1,374,385	
INDUSTRY			
BP International	1,730		Engineering Design and Manufacture
	7,384		Chemistry
British Aerospace	604		Computer Studies
	16,096		Applied Physics
British Petroleum	18,991		Chemistry
British Telecom	7,201		Linguistics
British Telecom — Seedcorn	18		Computer Studies
Burmah-Castrol	34,966		Biochemistry
British Union of Shoe Manufacturers	3,624		Electronic Engineering
Chevron Exploration	1,468		Geology
Debeers	1,376		Engineering Design and Manufacture
Glaxo	203		Biochemistry
I & E Sturge	4,253		Biochemistry
Imperial Chemical Industries	773		Biochemistry
	7,906		Wolfson Institute
	615		Chemistry
JOERS (GEC)	6,670		Physics
John E. Sturge	274		Biochemistry
Microbial Resources	2,699		Biochemistry
NFER/NELSON	24,661		Psychology
Plessey Research (Caswell)	337		Physics
Reckitt & Colman	147		Engineering Design and Manufacture
Sandvik	1,675		Engineering Design and Manufacture
Shoe & Allied Trades Research Association	123		Electronic Engineering
Shell Grants Committee	4,316		Politics
Shell UK	6,266		Estuarine and Coastal Studies
Sinclair Microcomputers	25		Physics
Sir W. Halcrow & Partners	589		Geography
Stiefel Laboratories (UK)	1,634		Zoology
		156,624	
		1,900,690	
<i>Carried forward</i>			

EXPENDITURE MET BY RESEARCH GRANTS AND CONTRACTS

for the year ended 31st July, 1986

SOURCE	£	£	DEPARTMENT
GOVERNMENT DEPARTMENTS			
Culham Laboratory	2,955		Applied Physics
Department of Education and Science	19,809		Adult Education (2)
Department of Health & Social Security	57,252		SPPS (2)
Department of Health & Social Security/ National Council for Alcoholism	1,090		SPPS
Department of the Environment	3,065		Chemistry
Department of Trade & Industry	62		Psychology
East Yorkshire Health Authority	807		Politics
Grimsby Community Health Council	31		Nursing Studies
Health Education Council	7,920		SPPS (4)
Home Office	6,515		SPPS
Laboratory of Government Chemists	17,911		Computer Studies
Ministry of Agriculture, Fisheries and Food	5,069		Zoology
Ministry of Defence	2,868		Electronic Engineering
	(1,466)		Engineering Design and Manufacture
	18,245		Applied Mathematics
	99,504		Applied Physics (3)
	67,557		Chemistry (4)
	26,257		Psychology (2)
<i>National Physical Laboratories</i>	6,019		Applied Physics
Ordnance Survey	187		Computer Studies
Royal Military College of Science	4,936		Applied Physics
Schools Council	245		SPPS
Sea Fish Industry Authority	2,464		Geography
	5,267		Institute of Estuarine and Coastal Studies
United Kingdom Atomic Energy Authority	3,227		Applied Physics
	1,095		Engineering Design and Manufacture
	9,855		Applied Physics (3)
	935		Physics
		369,681	
RESEARCH COUNCILS			
Agriculture and Food Research Council	80,117		Plant Biology (8)
Economic and Social Research Council	107,070		SPPS (3)
	9,882		Economics (2)
	1,087		Politics (2)
	5,800		Economic and Social History
	20,535		History
Medical Research Council	41,327		Biochemistry (3)
	35,171		Zoology (3)
	567		Chemistry
	11,092		Psychology
Natural Environment Research Council	5,817		Plant Biology
	298		Zoology
	6,897		Geology (2)
	7,255		Geography
<i>Carried forward</i>	332,915	369,681	

