



## City Research Online

### City, University of London Institutional Repository

---

**Citation:** El-Kheir Mohamed, E.K.A. (1997). A conceptual framework for internal auditing : an empirical examination of the perception and practice of internal auditing - Egypt as a field of study. (Unpublished Doctoral thesis, City University London)

This is the accepted version of the paper.

This version of the publication may differ from the final published version.

---

**Permanent repository link:** <https://openaccess.city.ac.uk/id/eprint/8272/>

**Link to published version:**

**Copyright:** City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

**Reuse:** Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

---

---



**A CONCEPTUAL FRAMEWORK FOR INTERNAL AUDITING:  
AN EMPIRICAL EXAMINATION OF THE PERCEPTION AND PRACTICE  
OF INTERNAL AUDITING - EGYPT AS A FIELD OF STUDY**

Thesis submitted by:

**Ehab Kamel Aboul-El-Kheir Mohamed**

BCom MSc MIIA FIIA

for the degree of:

**Doctor of Philosophy**

to:

**The City University**

London, England

Research conducted at:

**Centre For Internal Auditing**

**Department of Accounting and Finance**

City University Business School

Frobisher Crescent, Barbican Centre,

London EC2Y 8HB

England, UK

**JUNE 1997**

**VOLUME I**

**TABLE OF CONTENTS**  
**VOLUME I**

	<b>Page</b>
<b>LIST OF TABLES</b>	<b>8</b>
<b>LIST OF EXHIBITS</b>	<b>13</b>
<b>LIST OF APPENDICES</b>	<b>14</b>
<b>ACKNOWLEDGEMENTS</b>	<b>15</b>
<b>DECLARATION</b>	<b>16</b>
<b>ABSTRACT</b>	<b>17</b>
<b>LIST OF ABBREVIATIONS</b>	<b>18</b>
 <b>CHAPTER ONE</b> <b>INTRODUCTION</b>	 <b>19-28</b>
1.1 The nature of the research	19
1.2 Research objectives	20
1.3 Significance of the research	23
1.4 Research hypotheses	26
<i>1.4.1 Hypotheses related to the perception of internal audit</i>	26
<i>1.4.2 Hypotheses related to the practice of internal audit</i>	26
1.5 Research Methodology	26
<i>1.5.1 Library research</i>	26
<i>1.5.2 Field work</i>	27
<i>1.5.3 Data analysis</i>	28
 <b>CHAPTER TWO</b> <b>AUDITING: ITS NATURE, OBJECTIVES, AND TYPES</b>	 <b>29-52</b>
2.1 Financial auditing	34
2.2 Performance auditing	36
2.3 Operational auditing	37
2.4 Management auditing	39
2.5 Efficiency auditing	43
2.6 Internal auditing	43
2.7 Government auditing	47
Summary and Conclusion	51

<b>CHAPTER THREE</b>	
<b>AUDITING IN EGYPT &amp; THE UK</b>	<b>53-114</b>
3.1 A historical background	53
3.2 Overview of internal auditing in Egypt	64
3.3 Overview of internal auditing in the UK	71
3.4 The structure of auditing and financial control in the public sector in Egypt	75
3.4.1 The role of the ministry of finance	75
3.4.2 The role of the central auditing organisation	79
3.4.2.1 <i>The CAO and independence</i>	81
3.4.2.2 <i>The CAO reporting procedures</i>	83
3.4.2.3 <i>The central department for following up plans implementation. and performance evaluation</i>	85
3.5 The national audit office	89
3.5.1 The NAO and VFM audit	96
3.5.2 The NAO reporting procedures	97
3.6 Similarities and differences between the CAO and NAO	98
3.7 The audit commission for local authorities in England and Wales	102
3.8 The commission for local Authority accounts in Scotland	111
Summary & Conclusion	113
 <b>CHAPTER FOUR</b>	
<b>A CONCEPTUAL FRAMEWORK FOR INTERNAL AUDITING</b>	<b>115-187</b>
4.1 Classification of auditing research	116
4.2 What is a conceptual framework?	119
4.2.1 The components of a conceptual framework	122
4.3 A conceptual framework for internal auditing	123
4.3.1 Conceptual component	123
4.3.1.1 <i>Definition of internal auditing</i>	123
4.3.1.2 <i>Objectives of internal auditing</i>	124
4.3.1.3 <i>Scope of internal auditing</i>	127
4.3.1.4 <i>Common concepts</i>	131
4.3.2 Operational component	140
4.3.2.1 <i>Performance of audit work</i>	140
4.3.2.1.1 <i>Planning audit work</i>	140
4.3.2.1.2 <i>Field work</i>	146
4.3.2.1.3 <i>Reporting findings and recommendations</i>	151
4.3.2.1.4 <i>Following up audit recommendations</i>	152
4.3.2.2 <i>Audit measures</i>	153
4.3.3 Organisational component	157
4.3.3.1 <i>General organisational structure</i>	157
4.3.3.2 <i>Organisational structure of the internal audit department</i>	160
4.3.3.2.1 <i>Organisational status</i>	160
4.3.3.2.2 <i>Organising the internal audit department</i>	163
4.3.3.2.3 <i>The structure of the internal audit department</i>	166

4.3.3.2.4 <i>Establishing the department's rules, policies, plans, and procedures</i>	169
4.3.3.2.5 <i>Relations with others</i>	170
4.3.4 External component	175
4.3.4.1 <i>The relationship with external auditors</i>	175
4.3.4.2 <i>Environmental responsibilities of internal auditing</i>	180
Summary & Conclusion	185
 <b>CHAPTER FIVE</b>	
<b>RESEARCH HYPOTHESES AND METHODOLOGY</b>	188-200
5.1 Research hypotheses	188
5.2 Research methodology	191
5.2.1 Data collection	191
5.2.2 Subjects	195
5.2.3 Pilot testing	195
5.2.4 Sample plan	196
5.3 Data analysis	200
 <b>CHAPTER SIX</b>	
<b>A PRELIMINARY ANALYSIS OF THE RESEARCH DATA</b>	201-233
6.1 Perception response	204
6.2 Practice response	216
Summary & Conclusion	232

## **TABLE OF CONTENTS**

### **VOLUME II**

	<b>Page</b>
<b>LIST OF TABLES</b>	5
<b>LIST OF APPENDICES</b>	9
<b>LIST OF ABBREVIATIONS</b>	10
<b>CHAPTER SEVEN</b>	
<b>SIGNIFICANT INTER-SECTOR DIFFERENCES IN THE PERCEPTION OF INTERNAL AUDIT</b>	11-78
7.1 Perceptual differences on the different elements of the conceptual framework	13
7.1.1 Significant inter-sector mann-whitney differences for individual groups	13
7.1.2 Significant inter-sector t-test differences for individual groups	16
7.1.3 Significant inter-sector anova differences for individual groups	20
7.1.4 Significant inter-sector mann-whitney differences for all respondents	23
7.1.5 Significant inter-sector t-test differences for all respondents	23
7.1.6 Significant inter-sector anova differences for all respondents	24
7.2 Implications of the univariate analysis	27
7.3 Perceptual differences on the different components of the conceptual framework	33
7.3.1 Significant manova differences between the two groups of internal auditors	33
7.3.2 Significant manova differences between the two groups of senior internal auditors	40
7.3.3 Significant manova differences between the two groups of chief internal auditors	45
7.3.4 Significant manova differences between all respondents in the public sector vs. All respondents in the private sector	51
7.4 Implications of the multivariate analysis	56
7.4.1 The conceptual component	56
7.4.2 The operational component	59
7.4.3 The organisational component	63
7.4.4 The external component	68
7.4.5 The overall perception	69
Summary & Conclusion	71
<b>CHAPTER EIGHT</b>	
<b>SIGNIFICANT INTRA-SECTOR DIFFERENCES IN THE PERCEPTION OF INTERNAL AUDIT</b>	79-172
8.1 Public sector - Perceptual differences on the different elements of the conceptual framework	80
8.1.1 Significant nitre-auditor mann-whitney and t-test differences between internal auditors and senior internal auditors	80
8.1.2 Significant inter-auditor mann-whitney and t-test differences between internal auditors and chief internal auditors	82
8.1.3 Significant inter-auditor mann-whitney and t-test differences between senior internal auditors and chief internal auditors	83

8.1.4 Significant inter-auditor mann-whitney and t-test differences between the three different levels of internal auditors	83
8.2 Public sector - Perceptual differences on the different components of the conceptual framework	91
8.2.1 Significant inter-auditor manova and t-test differences between internal auditors and senior internal auditors	92
8.2.2 Significant inter-auditor manova and t-test differences between internal auditors and chief internal auditors	97
8.2.3 Significant inter-auditor manova and t-test differences between senior internal auditors and chief internal auditors	102
8.2.4 Significant inter-auditor manova and t-test differences between the three different levels of internal auditors	106
8.3 Private sector - Perceptual differences on the different elements of the conceptual framework	109
8.3.1 Significant inter-auditor mann-whitney and t-test differences between internal auditors and senior internal auditors	109
8.3.2 Significant inter-auditor mann-whitney and t-test differences between internal auditors and chief internal auditors	111
8.3.3 Significant inter-auditor mann-whitney and t-test differences between senior internal auditors and chief internal auditors	112
8.3.4 Significant inter-auditor mann-whitney and t-test differences between the three different levels of internal auditors	113
8.4 Private sector - Perceptual differences on the different components of the conceptual framework	120
8.4.1 Significant inter-auditor manova and t-test differences between internal auditors and senior internal auditors	120
8.4.2 Significant inter-auditor manova and t-test differences between internal auditors and chief internal auditors	125
8.4.3 Significant inter-auditor manova and t-test differences between senior internal auditors and chief internal auditors	129
8.4.4 Significant inter-auditor manova and t-test differences between the three different levels of internal auditors	134
8.5 All respondents - Perceptual differences on the different elements of the conceptual framework	137
8.5.1 Significant inter-auditor mann-whitney and t-test differences between internal auditors and senior internal auditors	137
8.5.2 Significant inter-auditor mann-whitney and t-test differences between internal auditors and chief internal auditors	138
8.5.3 Significant inter-auditor mann-whitney and t-test differences between senior internal auditors and chief internal auditors	138
8.5.4 Significant inter-auditor mann-whitney and t-test differences between the three different levels of internal auditors	139
8.6 All respondents - Perceptual differences on the different components of the conceptual framework	146
8.6.1 Significant inter-auditor manova and t-test differences between internal auditors and senior internal auditors	146
8.6.2 Significant inter-auditor manova and t-test differences between internal auditors and chief internal auditors	150
8.6.3 Significant inter-auditor manova and t-test differences between senior internal auditors and chief internal auditors	154
8.6.4 Significant inter-auditor manova and t-test differences between the three different levels of internal auditors	158



8.7 The implications of the significant differences on the different elements of the conceptual framework	161
8.8 The implications of the significant differences on the different components of the conceptual framework	167
Summary & Conclusion	169
<b>CHAPTER NINE</b>	
<b>INTER-SECTOR DIFFERENCES IN THE PRACTICE OF INTERNAL AUDIT</b>	173-220
9.1 Differences on the elements of the conceptual framework	174
9.1.1 Significant mann-whitney & t-test differences between the two groups of internal auditors from the public and private sectors	174
9.1.2 Significant mann-whitney & t-test differences between the two groups of senior internal auditors from the public and private sectors	175
9.1.3 Significant mann-whitney & t-test differences between the two groups of chief internal auditors from the public and private sectors	176
9.1.4 Significant mann-whitney & t-test differences between all respondent from the public and private sectors	177
9.1.5 Significant anova differences between the public and private sectors	178
9.2 The implications of the results of the univariate analysis	185
9.3 Differences on the components of the conceptual framework	188
9.3.1 Significant manova differences between the two groups of internal auditors from the public and private sectors	189
9.3.2 Significant manova differences between the two groups of senior internal auditors from the public and private sectors	193
9.3.3 Significant manova differences between the two groups of chief internal auditors from the public and private sectors	198
9.3.4 Significant manova differences between all respondents from the public and private sectors	203
9.4 The implications of the results of the multivariate analysis	208
Summary & Conclusion	213
<b>CHAPTER TEN</b>	
<b>10. SUMMARY &amp; CONCLUSIONS</b>	221-238
10.1 Significant findings of the research	222
10.2 Constraints to the implementation of modern internal auditing in Egypt	228
10.3 Recommendations of the research	232
10.4 Limitations of the research	236
10.4 Suggestion for future research	237
<b>Appendices</b>	239
<b>Bibliography</b>	278

**LIST OF TABLES**  
**VOLUME I**

<b>Table No.</b>	<b>Table Title</b>	<b>Page</b>
5.1	Structure of Items Included in the Perception Questionnaire	193
5.2	Structure of Items Included in the Practice Questionnaire	192
5.3	Sample Response Rate	199
5.4	Number of Respondents to the Research Questionnaires	199
6.1	Public Sector - Perception Response VARIMAX Rotated Component Analysis Factor Matrix	211-212
6.2	Private Sector - Perception Response VARIMAX Rotated Component Analysis Factor Matrix	213-214
6.3	Perception Questionnaire Combined Factor Structure	215
6.4	Public Sector - Practice Response VARIMAX Rotated Component Analysis Factor Matrix	223-224
6.5	Private Sector - Practice Response VARIMAX Rotated Component Analysis Factor Matrix	225-226
6.6	Practice Questionnaire Combined Factor Structure	227
6.7	All Sectors - Perception Response VARIMAX Rotated Component Analysis Factor Matrix	228-229
6.8	All Sectors - Practice Response VARIMAX Rotated Component Analysis Factor Matrix	230-231

**LIST OF TABLES**  
**VOLUME II**

<b>Table No.</b>	<b>Table Title</b>	<b>Page</b>
7.1	Perception: Mann-Whitney Test Public vs Private Sector	15
7.2	Perception: T-Test Public vs Private Sector	18
7.3	Perception: ANOVA F-Test Public vs Private Sector	22
7.4	Perception: Mann-Whitney, T-Test & F-test All Respondents - Public vs Private Sector	26
7.5	Perception of Internal Audit MANOVA Tests of Hotellings & Wilks Lambda Internal Auditors - Public vs Private Sector	39
7.6	Perception of Internal Audit MANOVA Tests of Hotellings & Wilks Lambda Senior Internal Auditors - Public vs Private Sector	44
7.7	Perception of Internal Audit MANOVA Tests of Hotellings & Wilks Lambda Chief Internal Auditors - Public vs Private Sector	50
7.8	Perception of Internal Audit MANOVA Tests of Hotellings & Wilks Lambda All Respondents - Public Sector vs Private Sector	55
7.9	Perception: Mean Scores Internal Auditors - Public vs Private Sector	74
7.10	Perception: Mean Scores Senior Internal Auditors - Public vs Private Sector	75
7.11	Perception: Mean Scores Chief Internal Auditors - Public vs Private Sector	76
7.12	Perception: Mean Scores All Respondents - Public vs Private Sector	77
7.13	Perception: Median Scores All Respondents - Public vs Private Sector	78

8.1	Perception - Public Sector T-Test & Mann-Whitney Test Internal Auditors vs Senior Internal Auditors	86
8.2	Perception - Public Sector T-Test & Mann-Whitney Test Internal Auditors vs Chief Internal Auditors	87
8.3	Perception - Public Sector T-Test & Mann-Whitney Test Senior Internal Auditors vs Chief Internal Auditors	88
8.4	Perception - Public Sector ANOVA with Scheffe All Three Levels	89
8.5	Perception: Public Sector MANOVA Tests of Hotellings & Wilks Lambda Internal Auditors vs Senior Internal Auditors	96
8.6	Perception: Public Sector MANOVA Tests of Hotellings & Wilks Lambda Internal Auditors vs Chief Internal Auditors	101
8.7	Perception: Public Sector MANOVA Tests of Hotellings & Wilks Lambda Senior Internal Auditors vs Chief Internal Auditors	105
8.8	Perception: Public Sector MANOVA Tests of Hotellings & Wilks Lambda Across All Three Levels	108
8.9	Perception - Private Sector T-Test & Mann-Whitney Test Internal Auditors vs Senior Internal Auditors	115
8.10	Perception - Private Sector T-Test & Mann-Whitney Test Internal Auditors vs Chief Internal Auditors	116
8.11	Perception - Private Sector T-Test & Mann-Whitney Test Senior Internal Auditors vs Chief Internal Auditors	117
8.12	Perception - Private Sector ANOVA with Scheffe All Three Levels	118

8.13	Perception: Private Sector MANOVA Tests of Hotellings & Wilks Lambda Internal Auditors vs Senior Internal Auditors	124
8.14	Perception: Private Sector MANOVA Tests of Hotellings & Wilks Lambda Internal Auditors vs Chief Internal Auditors	128
8.15	Perception: Private Sector MANOVA Tests of Hotellings & Wilks Lambda Senior Internal Auditors vs Chief Internal Auditors	133
8.16	Perception: Private Sector MANOVA Tests of Hotellings & Wilks Lambda Across All Three Levels	136
8.17	Perception - All Respondents T-Test & Mann-Whitney Test Internal Auditors vs Senior Internal Auditors	141
8.18	Perception - All Respondents T-Test & Mann-Whitney Test Internal Auditors vs Chief Internal Auditors	142
8.19	Perception - All Respondents T-Test & Mann-Whitney Test Senior Internal Auditors vs Chief Internal Auditors	143
8.20	Perception - All Respondents ANOVA with Scheffe All Three Levels	144
8.21	Perception: All Respondents MANOVA Tests of Hotellings & Wilks Lambda Internal Auditors vs Senior Internal Auditors	149
8.22	Perception: All Respondents MANOVA Tests of Hotellings & Wilks Lambda Internal Auditors vs Chief Internal Auditors	153
8.23	Perception: All Respondents MANOVA Tests of Hotellings & Wilks Lambda Senior Internal Auditors vs Chief Internal Auditors	157
8.24	Perception: All Respondents MANOVA Tests of Hotellings & Wilks Lambda Across All Three Levels	160

9.1	Practice: T-test & Mann-Whitney Test Internal Auditors - Public vs Private Sector	180
9.2	Practice: T-test & Mann-Whitney Test Senior Internal Auditors - Public vs Private Sector	181
9.3	Practice: T-test & Mann-Whitney Test Chief Internal Auditors - Public vs Private Sector	182
9.4	Practice: T-test & Mann-Whitney Test All Respondents - Public vs Private Sector	183
9.5	Practice: ANOVA F-test Public vs Private Sector	184
9.6	Practice of Internal Audit MANOVA Tests of Hotellings & Wilks Lambda Internal Auditors - Public vs Private Sector	192
9.7	Practice of Internal Audit MANOVA Tests of Hotellings & Wilks Lambda Senior Internal Auditors - Public vs Private Sector	197
9.8	Practice of Internal Audit MANOVA Tests of Hotellings & Wilks Lambda Chief Internal Auditors - Public vs Private Sector	202
9.9	Practice of Internal Audit MANOVA Tests of Hotellings & Wilks Lambda All Respondents - Public Sector vs Private Sector	207
9.10	Practice: Mean Scores Internal Auditors - Public vs Private Sector	217
9.11	Practice: Mean Scores Senior Internal Auditors - Public vs Private Sector	218
9.12	Practice: Mean Scores Chief Internal Auditors - Public vs Private Sector	219
9.13	Practice: Mean Scores All Respondents - Public vs Private Sector	220

**LIST OF EXHIBITS**  
**VOLUME I**

<b>Exhibit No.</b>	<b>Exhibit Title</b>	<b>Page</b>
3.1	Organisation Structure of the NAO	94
3.2	Audit Commission - Proposed VFM Projects	109
3.3	Organisation Structure of the Audit commission	110
4.1	Ideal Positioning of Internal Auditing	162
4.2	The Structure of the Internal Audit Department	168
4.3	The Meaning of the '4Es'	184
4.4	A Conceptual Framework for Internal Auditing	187

## **LIST OF APPENDICES**

Appendix A:1 - The Perception Questionnaire (Arabic)

Appendix A:2 - The Practice Questionnaire (Arabic)

Appendix B - The Covering Letter (Arabic)

Appendix C:1 - The Perception Questionnaire (English)

Appendix C:1 - The Practice Questionnaire (English)



## **ACKNOWLEDGEMENTS**

While writing this thesis and carrying out the underlying research, I have received help, guidance and helpful criticism from many kind persons. To all these persons I convey my sincere thanks and admit my deep debt. Chief among them is my supervisor, Professor G. Selim whose supervision, guidance, advice, encouragement and understanding brought my goal within reach. To him goes more than I can ever acknowledge here.