EXPENDITURE MET BY RESEARCH GRANTS AND CONTRACTS

for the year ended 31st July, 1986

SOURCE	£	£	DEPARTMENT
		1,900,690	
<i>Brought forward</i>			
OTHER ORGANISATIONS			
Action Research for the Crippled Child	7,202		Zoology
Anglian Water Authority	12,521		Zoology
	237		Geography (2)
British Academy	1,179		Geography
	4,539		French
Commission of the European Community	152		SPPS
	596		Applied Physics
Dr. Barnardo's	2,703		SPPS
Econ Ed 14-16 Project	535		SPPS
European Institute of Public Administration/ Basque Regional Government	2,000		Politics
Gatsby Foundation	18,847		Plant Biology
Graham Moss Associates/Humberside County Council ..	6,600		Geography
Henkel KGaA	5,509		Biochemistry
	26,059		Chemistry
Hull Obstetric & Gynaecological Trust Fund	15,226		Applied Physics
Humberside County Council	509		SPPS (2)
	15,194		Geography (2)
Joseph Rowntree Memorial Trust	(1,859)		Psychology
LEPRA	5,290		Biochemistry
Leverhulme Trust	189		Psychology
Lincolnshire Education Authority	9,273		SPPS
National Domesday Committee	1,213		Adult Education
National Coal Board	16,854		Electronic Engineering
Nuffield Foundation	2,216		SPPS
	14,538		Wolfson Institute
	1,229		Geography
	8,767		Politics (2)
	8,407		Psychology
	847		Sociology & Social Anthropology
	10,633		Economic & Social History
RC Hierarchy of England and Wales	127		SPPS
Schools Curriculum Development Committee	129		SPPS
Sir James Reckitt Charity	173		Biochemistry
Society of Antiquaries	367		Adult Education
The Post Office	9,746		Psychology (2)
United States Army	6,610		Psychology
Great Grimsby Borough Council/ Cleethorpes Borough Council/ Sir Francis Hill Memorial Trust	19		Adult Education
Wellcome Trust	53,832		Zoology (3)
Wolfson Foundation	4,497		Engineering Design and Manufacture
	13,722		Wolfson Institute
	842		SPPS
World Health Organisation	4,442		Applied Physics
Yorkshire Cancer Research Campaign	183		Biochemistry
Yorkshire Cancer Research Committee	183		
		291,894	
		<u>2,192,584</u>	

REFECTORY INCOME AND EXPENDITURE ACCOUNTS

for the year ended 31st July, 1986

	STUDENTS' UNION	STAFF
	£	£
INCOME		
General Receipts	370,539	170,952
Functions	33,828	253,324
	<u>404,367</u>	<u>424,276</u>
 EXPENDITURE		
Salaries	22,395	24,851
Printing, Stationery, Postages and Telephones	1,460	5,103
Other Expenditure	6,222	7,885
Provisions (Food and Bar Purchases)	175,272	194,390
Wages	131,826	142,749
Laundry and Cleaning	7,666	6,670
Fuel and Light	13,646	2,700
Repairs and Renewals of Equipment	26,993	18,863
Crockery, Cutlery and Glassware etc.	12,770	13,890
Maintenance of Premises	500	75
	<u>398,750</u>	<u>417,176</u>
Surplus	5,617	7,100
Allocation to reserves	(24,118)	(1,616)
Transfer from reserves	16,622	2,650
	<u>(1,879)</u>	<u>8,134</u>
(Deficit)/Surplus for the year	(1,879)	8,134
Balance brought forward	(15,617)	33,003
	<u>(17,496)</u>	<u>41,137</u>
(Deficit)/Surplus carried forward	(17,496)	41,137

STUDENT RESIDENCE INCOME AND EXPENDITURE ACCOUNTS

for the year ended 31st July, 1986

	Total £	Traditional Halls £	The Lawns £	Student Houses £
INCOME				
Residential Fees	1,757,077	722,220	455,391	579,466
Vacation Residence	72,414	965	4,668	66,781
Catering and Bar Takings	181,723	14,410	167,313	—
Conferences	218,222	65,907	144,449	7,866
Miscellaneous Receipts	24,738	4,004	20,734	—
	<u>2,254,174</u>	<u>807,506</u>	<u>792,555</u>	<u>654,113</u>
EXPENDITURE				
Salaries and Wages	808,637	322,487	286,303	199,847
Printing, Stationery, Postages and Telephones	46,822	5,671	7,031	34,120
Other Expenditure	22,055	5,061	14,356	2,638
Food	265,498	175,087	90,411	—
Bar Purchases	67,903	9,618	58,285	—
Laundry and Cleaning	79,216	22,276	28,935	28,005
Fuel, Light and Water	493,034	129,515	147,725	215,794
Repairs and Renewals of Equipment	131,251	30,238	47,587	53,426
Contribution to Decoration Costs	111,587	33,911	28,050	49,626
Contribution to Upkeep of Grounds	16,580	5,445	6,375	4,760
Contribution to University Funds	200,000	51,147	60,050	88,803
Loan Financed Student Residence Repayments	28,220	7,200	8,480	12,540
Cycle Racks Levy	5,644	1,440	1,698	2,508
Capital Expenditure met from Income	37,500	—	37,500	—
	<u>2,313,947</u>	<u>799,096</u>	<u>822,784</u>	<u>692,067</u>
(Deficit)/Surplus	(59,773)	8,410	(30,229)	(37,954)
Allocation to reserves	(14,971)	(13)	(14,958)	—
Transfer from reserves	12,561	—	12,561	—
	<u>(62,183)</u>	<u>8,397</u>	<u>(32,626)</u>	<u>(37,954)</u>
(Deficit)/Surplus for the year	(62,183)	8,397	(32,626)	(37,954)
Surplus from previous year	3,538			
	<u>(58,645)</u>			
(Deficit) carried forward	(58,645)			

APPENDIX NO. (5)*

ACCOUNTS CHART OF THE UNIFORM ACCOUNTING SYSTEM

IN IRAQ UNIVERSITIES

(*) The author's translation

Source: Al. Mustansiriya and Technology Universities Chart of Uniform Accounting System, 1983.

The name of account

*1-ASSETS

11-Fixed Assets

111-Land

1111-Land for agriculture

11111-Cost of purchasing land

11112-Cost of preparing land

1112-Land for construction

1113-Land for storage

112-Buildings, construction and roads

1121-Buildings

11211-Building studies

11212-Building of accomodation

1122-Stores and silos

1123-Residences

1124-Wells, mines and quarries

11241-Wells

1125-Dams and canals

1126-Floating constructions

1127-Roads and bridges

1129-Other constructions

11291-Sewers

11292-Water pools

11293-Glass houses

11294-Water pipelines

*Note 1, 11, 111 etc. See Chapter Nine

- 11295-Electricity and telephone lines
- 113-Machines and heavy equipment
 - 1131-Equipment
 - 1132-Service Equipment
- 114-Transportation means
 - 1141-Cars
 - 11411-Passenger cars
 - 11412-Goods cars (i.e. lorries)
 - 11413-Other cars
 - 1143-River transportation means
- 115-Tools and moulds
 - 1151-Tools
 - 11511-Academic tools and moulds
 - 11512-Others
 - 1152-Moulds
 - 1153-Tents
- 116-Furniture and clerical equipment
 - 1161-Furniture
 - 11611-Academic furniture
 - 11612-Administration furniture
 - 1162-Air conditioning and cooling equipment
 - 1163-Computers
 - 1164-Calculators, typewriters and photocopying machines
 - 1165-Office tools and equipment
 - 1166-Curtains and carpets
 - 1167-Scientific reference and books
- 117-Plants and animals
 - 1171-Plants