I am grateful to all members of staff at the City University Business School. I acknowledge with gratitude their co-operation and assistance.

I am also very thankful to all those who completed the research questionnaires and the institutions from which they came. Without their help, it would not have been possible to gain many insights revealed in the thesis.

Finally, I gratefully and humbly acknowledge the continued encouragement and immense support I have received from my parents, sister and all my friends when writing this thesis. To my parents I owe everything I have achieved.

While I have benefited greatly from the wisdom of many, I hold myself exclusively responsible for all errors, inaccuracies and omissions that may have persisted.

## **DECLARATION**

I grant powers of discretion to the University Librarian to allow this thesis to be copied in whole or in part without further reference to me. This permission covers only single copies made for study purposes, subject to normal conditions of acknowledgement

## **ABSTRACT**

The need for a conceptual framework for auditing to guide the development of auditing standards and practice on a consistent and theoretically sound basis has been recognised by many practitioners and academicians. This need seems to be even stronger in the case of internal auditing.

Thus, one major objective of the research is to take a step towards developing a widely accepted conceptual model that encompass the different concepts, identify the main objectives, define the functions, and explain the different interrelationships that exist within internal auditing. This follows a rigorous review of literature and theoretical background to set the research terms.

It is imperative that the attempt to develop the model should be accompanied by empirical study concerned with its applicability. Thus, the model is then used to examine how internal auditors working in developing countries perceive internal auditing. As well as, examining the standard of practice of internal auditing in developing countries.

Two questionnaires are developed and used as the research instruments. The first questionnaire is used to collect data on the perception of internal auditing, and the second is used to collect data on the practice of internal auditing. Factor analysis is then applied to data collected to explore the relationship between the different statements included in the questionnaires.

The empirical chapters consider: significant perceptual differences between different levels of internal auditors; significant perceptual differences between internal auditors working in the public and private sectors; significant differences in the practice of internal auditing between public and private sectors.

Main findings indicate that: the perception of internal auditing is significantly influenced by the level and experience of internal auditors; the perception of internal auditing is significantly influenced by the sector in which internal auditors work; the practice of internal auditing varies significantly between the public and private sectors; generally positive perception among all respondents of what is promoted by the conceptual framework; the practice of internal auditing in developing countries still lags behind what is promoted by the conceptual framework.

## **LIST OF ABBREVIATIONS USED**

AAA	American Accounting Association
ACB	Accounting Control Boards
AICPA	American Institute of Certified Public accountants
C&AG	Comptroller and Auditor General
CAO	Central Auditing Organisation (Egypt)
E&AD	Exchequer and Audit Department
EGOP	Egyptian General Organisation of Petroleum
EICA	Egyptian Institute of Chartered Accountants
FASB	Financial Accounting Standards Board
GAO	General Accounting Office (USA)
ICAEW	Institute of chartered Accountants in England and Wales
IIA	Institute of Internal Auditors
NAO	National Audit Office (UK)
SAO	State Auditing Office
UK	The United Kingdom of Great Britain and Northern Ireland
USA	United States of America
VFM	Value For Money

## **CHAPTER ONE**

### **1. INTRODUCTION**

This chapter is devoted to providing a brief description of the nature and main objectives of the research, the research problems, research methodology, research findings and recommendations.

#### **1.1 The Nature of the Research**

Research in international accounting and auditing could be placed in three categories: **descriptive** which provide information about the current state of the art of auditing; **conceptual** which develop a model or framework to examine the existing system; and **hypothesis-testing** in which hypothesis describing what should exist are developed, [Jaggi,1973]. When one looks at the literature it becomes apparent that there is little research on the idea of a conceptual framework for auditing generally and internal auditing in particular.

The problem of insufficient research in auditing was highlighted in a study by Needles [1989]. In this study Needles reviewed the literature for the 10-year period between 1978-1987 covering periodicals throughout the world. The study found that the amount of auditing research is very small though the real problem lies in the quality of the few research that exist; Needles found that almost all the research that existed was of a descriptive nature. This situation

seems to have hardly changed since Needles conducted his study as my research reviewed all the major periodicals in accounting and auditing with little success. Furthermore, a research was carried throughout the publications of major universities to review the doctorate projects in auditing. This research concluded, as with previous findings, that the number of doctorate projects on auditing is very small when compared with research on accounting matters. Also, the research revealed that even within accounting research the area of conceptual framework has attracted a very small amount of interest, if any.

Therefore, it was apparent that there is a dire need for research on the idea of a conceptual framework of internal auditing, with the research combining the three different categories stated by Jaggi. This involves a descriptive approach in describing the current state of auditing. Then a conceptual approach is followed in developing a conceptual framework for internal auditing, and in the final stage a hypothesis-testing approach is followed in examining whether the perception and practice of internal auditing conform with the conceptual framework.

## **1.2 Research Objectives**

The practice of auditing goes back more than five thousands years to the times of ancient Egyptians and over the years it has developed to become an inevitable function for all companies with its own standards. The practice of internal auditing became widely utilized in the 1940's. In the last six decades

internal auditing has been striving to reach the full professional status enjoyed by external auditing. However, achieving this full profession status requires development both in the practice of internal auditing as well as development in the theoretical body of knowledge that supports this practice.

Unfortunately, few studies were carried out to investigate the theoretical background of internal auditing and the relationship between the theory and the practice of internal auditing, in this case in developed countries. So no doubt that the situation in developing countries is much worse. Therefore, this research is mainly attempting to focus on the concept of developing a conceptual framework for internal auditing and then test the way this framework is perceived by internal auditors. The research does not restrict itself only to studying perception of internal audit but also examines the practice of internal audit in organisations from both the public and private sectors. This study is unique in that the empirical part of the research is carried out using organisations and internal auditors working in a developing country, namely Egypt. This is one of the first studies that concerns itself with investigating internal auditing in developing countries. The importance of such studies stems from the fact that if internal audit is to be considered an international profession it must have an international body of knowledge and standards that could be applied anywhere in the world. Also, there must be common agreement among the practitioners of internal auditing as to what is expected from them and the aims, goals and objectives of their profession.

Thus the objectives of this research could be stated as follows:

- 1) To provide a comprehensive review of the different terminologies used to describe the different types of auditing and to determine what is really meant by internal and any other type of auditing.
- 2) To determine the current state of auditing in Egypt and compare it with the practice of auditing in the UK which represents the state of auditing in developed countries.  
  
This study pays extra attention to the purpose and scope of public sector auditing between the two countries and identifies the factors that contribute to the similarities and differences between the developed and developing countries.
- 3) To study the different concepts that contribute to understanding the meaning and objectives of internal auditing and the different factors that govern it. This will also include tracing the different aspects of internal auditing and how these different factors come together to form the model that could be applicable anywhere. In doing so, the main objective of this section would be to form a conceptual framework for internal auditing. However, it should be noted that this study does not claim that the framework developed would be the perfect model but is merely a first step.



- 4) To undertake field work, mainly in Egypt, for the purpose of finding how internal auditors perceive the different aspects of the internal audit profession. Also, the research aims to examine whether the perception of internal auditing would vary according to the sector in which internal auditors are working.
- 5) To ascertain the standard of the practice of internal auditing in organisations from both the public and private sectors and examine the differences in the practice of internal auditing between the two sectors. And to determine whether the concept of the modern internal audit is put into practice in organisations working in Egypt, and to attest whether the practice of internal auditing differs significantly according to the nature of ownership of the organisation.
- 6) To draw up conclusions and implications for the practice of internal auditing in developing countries as well as the implications for the internal audit profession.

### **1.3 Significance of the Study**

In the past few years, due to economic conditions, organisations from all sectors have come under great pressure to cut their costs in order to be able to compete in an increasingly competitive environment. In view of this, internal audit becomes crucial as it can help organisations become cost effective in two ways: first, by improving internal controls organisations could save a huge

amount of resources that might otherwise be wasted; second, as the fees charged by external auditors gets higher it is crucial that organisations should have an effective internal audit function which could be relied upon by external auditors and therefore help save time and money spent on the audit process.

This comes at a time when the internal audit strives to reach the full profession status it deserves. However, as research has revealed, few academic studies have been undertaken in order to support the global development of the internal audit profession. This lack of research is particularly in a dire state in developing countries. This should not be ignored as the international market becomes more and more open and interlinked to the degree that almost all countries are affected by what happens worldwide. Multinational companies now operate in most developing countries and it is imperative that these companies should be assured of a high and similar standard of internal auditing everywhere. Also, the accounts of these companies are often subjected to examinations by external auditors in developed countries. These auditors should be able to rely on the work of internal auditors knowing that the standards and concepts of internal auditing are the same worldwide. More importantly the internal audit serves the organisation as a whole and top executives of organisations in particular need to have full confidence in the work of internal auditors in the affiliated firms, whether in developed and developing countries.

This highlights the need to draw a conceptual model for internal audit that could be accepted both in developed and developing countries. The study also provides a picture of the perception and practice of the internal audit in one developing country in an attempt to pave the way for more understanding and co-operation between practitioners of the profession worldwide. This should help those responsible for the advancement of the profession in their efforts to promote globally accepted standards for internal auditing.

The study is also significant in being the first study that has been conducted using a conceptual model that is mainly based on the experience of developed countries in trying to assess the state of internal auditing in developing countries.

It is important to note that a global standard of internal auditing could not be established by legislation. The only way forward seems to be for people within internal auditing to research and investigate ways of development through reasoning and intellectual persuasion. This research merely aims to open the door for further discussion as to ways of developing standards for the profession that are accepted and complied with worldwide.