- 1172-Animals
- 118-Deferred revenue expenditure
 - 1184-Research and development expenditure
 - 1187-Miscellaneous deferred expenditure
- 12-Projects under construction (i.e. incomplete)
 - 121-Land
 - 1211-Land for agriculture
 - 1211-Cost of purchasing land
 - 12112-Cost of preparing land (i.e. cost of land improvement)
 - 1212-Land for construction
 - 1213-Land for storage
 - 122-Building, constructions and roads
 - 1221-Buildings
 - 12211-Building for academic activities
 - 12212-Building for administration activities
 - 1222-Stores and silos
 - 1223-Residences
 - 1224-Wells, mines and quarries
 - 12241-Wells
 - 1225-Dams and canals
 - 1226-Floating constructions
 - 1227-Road and bridges
 - 1229-Other constructions
 - 12291-Sewers
 - 12292-Water pools
 - 12293-Glass houses
 - 12294-Water pipelines
 - 12295-Electricity and telephone lines

123-Machines and heavy equipment

1231-Academic equipment

1232-Administration equipment

124-Transportation means

1241-Cars

12411-Passenger cars

12412-Goods cars

12413-Other cars

1243-River transportation means

125-Tools and moulds

1251-Tools

12511-Academic

12512-Administration

1252-Moulds

1253-Tents

126-Furniture and clerical equipment

1261-Furniture

12611-Academic

12612-Administration

1262-Air conditioning and cooling equipment

1263-Computers

1264-Calculators, typewriters and photocopying machines

1265-Office tools and equipment

1266-Curtains and carpets

1267-Scientific reference books

127-Plants and animals

1271-Plants

1272-Animals

128-Deferred revenue expenditure

1284-Research and development expenditure

1287-Miscellaneous deferred expenditure

129-Other investment expenditures

1291-Advanced payments

1292-Credits for fixed assets

12-Inventories

131-Crudes and raw materials

132-Oil and grease

133-Spare parts

134-Filling and packing materials

135-Miscellaneous inventories

1351-Working tools

1352-Stationery

1353-Educational books

1354-Tarpaulin and used materials

1355-Workers' supplies and sports

136-Goods

1361-Finished goods

1362-Unfinished goods

137-Goods purchased for sale

138-Credits for purchasing materials, tools and equipment, etc.

1381-Credits for the establishments

1382-Credits for others

139-Other inventories

1391-Inventories with others

16-Debtors

161-Clients

- 1611-Socialist sector
- 1612-Cooperative sector
- 1613-Mixed sector
- 1614-Private sector
- 163-Current debit accounts
 - 1631-Inside the state organisation
 - 1632-Inside the establishment
- 165-Debtors of non-current activities
- 166-Miscellaneous debtors
 - 1661-Deposits with others
 - 1662-Revenues due
 - 1663-Pre-paid expenses
 - 1664-Compensation claims
 - 1665-Cash and inventory differences
- 167-Loans
 - 1671-Loans for activities
 - 1672-Loans for employees
 - 1673-Loans for marriage
- 18-Cash
 - 181-Cash in hand
 - 1811-In the centre
 - 1812-In the subsidiaries
 - 1813-In the showrooms
 - 182-Continuous loans
 - 183-Banks
 - 184-Government treasuries
 - 185-Cheques and promissories

1851-Cheques and promissories under the process of being collected

1852-Promissories on the way

1853-Refused cheques and promissories

2-LIABILITIES

22-Reserves

223-Miscellaneous reserves

224-Accumulated surplus

225-Accumulated deficits (debit)

23-Provisions

231-Accumulated depreciation provision

2312-Accumulated depreciation provision for buildings, constructions
and roads

2313-Accumulated depreciation provision for machines, heavy tools
and instruments

2314-Accumulated depreciation provision for transportation means

2315-Accumulated depreciation provision for tools and moulds

2316-Accumulated depreciation provision for furniture and clerical
equipment

232-Bad debts provision

233-Ordinary leave provision

234-Purchasing expenditure provision

235-Miscellaneous provisions

25-Credit bank

251-Bank overdrafts

26-Creditors

261-Suppliers

2611-Socialist sector

2612-Cooperative sector

2613-Mixed sector

2614-Private sector

263-Current credit accounts

2631-Inside the state organisation

2632-Inside the establishment

265-Creditors of non-current activities

266-Miscellaneous credit accounts

2661-Received deposits

2662-Revenues received in advance

2663-Expenses due

2664-Salaries and wages due

2665-Returned salaries and wages

2666-General retirement office

2667-State organisation of workers retirement and social security

267-Deductions for others

2671-Deductions from employees for others

2672-Deductions from others for others (e.g. deducting taxes from
payments to contractors on behalf of the Income Tax General
Directorate)

28-Current operations account

3-EXPENSES

31-Salaries and wages

311-Clerks' cash salaries

3111-Salaries

3112-Family allowance (i.e. wife and children allowances)

3113-Overtime wages

3114-Incentive payments

3115-Technical and professional allowances

3116-Compensation allowances

3117, 3118 and 3119 for other allowances (to be used according to
a firm's requirements)

312-Workers' cash wages

3121-Wages

3122-Family allowances

3123-Overtime wages

3124-Incentive payments

3125-Technical and professional allowances

3126-Compensation allowances

3127, 3128 and 3129 for other allowances (to be used according to
a firm's requirements)

313-Salaries and wages for foreigners

314-Contribution to the social security of clerks

3141-Share of the establishment in retirement salaries

3142-Insurance on clerks

3143-Health security for clerks

315-Contribution to the social security of workers

3151-Share of the establishment in the retirement wages

3152-Insurance on workers

3153-Health security for the workers

316-Contribution in the social security of foreigners

32-Physical requirements

321-Crudes and raw materials

322-Fuel and lubricating oil

3221-Oil materials

3222-Gas

3223-Lubricating oil and grease

- 323-Spare parts
- 324-Filling and packing materials
- 325-Miscellaneous
 - 3251-Working tools
 - 3252-Stationery
 - 3253-Scientific reference and books
 - 3254-Waste and consumed materials
- 326-Employees' supplies
 - 3261-Clothes
 - 3262-Food
 - 3263-Medical materials
- 327-Water and electricity
 - 3271-Water
 - 3272-Electricity
- 33-Service requirements
 - 331-Maintenance services
 - 3312-Buildings, constructions and roads
 - 3313-Machines and heavy equipment
 - 3314-Transportation means
 - 3315-Tools and moulds
 - 3316-Furniture and clerical equipment
 - 332-Research and consultative service expenses
 - 333-Advertisement, printing and hospitality expenses
 - 3331-Advertisement
 - 3332-Printing and publication
 - 3333-Hospitality
 - 3334-Showroom

- 3335-Ceremonies
- 334-Transfers, travel, studying and communication expenses
 - 3341-Employees' transportation
 - 3342-Goods transportation
 - 3343-Travel and studies
 - 33431-Travel for studying and training
 - 33432-Travel for activities
 - 3344-Communications
- 335-Fixed assets rent
 - 3352-Buildings and constructions
 - 3353-Machines and heavy equipment
 - 3354-Transportation means
 - 3355-Tools and moulds
 - 3356-Furniture and clerical equipment
- 336-Miscellaneous service expenses
 - 3361-Memberships and subscriptions
 - 3362-Insurance instalments
 - 3363-Rewards for outsiders for services offered
 - 3364-Taxes and duties paid to other countries
 - 3365-Legal services
 - 3366-Banking services
 - 3367-Training and qualification
 - 33671-Students and trainees allowances
 - 33672-Studying and training expenses
 - 3368 and 3369 for other service expenses (to be used according to a firm's requirements)
- 34-Contracts and services

- 341-Secondary contracts
- 342-Services received
- 35-Goods purchased for sale
 - 351-Locally purchased goods for sale
 - 352-Imported goods for sale
 - 3521-For the establishment itself
 - 3522-For others
- 36-Interest and rent of land
 - 361-Debit interest
 - 362-Debit Rent of land
- 37-Depreciation
 - 372-Buildings, constructions and roads
 - 373-Machines and heavy equipment
 - 374-Transportation means
 - 375-Tools and moulds
 - 376-Furniture and clerical equipment
 - 377-Plants and animals
 - 378-Written-off deferred expenses
- 38-Transferable expenses
 - 381-Retirement and social security
 - 3811-Retirement salaries
 - 3821-Social rewards
 - 383-Miscellaneous
 - 3831-Donations to others
 - 3832-Compensations and fines
 - 3833-Written-off debts
 - 3834-Special services
 - 3835-Written-off marriage loans