## **1.4 Research Hypotheses**

The research hypotheses fall under two categories:

### **1.4.1 Hypotheses related to the perception of internal auditing**

- 1) The way internal auditors perceive the internal audit profession is influenced by the nature of ownership in the organisation they are working in.
- 2) The way internal auditors perceive the internal audit profession is influenced by the experience and level of internal auditors.

### **1.4.2 Hypotheses related to the practice of internal auditing**

- 1) The practice of internal auditing in the public sector differs significantly from the practice of internal auditing in the private sector.

## **1.5 Research Methodology**

### **1.5.1 Library research**

This involves researching the theoretical background behind the development of the different types of auditing and their nature, scope and objectives. Particular attention would then be focused on the modern concept of internal auditing, this entails a review of the literature on internal auditing in developed countries. This would be

carried out in the hope of providing the researcher with the required characteristics to construct a conceptual model for internal audit.

This phase also involves examining the current state of auditing in Egypt and an attempt would be made to draw comparisons with the state of auditing in a developed country, namely the UK. This would be done through investigating some government documents and legislation that affects the auditing profession.

### **1.5.2 Field work**

This phase consists of collecting the necessary data. This would be done mainly through two questionnaires especially designed for this study as well as some personal interviews that the researcher conducted with internal auditors from all levels in both sectors in Egypt. With the questionnaires, the primary aim of the first one is to explore the perception of internal auditors as held by different levels of internal auditors from the two sectors. The main aim of the second questionnaire is to gather data necessary to assess the state of the practice of internal auditing in organisations working in Egypt.

Meanwhile, the interviews held would be very useful in helping the research exploring the views of internal auditors of the state of their profession, and throw light on aspects that could not be included in the questionnaires. Furthermore, such interviews would be important in

that they gave the researcher the opportunity to observe on first hand the practice of internal audit in the organisations concerned.

### **1.5.3 Data analysis**

Different statistical techniques would be performed on the data collected to test the hypotheses. These would include factor analysis, parametric and non-parametric tests, one way analysis of variance, and multivariate analysis of variance as well as computing the mean and median scores. The computer analysis of the research data would be performed using the following packages: the Statistical Package for Social Sciences (SPSS/Win) and MINITAB.

## **CHAPTER TWO**

### **2. AUDITING : ITS NATURE, OBJECTIVES AND TYPES**

When writing about any topic the area covered needs to be defined. Thus, a definition is needed for the term auditing. However, as Mautz once stated “definitions are seldom helpful unless they are simple and easily understood, however an audit itself is neither simple nor easily understood” [Mautz, 1964: 1]. This problem of finding a definition which generally defines auditing is not new to the auditing environment which enjoys a great deal of controversies, but the source of much of these controversies is *What is auditing ?* This question seems to be the most fundamental and pervasive auditing issue. This very same question was the first to be tackled in the PMM Monograph. The monograph asks : “What is the basic function of auditing in society ?” [McMickle, 1978: 119].

John C. Burton and A. Clarence Sampson also stated at the 1974 Symposium on Auditing Research that :

The first problem that needs to be considered is a definitional one. What is auditing ? .... Whatever definition of auditing is agreed upon, it seems desirable that there be a better articulation of what an audit really is. There are widely varying perceptions today as to what an auditor is and does. [Burton and Sampson, 1974]

Little is found in literature concerning the basic and main issue of finding a theory to encompass the broad range of issues and concerns of auditing. The first to tackle this area was made in 1961 by Mautz and Sharaf, with the publication of their *Philosophy of Auditing*, in which they mentioned that "for years auditing has been so busy getting itself established and accepted that it has had little time for inspection. But as it becomes more and more mature, this excuse becomes less and less valid. There is indeed something incongruous about a profession with no visible support in the form of a comprehensive and integrated structure of theory. We need a philosophy of auditing" [Mautz and Sharaf, 1985: 5]. However, they admit that their book is not the long awaited remedy needed to solve all the problems confronted. Instead they see it as "...an introductory work only. Here is undertaken no more than an investigation into the possibility and nature of such a theory. Progress always comes slowly and we will be content if we can do no more than point the direction" [Mautz and Sharaf, 1985: 4]. The hopes of Mautz and Sharaf of arousing interest and seeing more research into the structure and theory of auditing have not been fulfilled yet.

Anderson, Giese and Booker [1970: 524] commented on the progress of auditing since the publication of *The Philosophy of Auditing* as follows :

Despite the long history and growth of auditing, the basic nature of this human process has never been treated explicitly. The single exception in the United States is the work of Mautz and Sharaf, which attempts to generalise about an otherwise specific and often



incomprehensible literature. In their Philosophy of Auditing, Mautz and Sharaf attempt the development of a theory of auditing.

Regrettably, this work has not produced the scholarly inquiry which the authors hoped would follow from it.

The need for more research was again emphasised by Frederick L. Neumann in 1972. He stated that “....our goal must be ....to incorporate results of primary induction into an explanatory theory covering a wide range of inquiry. Limited, specific research have their value. Theoretical research, however, is the more general and more widely applicable. I, therefore, believe it is essential for reasonable progress” [Neumann, 1972: 113]. In the same year, the American Accounting Association made the second major contribution to auditing by publishing its Statement of Basic Auditing Concepts. One of the conclusions of this study was that “pioneer work has been done by Mautz and Sharaf in an effort to identify the postulates of auditing. Continuing research should be undertaken by the auditing profession to identify the rules, definitions, and postulates necessary to the auditing process” [AAA, 1972: 48].

But the question still to be answered is : Hás a theory of auditing been developed ? Does this theory cover all aspects of auditing? In his study on the nature and objectives of auditing Peter McMickle [1978: 34] made the following remarks : “The Philosophy of Auditing and a Statement of Basic Auditing Concepts represent the only serious attempts to date to present a consolidated statement of auditing theory. They are both important efforts that

have significantly contributed to the study of auditing. However, both studies examine the nature of auditing from the perspective of the public auditor. They are not, therefore, satisfactory rationalisations of internal and governmental auditing. What is still needed is a more general statement of auditing theory .... a framework of concepts that encompasses and rationalises all branches of contemporary auditing". McMickle's study is one of few studies devoted to the theoretical aspect of auditing, in which he tried to answer the ever important question: What is auditing ? Considering all the difficulties surrounding the topic the study is seen as one of the most comprehensive so far. Even though the study might not have fulfilled all expectations, its objectives and the time available to the author should be taken into account. More research is still needed in the area.

Although the purpose of this research is not to examine the theory of auditing, the previous paragraphs were necessary to explain the difficulties confronted in trying to define auditing. In the following paragraphs general definitions of the term 'auditing' will be discussed before going on and discussing the types and objectives of auditing. In a later phase classification of different types of auditing would be inevitable. However, for the next few paragraphs a broad definitions will be looked for in the literature and this type of definitions is rarely found.

One of the earliest definitions can be found in Mautz and Sharaf's Philosophy of Auditing. They recognise auditing as a specialised field of knowledge and

they point out that “auditing is analytical, critical, investigative .... and has its roots not in accounting which it reviews, but in logic on which it leans heavily for ideas and methods” [Mautz and Sharaf, 1985: 14].

In the Statement of Basic Auditing Concepts the following definition was given “auditing is a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and communicating the results to interested users” [AAA, 1972: 2].

A brief, simple definition is provided by Schandle [1978: 2-3]. He defines auditing as “a human evaluation process to establish the adherence to certain norms, resulting in an opinion”.

These definitions are as much as one can get for a general broad definition of auditing, and one has to be satisfied with them as a starting point for going on and discussing the different types of auditing and their objectives and scope. Speaking about the different types of auditing the reader in the field of auditing will be faced with the great number of objectives that have been used to describe the scope of auditing, which have been wrongly used as definitions for several types of auditing. Examples of these are [McMickle, 1978: 65]:

- Financial Audit
- Management Audit
- Performance Audit
- Programme Audit
- Operational Audit
- Expanded Scope Audit
- Depth Audit
- Functional Audit
- Mission Audit
- Responsibility Audit
- Broad scope Audit
- Compliance Audit
- Efficiency Audit
- Fidelity Audit
- Comprehensive Audit
- Fiscal Audit
- Quality Audit
- Results Audit
- Organisational Audit
- Project Audit
- Accomplishment Audit
- Enterprise Audit
- Variable Scope Audit
- Total Audit
- Status Audit
- Extended Scope Audit
- Substantive Audit

These are only some of the many terms used to describe audits of various scope. Some of these terms are more commonly used than others and most of these terms unite together to refer to one of the main types of auditing. In the following paragraphs a brief explanation of how some of the above terms are viewed is given.

## **2.1 Financial Auditing**

As the most dominant type of auditing, most of the material in the literature concerns financial auditing, having established its professional bodies way ahead of the other types. This is the work carried out by the external auditors with the main aim of attesting the fairness and truth of the financial statements and, because of this it is sometimes called independent auditing and the people practicing it independent auditors. However, the author does not favour using the term independent auditing to label any type of auditing.

A simple definition of financial auditing is provided by Sawyer [1988: 4] as “the analyses of the economic activity of an entity as mentioned and reported by accounting methods”.

A more comprehensive definition is given by Mautz [1964: 3] who describes the role of financial auditing as “ ... to establish the reliability or unreliability of the financial statements and supporting accounting records of a company or institution, ... and to discover whether or not the financial statements do actually portray the financial position and the results of operations of the company or institution under examination”.

Perhaps the most comprehensive definition, though, is the one given by the American Accounting Association Committee on Basic Auditing Concepts and mentioned earlier as one of the broad definitions of auditing. But some writers such as Sawyer believe that it thrusts toward financial or accounting matters. However, one of the clearest explanations of the role of financial auditing is given by the American Institute of Certified Public Accountants [AICPA, 1973]. It gives the main objective of financial auditing as :

“the objective of the ordinary examination of financial statements by the independent auditor is the expression of an opinion on the fairness with which they present financial position, results of operations, and changes in financial position in conformity with generally accepted accounting principles”.

## 2.2 Performance Auditing

The report of a study group known as the “Little Hoover Commission”, which was established in Michigan in 1950 and 1951 as a result of the first Hoover Commission report of 1949, contained the following comment:

Because the appropriation process involves the determination of policy, it is necessary that the legislature hold the executive responsible for not only the honest expenditure of all public money in accordance with policies prescribed by law. This is known as an operational audit or performance audit, and it too should be undertaken by a staff responsible to the legislature.

[Knighton, 1967: 14]

The recommendation of this commission then was “ ... strengthening the legislature's means for effective control, particularly through establishment of a legislative auditor general to be appointed by and responsible to the legislature ( whose responsibility it would be ) to undertake performance as well as fiscal audits of all state agencies” [Knighton, 1967: 14-15].

It would appear that this was the first time the term ‘performance audit’ was used, and there are some who feel it was coined from the term ‘performance budget’ used by the first Hoover Commission in 1949. [Knighton, 1967: 15]

In his explanation of the term performance auditing, Peter McMickle [1978: 53] suggests that it “... is the term most state auditors use to describe state

audit activities that go beyond financial and compliance boundaries into the area of operational evaluation, .... and can take an inductive or deductive approach, or both”.

### **2.3 Operational Auditing**

The concept of operational auditing began to materialise during the 1950s due to the expansion in internal auditing in the private sector. Kent had used the term ‘operations auditing’ in 1948. [McMickle, 1978 53] Then the term was popularised by Frederic E. Mints [1954] through an article in *The Internal Auditor*. Mints has since stated :

My usage of the term was first planned during a brainstorming session which Mr. Kent and I held during the summer of 1953 in preparation for a talk on the subject. We considered a number of alternative titles and decided ‘operational’ had the most ear-appeal. I have subsequently had some regrets on this choice. [Dooley, 1963: 13]

Cadmus [1964: 5] supports this idea that operational auditing originated from internal auditing. He proposes that operational audits represent an application of the internal auditor's talents to the operational controls of the organisation, and he states that “we do not consider or propose that there should be any separate and different classification of employee called an operational auditor”.

However, other writers such as Lennis Knighton [1973: 42-44] prefer to include the term ‘operational auditing’ under the umbrella term of

'performance auditing'. He indicates that "the concept of performance auditing includes compliance auditing, operational auditing, and programme auditing". Knighton believes that these three terms might not be all performed at one time, but a true performance audit programme must encompass all of them.

But what is really meant by the term operational auditing and what is scope of its coverage ? One of the clearest answer to this question is provided by Sawyer [1988: 4] as he defines operational auditing as "the comprehensive review of unit activities, systems, and controls within an enterprise to reach economic, efficiency, effectiveness or other objectives". Earlier Joseph Dodwell [1966: 45] stated that "the primary objective of operational auditing is to identify those areas in which cost reduction, operating improvement or increased profitability can be the initiation or modification of administrative and operational controls or policy directives or by related corrective action". And Norgaard [1972: 25] states that "operational auditing is concerned with the examination and evaluation of management and its operational controls, and is made with purpose of formulating recommendations that will lead to increased operating efficiency".

For a more comprehensive consideration, though in the government arena, Kingwood views operational auditing to concern itself with (1) financial and compliance aspects; (2) whether managers of programmes are using resources



efficiently and economically; and (3) whether programmes are achieving the results set down in the legislation. [Jadallah, 1979: 42]

## 2.4 Management Auditing

“Just what is Management Auditing ?” asks Sawyer [1973: 10], before unravelling the question in the following citation :

There is a good deal of question as to what management auditing is. Is it an audit of management ? Some people say positively that it is. Is it an audit by managers ? Others just as positively take that view. Is it an audit for managers ? There is a large body of practitioners that like that definition. And if you ask them which managers- executive middle, or line - you will get three answers to that question too.

However, there seems to be a very little in the literature to support the idea of a management audit by managers, only in the case of a very small business where the manager is his \ her own auditor. The real argument is whether management audit is audit *of* management or audit *for* management. Each of these views is supported by several authors in the literature.

The term ‘management audit’ is believed to have been coined by T.G Rose [1932] in a book published in London with the same title. The audit that Rose mentioned in his book was basically a questionnaire-type interview designed to analyse functional activities. Comyns-carr commented on Rose's originality

stating that Rose “ ... brings forward an individual idea of an interesting original kind, the idea that management of an undertaking might be made subject to periodical expert investigation from outside analogous to the audit of its financial accounts”. [McMickle,1978: 47]

Then, in 1940, The Metropolitan Life Insurance Company provided a more comprehensive approach in its Outline for a Management Audit. [MLI, 1940] The approach used was previously developed for policyholder companies. It enlarged upon Rose's early work but pursued a similar outline. This work was followed several years later in 1948 by Howard G. Benedict's Yardsticks of Management. Benedict developed a questionnaire of nine divisions and many subdivisions attempting to evaluate management by means of weighted factorial analysis. [Benedict, 1948]

Those earliest writings considered management audit to be audit of management rather than audit for management. But this approach did not gain interest till the 1950s when the term management audit was used by Jackson Martindell, President of the American Institute of Management. His use of the term related to company evaluation that was similar to, but more comprehensive than, the Rose, Metropolitan, and Benedict audits. [Martindell, 1950]

During the 1950s the term was well promoted by the American Institute of Management. The Institute published more than a hundred cases of prominent

organisations such as Standard Cash Register, Toledo Edison, Statler Hotels, and General Electric. They also published, for a short while, a periodical entitled Management Audit. [McMickle, 1978: 55]

During that time one of the most significant works on management auditing appeared in 1959 when William P. Leonard published The Management Audit : An Appraisal of Management Methods and Performance. As with previous literature Leonard's work follows the deductive checklist or questionnaire approach. [Leonard, 1962]

Supporting this idea of audit of management, John Buckley [1966: 45] states that “essentially management services denote activities that provide assistance to management, while management audits describe activities related to the appraisal of management”. His view is supported by Campfield [1971: 29-30] who agrees that “if the modern management auditor is concerned with the substance of management planning and control .... he must ultimately appraise the overall efficiency of management itself”.

Despite these previous views, the idea that management auditing is auditing for management enjoys more support in the literature. In this sense George Gustafson [1970: 41] writes “it cannot be stressed too often that the most important single process in management- type auditing is developing findings which are significant, accurate and objective ... in order that a constructive contribution is made to better management”.

Another example is William P. Leonard's view. He sets the primary objective of management audit as " .... to reveal defects or irregularities in any of the elements examined in that portion of the organisation that is under study and to indicate possible improvements" [Leonard, 1962: 93].

But Sawyer [1988: 31] partially agrees with Leonard's view and states that "... management-oriented (internal) auditors can improve the ability of the managers to manage by pointing out the fundamental violation and by counseling the managers on how to correct it". He adds " .... management-oriented auditing is not restricted to exploring the causes of deficiencies. It is used whenever managers and boards call on (internal) auditors for special services within their competence: (1) to examine the basis for long-range decisions; (2) to evaluate the management of proposed acquisition; (3) to present to a legislature the need for new legislation; (4) to assess the effectiveness of company-wide systems, policies, and procedures. These are but a few uses for management-oriented auditing. The field is open-ended. Wherever management consulting is needed, management-oriented auditors can provide a useful service". Sawyer even prefers to use the term 'management-oriented audit' rather than 'management audit' to avoid giving the implication that it is an audit of management. However, some writers state that it depends on how the auditor approaches the work and his/her attitude. For example, Cadmus [1964: 28] states that "the thrust of the audit function depends on whether the auditor's state of mind is oriented toward appraising

management (audit of management ) or assisting management ( audit for management )”.

## **2.5 Efficiency Auditing**

Normanton [1966] defined efficiency auditing saying “it examines official structure, duties and performance, something in a similar way but at all levels including the highest. At other times it goes beyond the traditional field of ‘O&M’; it looks at a piece of administrative activity from a detached viewpoint and asks itself whether what is being done makes sense. It is not a confidential servant but a constitutional critic with a constructive mission. By the use of publicity it widens the debate upon matters which effect the careers of many thousands. It provides parliaments, governments, and civil servant themselves with access to information which otherwise is not systematically gathered by anybody. Efficiency audit can and does co-exist and co-operate effectively with departmental organisation study groups, which supplement its work on their own level. But for the strongest reasons of both organisation and methods, such groups are internal and dependent, the audit external and independent, and these positions are forever incompatible. There is therefore no real problem competition between O&M and efficiency audit, but rather one of co-operation”.

## **2.6 Internal Auditing**

Internal auditing was developing in industry during the early years of the twentieth century, but it had to wait till the late 1930s and early 1940s when it

became widely utilised. In 1941, the first significant text on internal auditing was published - Internal Auditing by Victor Z. Brink et al. This publication served as a catalyst to bring together in that same year the 24 founders of the Institute of Internal Auditors. [Cadmus, 1960: 28]

World War II resulted in an increase in the demand for better control, which helped both the profession and the institute to grow rapidly. The second half of this century saw the continuing expansion of internal auditing in the private sector. This expansion was matched with similar expansion in the membership of the Institute of Internal Auditors, from 24 members in 1941 to almost 3000 in 1951, almost 6000 in 1965, 12,000 in 1975 and currently in excess of 55,000. [Chambers, Selim and Vinten, 1988: 3] The institute currently has chapters in over 100 different countries worldwide. Membership of this body in the UK is approximately 4000 (1997).

As Brink, Cashin and Witt [1973] once stated there is no better way to begin writing about internal auditing than to turn to the Institute of Internal Auditors, the professional association of internal auditors. In the institute's Statement of Responsibilities of the Internal Auditing [IIA, 1995], the nature of internal auditing is described as "Internal auditing is an independent appraisal activity established within an organisation to examine and evaluate its activities as a service to the organisation. The objective of internal auditing is to assist members of the organisation in the effective discharge of their responsibilities. To this end, internal auditing furnishes them with analyses, appraisals,

recommendations, counsel, and information concerning the activities reviewed. The audit objectives includes promoting effective control at reasonable cost. The members of the organisation assisted by internal auditing include those in management and the board of directors”.