3836-Share of the establishment in financing the state organisation
for workers culture

384-Taxes and duties

3841-Production duties

3842-Taxes and other duties

385-Subsidies

39-Other expenses

391-Previous years' expenses

392-Unexpected expenses

393-Capital losses

4-REVENUES

41-Revenues from commodity production activities

412-Revenues from transferable industrial activities

4121-Net sales

4122-Cost of the difference between beginning and end finished
goods inventory

4123-Cost of the difference between beginning and end unfinished
goods inventory

416-Revenues from water and electricity

4161-Revenues from water

4162-Revenues from electricity

417-Revenues from waste products and materials

42-Revenues from trading activities

421-Net sales of goods purchased for sales

422-Cost of the difference between beginning and end goods purchased
for sales inventory

423-Commissions received

425-Miscellaneous revenues

43-Revenues from service activities

431-Revenues from transportation activities

433-Revenues from maintenance and repairing activities

434-Revenues from consultancy and technical activities

435-Revenues from social services

436-Revenues from memberships and subscriptions activities

437-Revenues from miscellaneous services

438-Rent of fixed assets except land

44-Revenues from working for others

45-Cost of assets internally produced

451-Costs of fixed assets internally produced

452-Costs of spare parts internally

453-Costs of filling materials internally manufactured

46-Interest and rent of land

461-Credit interest

462-Credit Rent of land

48-Transferable revenues

482-Transferable donations

4821-Donations from general treasury

4822-Donations from central and subsidiary units

483-Miscellaneous transferable revenues

4831-Donations received

4832-Compensations and fines

4833-Debts previously written-off

49-Other revenues

491-Revenues from previous years

492-Unexpected revenues

493-Capital gains

DEFINITIONS

1. Accountability is also referred to as ... the obligation of institutions and their members to produce outcomes that are consistent with goals of the institutions and that are demonstrably worth what they cost. (Bowen, H. ed., 1974, p.119)
2. Accounting system consists of the business papers, records and reports plus the procedures that are used in recording transactions and reporting their effects. Operation of an accounting system begins with the preparation of business papers; such as an invoice or cheque, and includes the capture of the data entered on this paper and its flow through the recording, classifying, summarising and reporting steps of the system. Actually, an accounting system is a data processing system, and it is now time to introduce more efficient ways of processing data. (Pyle et al, 1978)
3. A cost centre is any school or academic department which is recognized by the university, for which costs may be separately identified and collated by the central accounting system of the university.
(Ch. 7, p.48)
4. Allocation is a systematic distribution or assignment of a total amount among several years, accounts, products, departments, or other elements.
5. Allocation efficiency refers to the way in which society's limited productive resources are allocated to different users. An efficient allocation of resources occurs when it is impossible to switch resources from one use to another in order to make one person better off without making someone else worse off. (Davies, J. and McInnes, M, 1982, pp.29-41)
6. Cost-benefit analysis is the systematic comparison of expected costs and benefits of a course of action, when benefits and costs are measured on the same scale, such as dollars, the benefits should exceed the costs for a given course of action to be taken. When benefits can not be measured readily in dollars, cost-benefit analysis generally requires the comparison of two or more alternatives that are estimated to provide the same benefits (such as the same level of national defense) and selection of the alternative with the lowest cost. (Ester, R, 1981, p.23)