This definition of the nature of internal auditing is one the simplest definitions to be found. The importance of emphasising that it is a service to the organisation is given by Brink et al as follows: "First of all there is the indicated coverage of all operational activities of the employer organisation, without limitation to accounting and financial activities, and secondly, there is a clear statement of the end objective of service to the organisation. Thus there is a definite management orientation at a broad operational level" [Brink, Cashin and Witt, 1973: 3-4 ].

Also, the definition makes it clear that internal audit in itself is a control, a unique type of control which is concerned with measurement and evaluation of the effectiveness of other controls.

However, some writers such as Sawyer [1996] see the statement as an introduction more than a definition. He adds that "... it tells little about what internal auditing includes. It gives no indication of what internal auditors are responsible for. It is far too general to serve as a definition of an entire discipline - but then, that was never its intention. We will have to look further

for a definition that embodies the broad, unrestricted scope of professional internal auditing". Sawyer then gives this definition as follows :

Internal auditing is a systematic, objective appraisal by internal auditors of the diverse operations and controls within an organisation to determine whether: (1) financial and operating information is accurate and reliable; (2) risks to the enterprise are identified and minimised; (3) external regulations and acceptable internal policies and procedures are followed; (4) satisfactory standards are met; (5) resources are used efficiently; and (6) the organisation's objectives are effectively achieved - all for the purpose of assisting members of the organisation in the discharge of their responsibilities. [Sawyer, 1996: 6-7]

Sawyer's definition gives more than an explanation of the nature of internal auditing, it relates the internal auditor's role and purpose, beside identifying opportunities and responsibilities. It promotes for a broad management-oriented approach. Yet it still matches the objectives and scope of internal auditing as given in the Statement of Responsibilities of Internal Auditing.

The scope of internal auditing encompasses the examination and evaluation of the adequacy and effectiveness of the organisation's system of internal control and quality of performance in carrying out assigned responsibilities. The scope of internal auditing includes :



- Reviewing the reliability and integrity of financial and operating information and the means used to identify, measure, classify, and report such information.
- Reviewing the systems established to ensure compliance with procedures, laws, and regulations which could have a significant impact on operations and reports, and determining whether the organisation is in compliance.
- Reviewing the means of safeguarding assets and, as appropriate, verifying the existence of such assets.
- Appraising the economy and efficiency with which resources are employed.
- Reviewing operations or programmes to ascertain whether results are consistent with established objectives and goals and whether the operations or programmes are being carried out as planned.

## **2.7 Governmental Auditing**

Governmental auditing was the predominant type of auditing during the earliest times of ancient civilisations where auditors were appointed by, represented, and reported to some higher authority that an auditee was accountable to. At these times auditors were the eyes of the officials and their objective was

mainly to prevent fraudulent acts. Then during the nineteenth century public auditing came into existence and quickly became the dominant field of auditing. [McMickle, 1978: 65]

Governmental auditing came into focus again in the 1940s and 1950s, with expanded scope. A significant work in this direction was the work of the previously mentioned Hoover Commission. This expanded scope is implicitly put forward by the American General Accounting Office (GAO) in a monograph entitled Statement for Audit of Governmental Organisations, Programs, Activities & Functions. It states that “the term audit may be used to describe not only work done by accountants in examining financial reports but also work done in reviewing (a) compliance with applicable laws and regulations, (b) efficiency and economy of operations, and (c) effectiveness in achieving programme results” [GAO, 1972: 3].

The GAO then elaborates and explains the three elements of this expanded scope as follows :

- 1) Financial compliance - determines (a) whether the financial statements of an audited entity present fairly the financial position and the results of financial operations in accordance with generally accepted accounting principles, and (b) whether the entity has complied with laws and regulations that may have a material effect on the financial statements.

- 2) Economy and efficiency - determines (a) whether the entity is managing and utilising its resources economically and efficiently, (b) the causes of inefficiencies or uneconomical practices, and (c) whether the entity has complied with laws and regulations concerning matters of economy and efficiency.
- 3) Programme results - determines (a) whether the desired results or other authorising body are being achieved, and (b) whether the entity has considered alternatives that might yield desired results at a lower cost.

But one might still ask “what is the difference between governmental and internal auditing ?” The fact is that both seem to have almost the same scope, at least theoretically, with the difference in the parties they serve. Internal auditors work in private or public organisations as a service to this organisation, while governmental auditors are employed by governments to audit public enterprises as a service to governments, in that they act as external auditors to the organisations audited. Both of them contemplate a broad scope audit that goes beyond financial attestation to encompass reviews of the management function.

Yet the question about the differences, the scope or nature can be applied on all the previously stated types of audit. Peter McMickle [1978:65] asks :

- What is the difference, if any, between operational, management, or performance audits ?
- What is the exact scope or nature of expanded scope audits ?
- Do operational and performance audits include or exclude financial and compliance matters ?

Lawrence Sawyer [1973: 10], cuts through the confusion caused by such proliferation of terminology by stating, "I have decided to toss the term operational auditing, performance auditing, functional auditing, comprehensive auditing and the like". Instead he replaces them with "modern internal auditing" which he simply defines as "doing what the company president would do if he had the time and if he knew how".

However, this study is not concerned with building theories regarding the different concepts of auditing. The main terminology and concept which will be used in the rest of this study are: (1) External auditing - by which I mean the work done by the external auditors to attest as to the fairness and truth in representing financial positions; (2) Internal auditing - this term is used to refer to auditing in its broadest scope which include performance, operational, management auditing . . . etc., i.e. what Sawyer refers to as modern internal auditing. This a more useful division of the environment of auditing because it is representative of the way auditors view themselves and organise professionally.

## SUMMARY AND CONCLUSION

This chapter provided a look at the different terms and concepts used to describe different types of auditing and the nature and objectives of those types. This was a matter of necessity in order to set the terms to be used in the research and to clear the ambiguity and confusion caused by the many terms used to describe the practice of different groups of auditors.

The research found that the many terms that exist do not really refer to different types of auditing but rather they are merely terms used to describe the nature of the scope of different audit tasks. Therefore, it was concluded that auditing could mainly be defined into two main types: **External** which is the audit carried by auditors to attest the truth and fairness of the financial statement produced by a particular firm, this is mainly performed as service to external parties that might have an interest in the firm. **Internal** which in general refers to the audit performed by auditors working for organisations as a service to the organisation and its members in helping them in the effective discharge of their responsibilities. Internal auditing acts as function evaluating and assessing the different controls within the organisation.

It is also concluded that the scope of auditing, as referred to by terms such as performance and operational auditing is not an entirely exclusive privilege of one group of auditors. However, it is apparent that the different responsibilities and objectives of the two main types of auditing have meant that all these terms defining the scope of auditing represent an integral part of the practice of internal auditing. This does not exclude external auditors from the practice of such audit tasks but the

nature and objectives of their work makes the financial aspects of auditing of greater importance. It is also noted that many external auditor firms, especially the so called the "big-six", have established divisions within their firms specialised in carrying out audit tasks that have a scope extending beyond normal financial auditing.

Finally, it should be re-emphasised that the term 'internal audit' as used in this research refers to auditing in its broadest scope to reflect the work carried out by modern internal auditors.

## **CHAPTER THREE**

### **3. AUDITING IN EGYPT & THE UK**

#### **3.1 A Historical Background**

Auditing was known in Egypt as far back as 5500 years. Early Egyptians required the actual witnessing of corn being brought to the granaries and demanded that receipts of corn be certified. [Sawyer, 1988: 18] Nowadays, there is little that literature has to offer about auditing in Egypt.

External auditing in Egypt seems to have a great deal in common with what is practised in the more developed countries. The Egyptian Institute of Chartered Accountants was established in 1946 by a group of accounting professionals who were members of the Institute of Chartered Accountants in England and Wales. The main purpose of the founders at that time was to promote their common aspirations, foremost of which was the promotion of the prestige of the profession by encouraging a high standard of professionalism, education and knowledge. [Badran, 1983: 12] But despite having been the first professional organisation in Egypt, the institute's activities and influence were limited because of its small size, lack of authority and lack, at that time, of statutory or other governmental regulations requiring a limited company or other form of corporation to have its financial statements examined and reported upon by an independent external accountant. [Ata-Allah, 1978: 65-66]

Then in 1953 the legislature felt the need for a law to organise and govern the accounting profession. In the same year, law No. 133 was issued and specified certain qualifications for those entitled to register under the Act, and restricted the practice of accounting to persons who did, in fact, register in the Accountants' official lists at the Ministry for Trade and Industry. Most of the companies continued to ignore the accounting systems within them and presented their financial statements to the tax authority without being properly prepared in accordance with the professional standards. This resulted in the issue of laws No. 253 & 254 in 1953 to make compulsory the review of financial statements by a listed accountant before representing them to the tax authority. This law was supported by the Companies Act No. 26 in 1954, under which every private company formed under its provision must appoint an auditor by its general assembly of shareholders to audit its financial statements.

Soon thereafter, the Egyptian Accounting Association was formed by law No. 394 of 1955. All practising accountants must be members of the association. The dues collected from each member make the association a financially self-supporting organisation, financially independent from the government. In essence the association is run by the profession itself, which was the intention of the government when establishing the association. The main objectives of the association are : [Badran, 1983: 14-15]

- (1) To promote professional practice.
- (2) To establish and enforce a code of professional ethics.



- (3) To contribute to the improvement of accounting principles and techniques.
- (4) To co-operate with the public authorities in matters concerning their speciality.

1961 represents a turning point in the history of the auditing profession and indeed the whole Egyptian economy. In that year the famous nationalisation laws were issued and about 80% of the country's investment came under governmental control. This was followed by the establishment of specialised state agencies called 'public organisations'.

Those public organisations which have the characteristics of holding companies specialised in supervising companies which dealt with similar business activities. [Badran, 1983: 16] Those public organisations were then grouped into different groups according to the type of industry. Each of these groups was supervised by a Cabinet Minister, who in turn reported to the Cabinet of Ministers and to Parliament.