7. Economy and efficiency determines whether the entity is managing or utilizing its resources (personnel, property, space, and so forth) in an economical and efficient manner and the causes of any inefficiencies or uneconomical practices including inadequacies in management information systems, administrative procedures or organizational structures (Pomeranz et al, 1976, p.8).
8. Effectiveness concept is the ratio of actual outcome to the possible or ideal outcome (Cowan, 1985, p.233).
9. Efficiency - power to produce the result intended. The ratio of the energy output of machines, etc., to the energy input; capability, competence (Chambers, 1949).
10. Efficiency concept is the ratio of output to input (Cowan, 1985, p.233).
11. Efficiency educational concept is about helping universities and schools to achieve more of what they should achieve with the money that is available.
12. External efficiency. Society usually assigns a number of over-riding cultural, social and economic objectives to the education system. External efficiency is concerned with the success of the educational system in meeting these objectives. In many countries this task is made difficult by the fact that the objectives are not always explicit nor compatible with each other (Sadlack, J. 1978, p.215).
13. Fund accounting is a system of accounting used in non-profit making organizations, and especially in government, in which a self-balancing set of accounts is maintained for each of several subdivisions, called funds of the organization (Estes, R. 1981, p.55).
14. Government plan is defined as a financial certificate which is composed of government expenses and funds and determines the relation between them. It is oriented toward achieving specific goals for a given period of time (Origin Law of General Accounts, No. 28, 1940 and its amendments, 1976 and 1981).

15. Internal efficiency. To the educational system and its individual institutions the broad aims of society are taken as given. They have more specific targets established within this framework. The internal efficiency of an education system or an institution is a measure of its success in meeting these operational targets with the resources made available to it (Sadlack, J, 1978, p.215).
16. Management control is the process by which management assures that the organization carries out its strategies effectively and efficiently (Anthony and Dearden, 1980, p.7).
17. Non Profit organization's objective. In general, this objective is to render as much service as possible with a given amount of resources, or to use as few resources as possible to render a given amount of service (Anthony and Herzlinger, 1975, p.39).
18. Operation control is the process of assuring that specific tasks are carried out effectively and efficiently (Anthony and Dearden, 1980, p.7).
19. Performance appraisal is the process of evaluating the performance and qualifications of the employee in terms of the requirements of the job for which he is employed for the purposes of administration, including placement, selection for promotion, providing financial rewards and other actions which require differential treatment among the members of a group, or distinguished from affecting all members equally.
20. Planning - Programming - Budgeting System (PPBS) A set of procedures used in government agencies that provide for the identification of objectives and goals, the design of programmes to achieve these goals, and the development of programme budgets in which each programme is treated as an entity. For example, most university budgets classify expenditures by department and by object, such as salaries, supplies, utilities, travel. The objectives of a university generally include education, research and service, but the budget is not classified in a way that would show the expenditures for each of these functions. With PPBS, separate budgets would be developed for the education, research and service

programmes. Budgets could also be developed for subprogrammes, such as community extension services, undergraduate education or accounting research (Estes, R, 1981, p.23).

21. Responsibility accounting. A system in which costs are allocated to and reports are prepared for responsibility centre, with the objective of controlling costs by assigning responsibility for specific costs to individual managers.
22. Responsibility centre. An organizational unit with responsibility for control of costs and, in some cases, revenue. See also responsibility accounting.
23. Strategic planning is a disciplined effort to produce fundamental decisions and actions shaping the nature and direction of an organization (or other entity's) activities within legal bounds (Olsen, J. and Eadia, D. "The Game Plan: Governance with Foresight", Council of State Planning Agencies, Washington, DC, 1982, p.4) and also (Bryson, J. 1988, p.73).
24. System analysis consists of collecting, organizing and evaluating facts about a system and the environment in which it operates. The objective of system analysis is to examine all aspects of the system - equipment, personnel, operating conditions and its internal and external demands - to establish a basis of designing and implementing a better system (Conger and Knapp, 1974).
25. Uniform Accounting System is the uniform treatment of all counting methods, procedures, and concepts (i.e. a single inventory method for department stores and a single method of research and development account for the petroleum industry). It includes standardisation of accountable events like business combinations, inceptions of private pension plans or receipt of governmental subsidies or tax concessions (Mueller, G. 1967, p.93)

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