These changes inevitably resulted in changes in the auditing profession. The State Accounting Office (SAO) and the Accounting Control Boards (ACB) were two independent auditing authorities apart from the independent auditing firms. The SAO and ACBs were authorised to exercise the auditing of public organisations. [Badran, 1983: 17]

The State accounting Office was a public agency, like the GAO in the US and the NAO in the UK, mainly concerned with auditing any organisation which had public funds invested in it. According to law, the SAO had the right to audit the financial activities of public organisations and their affiliated enterprises. The SAO produced reports regarding financial statements. However, these reports were built on the SAO auditing standards which were more concerned with government regulations than normal auditing standards.

On the other hand, the ACBs were established in each public organisation to audit the financial activities of the affiliated companies under this organisation. These boards carried the work in the manner of independent accountants, and indeed many accounting firms and individual chartered accountants joined these boards. These boards were independent and reported directly to the board of directors of the public organisation expressing opinions on the financial position of the organisation. Members of these boards were government employees and received a regular salary.

This situation was explained by Kollaritsch as follows :

Accounting Control Boards, run by the government; took over the duties of the independent accountants. These boards presently audit all government-owned enterprises. Each board, specialising within certain sector of the industry, is charged with the design of accounting systems, the development of budgets, and the evaluation of management within its jurisdiction. The audit now serves primarily to

detect fraud and to evaluate management .... quite different from the primary attesting function performed by the profession in the United States. [Kollaritsch, 1965: 385]

The establishment of the SAO and ACBs created new problems, there was a duplication of work since both of them audited the same accounts without any co-ordination. Also, there were doubts about whether the ACBs were really independent. These problems were alleviated in 1964 when the SAO was replaced by the Central Auditing Organisation (CAO). The CAO became the agency in charge of auditing public enterprises, with members of the ACBs becoming responsible to the CAO. Many of the remaining chartered accountants joined the CAO.

This was followed by the development of a uniform accounting system to be applied in all public enterprises with the exception of banks and insurance companies. This accounting system was designed by the Central Department for Research and Operations, which was the department within the CAO responsible for carrying out research on auditing processes, follow-up and evaluating the implementation of the development plan on micro and macro levels. The system works as an accounting handbook in that it traces the movement between accounts, sets norms for accounting classification, and spells out valuation and reporting methods. [Alhashim, 1977: 129]

In effect those changes marked the decline of the external auditing profession in Egypt as the demand for the services of such a profession vanished with the nationalisation of four-fifths of the country's enterprises. And as Kollaritsch [1965: 385] put it, " most Egyptian accountants have had no alternatives other than to accept government employment".

It was not until 1974 that the government realised that the public sector and the nationalisation's laws were not achieving the growth and development hoped for. Hence, law No. 43 of 1974 was issued to open the door for foreign investment and to encourage and build a new private sector. This resulted in an increase in the number of private and multinational corporations, which led to the revival of the auditing profession as the demand for the services of external auditors by these corporations increased dramatically.

Since that time the profession has grown in strength, and today the Egyptian accounting profession is more organised and the competency level of the Egyptian auditors is improving all the time based on educational background and work experience. Membership of the Egyptian Institute of Chartered Accountants (ECIA) requires one of the following : [ECIA, 1982]

- (1) A Doctorate degree in accounting from an Egyptian or foreign university with three years of practical experience.
- (2) Membership of the Institute of Chartered Accountants in England and Wales.

- (3) A Master's degree in accounting and three years practical experience in the office of any member of the institute, with a successful completion of a written examination given by the institute at the end of the third year of practising.
- (4) A bachelor's degree in accounting and three years of practical experience in the office of any member of the institute, with a successful completion of two written examinations given by the institute. The intermediate examination is given after one and a half years of practising experience and the final examination is given at the end of the third year of practising.

Also, the purpose of the Egyptian auditors' work is basically the same as that of their counterparts in western developed countries. Both attest to the fairness of the financial statements of the audited entity within the framework of generally accepted accounting principles. The matters to be covered by the Egyptian auditor's report are specified in the Companies Act of 1954 as :

[Badran, 1983: 25-26]

- (1) Whether or not the auditor has obtained all the information and explanations required.
- (2) Whether or not such principles have been consistently observed in the current period in relation to the preceding period and whether the returns submitted from branches, if any, not visited by the auditor are adequate.

- (3) Whether or not the balance sheet and the statement of profit and loss are in accordance with the books of the company which have been examined by the independent auditor.
- (4) Whether or not proper books of accounts have been kept by the company.
- (5) Whether or not the balance sheet and the statement of profit and loss give respectively a true and fair view of the state of affairs and the results of its operations.
- (6) Whether the directors' report is in agreement with the books of account.
- (7) Whether or not the balance sheet, the statement of profit and loss and the directors' report comply with Companies Act of 1954 as well as the company's policy.
- (8) If a corporation whose books are being audited is a manufacturer or an industrial firm, the independent auditor should designate whether or not the company keeps regular and efficient cost accounting records.

The Egyptian auditor's objective then is expressing whether the financial statements give a true and fair view of the state of the company's affairs and the results of its operations, and is in compliance with accounting standards and laws. This is similar to the objective of American auditors which is "the ordinary examination of financial statements by the independent auditor is the expression of an opinion on the fairness with which they represent financial position .... in compliance with generally accepted accounting principles"

[AICPA, 1973]. It seems that Egyptian auditors have a lot in common with their counterparts in the west.

In the United Kingdom the process of auditing companies' accounts is organised by the Companies Act 1989 which made a large number of amendments to the previous Companies Act 1985, primarily in the areas of Auditing and Group Accounts. The objective of introducing these changes was to implement into English Law the European union directives on Company Law. However, the Companies Act 1985 remains the principal Act and the Companies Act 1989 includes a number of sections which are expressed to be Sections of the principal Act in replacement for the original sections. For example, S.23; this section is found in S.9 of the Companies Act 1989 but will be known as S.235 Companies Act 1985. [NAO, 1983]

The Act requires the auditor to state his opinion on the accounts presented by the company. Section 235 (2) states that " the auditors' report shall state whether in the auditors' opinion the annual accounts have been properly prepared in accordance with this Act, and in particular whether a true and fair view is given".

Thus the main objective of the UK's auditors is similar to that of Egyptian auditors. Both groups set out to give their opinion on the fairness and truth by which the annual accounts are prepared. In addition, auditors in the UK are required by Section 235 (3) of the Companies Act to " ... consider whether the

information given in the directors' report for the financial year for which the annual accounts are prepared is consistent with those accounts; and if they are of the opinion that it is not they shall state that fact in their report”.

The Egyptian auditors also are required by their respective Companies Act to state in their report “whether the directors’ report is in agreement with the books of account”. This means that the legal contents of the reports prepared by the UK's auditors and Egyptian auditors are almost the same.

The duties of the auditors in the UK are specified in Section 237 of the Companies Act. This Section reads:

- (1) A company's auditor shall, in preparing their report, carry out such investigations as will enable them to form an opinion as to -
  - (a) Whether proper accounting records have been kept by the company and proper returns adequate for their audit have been received from branches not visited by them, and
  - (b) Whether the company's individual accounts are in agreement with the accounting records and returns.
- (2) If the auditors are of opinion that proper accounting records have not been kept, or that proper returns adequate for their audit have not been received from branches not visited by them, or if the company's individual accounts are not in agreement with the accounting records and returns, the auditors shall state that fact in their report.



- (3) If the auditors fail to obtain all the information and explanations which, to the best of their knowledge and belief, are necessary for the purposes of their audit, they shall state that fact in their report.
- (4) If the requirements of schedule 6 ( disclosure of information: employment and other benefits of directors and others ) are not complied with in the annual accounts, the auditor shall include in their report, so far as they are reasonably able to do so, a statement giving the required particulars.

On comparing these duties with those of Egyptian auditors, it seems that both groups not only have the same objectives but the contents of their reports and the duties they have to perform are almost identical. Moreover, both of them have the same rights of access at all times to the company's books, accounts and vouchers, and are entitled to require from the company's officers such information and explanation as they think necessary for the performance of their duties as auditors. This similarity is due to the fact that most founder members of the Egyptian Institute of Chartered Accountants were members of the ICAEW, and nowadays being a member of the Institute of Chartered Accountants in England and Wales as one way of gaining the membership of the Egyptian Institute of Chartered Accountants. However, the similarities in the way the profession is organised do not necessarily mean that there are also similarities in practice.

### **3.2 Overview of Internal Auditing in Egypt**

There is no overall rule which tells organisations in Egypt how to run their internal audit departments. Also, the kind of professional standards and guidelines available to internal auditors in the west is not widely available to Egyptian internal auditors. However, this does not mean that internal auditing is non-existent, rather it is yet to enjoy professional status. The Public Sector Organisations Act 1983 makes it compulsory for public organisations to grant both internal and external auditors the necessary powers required in order to carry out their work.

Some public departments and organisations have their own guidelines on the practice of internal auditing; these guidelines are issued to be of help to internal auditors working for the department or organisation and to provide guidance for those auditors while they are performing their audit duties. One example of those guidelines is the one issued by the Egyptian General Organisation for Petroleum (EGOP), which is an organisation administering and controlling companies working in the Egyptian petroleum sector. This organisation falls under the control of the Ministry of Petroleum.

The aim of these guidelines are to unify the way internal audit is practised in the different companies within the petroleum sector, even though every company has its own internal audit programme.

The guidelines issued by the EGOP set out the objectives of internal auditing and stress that internal auditing should no longer only be concerned with financial and compliance auditing but is also expected from the internal audit to evaluate the efficiency of the systems of controls and evaluate the policies, plans and procedures. The guidelines state the aims (the author sees them as the duties of the internal auditor and the scope of his/her work, they are not an end in themselves but a means to reach the objective of internal audit ) of internal audit as: [EGOP, 1990: 3-5]

- (1) Continuous evaluation of internal control systems.
- (2) Evaluation of policies and objectives.

(Note: The researcher does not agree that this is part of the auditor's job)

- (3) Safeguarding the resources of the EGOP / company.
- (4) Evaluating the accuracy and integrity of financial and statistical information.
- (5) Ensuring the regularity of financial matters and preventing fraud.
- (6) Evaluating the plan and following-up its implementation.

Comparing these aims with what stated by the IIA in the Statement of Responsibilities of Internal Auditing. The Statement states that the scope of internal auditing includes: [IIA, 1995]

- (1) Reviewing the reliability and integrity of financial and operating information and the means used to identify, measure, classify, and report such information.
- (2) Reviewing the systems established to ensure compliance with those policies, plans, procedures, laws, and regulations which could have significant impact on operations and reports, and determining whether the organisation is in compliance.
- (3) Reviewing the means of safeguarding assets and, as appropriate, verifying the existence of such assets.
- (4) Appraising the economy and efficiency with which resources are employed.
- (5) Reviewing operations or programmes to ascertain whether results are consistent with established objectives and goals and whether the operations or programmes are being carried out as planned.

When compared, both sets seem to have some similarities apart from the point regarding the evaluation of policies and objectives. While the Egyptian set of guidelines sees the policies and objectives as a subject to internal audit evaluation, the Statement of Responsibilities of Internal Auditing rightly does not endorse this idea. Internal auditing should not question the merit of

policies and objectives, rather they should evaluate how successfully these policies are achieving their objectives in the best economic, efficient, effective manner, as well as the system used in forwarding the information to management.

Then the EGOP guidelines sets out the Standards and Concepts of internal auditing. It states the standards as:

**{1} Independence**

- The internal auditor should not carry out work which comes under his review.
- The internal auditor should have sufficient organisation status to allow him total freedom in performing audit work.
- The internal auditor should be objective when performing audit work.

**{2} Due Professional Care**

- The internal audit should be carried out with due professional care.
- Internal auditors should have adequate professional experience as well as educational background.
- There should be an adequate level of supervision within the internal department.
- Internal auditors should have a good character and good skills in communication and public relations.

**{3} Principles to be followed when planning and performing audit work**

- Internal auditors should plan their work before embarking on it.
- Internal auditors should evaluate information and collect sufficient evidence to support their findings.
- Communicating audit results clearly to the concerned management.
- Following-up the implementation of audit recommendations.
- Keeping continuous communication channels with the external auditors.
- Documenting audit work and keeping neat working papers.

The guidelines then define some concepts which it sees have direct relation with the above stated standards. These Concepts are: [EGOP, 1990: 7-9]

- 1) Testing and Samples
- 2) Risk and Proving
- 3) Internal Controls

Although these standards have many shortcomings when compared with the IIA Standards, they still represent a good base for further development. The EGOP standards share the basic ideas with the IIA standards; they both promote independence and due professional care. However, the IIA standards are more detailed and answer more queries than the EGOP ones do. The EGOP standards do not have a specific standard concerned with the scope of internal auditing. Though, as mentioned above, the guidelines in setting the

aims of internal audit stated what could be considered as the scope of internal auditing and this scope to a certain extent is compatible with the scope specified in the IIA standards and Statement of Responsibilities of Internal Auditing. The third standard of the EGOP standards represents a vague combination of the two IIA standards regarding the Performance of Audit Work and Management of The Internal Auditing Department. This third EGOP standard does not give clear guidance and does not answer many questions on how to carry out audit work or how to run the internal audit department. Therefore, there is still room for improvement on those guidelines with the standards expanded and explained in more details.

Research on the topic of internal auditing in Egypt seems non-existent; the only study available is a study carried out by Mostafa Hodieb [1985] to test how Egyptian internal auditors' objectivity is influenced by managers. The research examined two major proposals; first, it examined whether the knowledge of the outcome preferred by a firm's managers influence the professional judgement reached by the firm's internal auditors. Second, two factors are believed to affect the degree to which internal auditors may be influenced by the managers of their organisation : the level of the internal auditors commitment to their organisation, and their commitment to the profession of internal auditing. The research used 69 internal auditors working in five private and four public banks in Cairo, Egypt.

The results of this research indicated that the organisational status is not the dominant factor in evaluating the objectivity of the internal auditors. It is apparent that the independent external auditors should not rely on organisational status as the most important criterion in evaluating the objectivity of the internal auditors as suggested by the American Institute of Certified Public Accountants, the Institute of Internal Auditors, and the Egyptian Institute of Chartered Accountants. The results also indicated that internal auditors working in private banks are highly committed to their organisations, while those in public banks are highly committed to the profession of internal auditing. The strong desire to maintain employment in private banks could be used as a tool to bias the professional judgement of the internal auditors. Also, the managers in public banks exercised different types of power to bias the internal auditors objectivity.

Although Hodieb's research has certain limitations - such as the extent of it and whether or not it is really representative of the general population of internal auditors in Egypt - it represents a starting point for more research in the area of internal auditing in Egypt.



### **3.3 Overview of Internal Auditing in the United Kingdom**

The interests of the internal auditing profession in the UK are looked after by the Institute of Internal Auditors which has around 4000 members (1997). The institute has published a set of professional standards which should be followed by members when performing audit work. The institute also has issued a Code of Ethics promoting high standards of conduct in order to secure effective discharge of the auditors responsibility to the interest of those served by the profession. To clear any ambiguity the institute frequently issues the Professional Standards Bulletins which address internal auditors' questions. The answers contained in these bulletins, prepared by the international professional standards committee, are published in the IIA journal "The Internal Auditor". Furthermore, the institute's Statement of Responsibilities of Internal Auditing acts as a summary of the role and responsibilities of internal auditing, which can be used for information and public relations purposes.

Internal auditors working in the private sector are guided by the IIA's Standards, the Statements on Internal Auditing Standards, the Code of Ethics, and the Statement of Responsibilities of Internal Auditing. Internal auditors working in government departments and non departmental public bodies have at their disposal the Government Internal Audit Manual (GIAM) in addition to the publications of the IIA. The Government Internal Audit Manual is issued by the Treasury to provide direction, advice and information on internal audit to government departments and non-departmental public bodies.

GIAM consolidates and brings up to date existing guidance and supports the development of internal auditing in government. Therefore, it consolidates the IIA's Standards for Professional Practice and Statement of Responsibilities of Internal Auditing with CIPFA's Statements on Internal Audit Practice - Public Sector. CIPFA's Statements place particular emphasis upon irregularities and fraud evidence, and relationships with other parties' namely external audit client departments and other review agencies. [Chambers, Selim and Vinten, 1988: 39] The Government Internal Audit Manual is not merely a set of standards, as these represent one out of four sections which make up the GIAM. These Sections are: [GIAM, 1996]

**(A) Objectives**

This section sets out the role and responsibilities of internal auditing, how internal auditing fits into the government department and the approach to be adopted by internal auditors in carrying out their work.

**(B) Standards**

This section promote good practice and indicates criteria by which the operation of internal auditing should be measured and evaluated. These standards apply to all internal audit units and internal auditors in government departments and non-departmental public bodies. The Standards are regularly modified as internal auditing adapts to change. The areas covered by the standards are:

- 1) Scope
- 2) Independence
- 3) Planning
- 4) Audit Approach
- 5) Controlling
- 6) Reporting
- 7) Due Professional Care
- 8) Relationships
- 9) Staffing and Training

**(C) Practice**

This section outlines the professional practice of internal auditing in government departments and non-departmental public bodies. The section acts as a good guideline to auditors on understanding systems and internal control, how to evaluate these internal control systems, and how to plan and carry out systems auditing. In its supplementary, the section provides information on performance measures and indicators, and the internal audit and value for money audit.

**(D) Digest**

This section gives a brief description of significant words and phrases used in the Manual, and references to the principal paragraphs of explanation in the text.

The GIAM relies heavily on the IIA and CIPFA documents. It is meant to help internal auditors in government departments and is thus especially prepared to meet the needs of those auditors. However, auditors in the private sector will find the GIAM of great help as it represents an immaculate guide to standards and practice of internal auditing. Chambers describes the GIAM as “an eclectic compilation, selecting what was considered most apposite for British government needs. The whole GIAM repays careful study for those in both public and private sectors and is an invaluable guide” [Chambers, Selim and Vinten, 1988: 40].

As internal auditing is gaining more recognition as a profession in the UK, it is also building a good theoretical background. The number of research projects probing different aspects of internal auditing is increasing day by day, however it does not attract as much research projects as external auditing does. Moreover, degree courses in internal auditing are now available as well as postgraduate courses and the professional qualification of the Institute of Internal Auditors (UK) is becoming a highly regarded and marketable qualification.

### **3.4 The structure of auditing and financial control in the public sector in Egypt**

Auditing in the public sector is divided into two types

- Internal audit
- External audit

The internal audit is carried out by the internal audit department which is set up inside the public entity by the management of this entity to help them carry out their responsibilities.

The external audit is carried out by two different authorities. This type of audit is also called “control over budget”. The audit is carried out by:

- The ministry of finance (pre-spending & post-spending)
- The central auditing organisation (post-spending)

(Note: I do not agree with the use of the term ‘audit’ to describe the work of the ministry of finance, rather it should be ‘control’; but the term audit is used because that is how it is referred to by the Egyptian legislator)

#### **3.4.1 The role of the ministry of finance**

The ministry of finance carries out its audit in three different ways:

##### **(a) Decentralised audit**

This type of audit is carried out by the ministry of finance from within the audited entity. It is a pre-spending audit which is

carried out by different levels of authority, whose responsibilities are determined by the ministry of finance.

This process is organised by Act No. 127 for 1981. The Act states that “the ministry of finance will appoint a financial manager in every province, he would be helped by the heads of finance in the different areas of the province. The ministry will also appoint a financial controller at every ministry and he would be also helped by the heads of the financial hierarchy in the ministry. They are all responsible for the implementation of this Act or any other relevant Acts without contradicting any regulations which might exist within the audited entity”.

The Act defines the different levels of authority as:

- The financial controllers
- The financial managers
- The financial agents

The law went on to describe the role of each group as follows:

#### **The financial controllers**

The financial controller represents the ministry of finance in the province or ministry and his responsibilities are:

- (1) General responsibilities

These include checking the financial position once every three months and the annual financial statements. They

also include supervising the representatives of the ministry of finance in the audited entity as well as making checks on the entity's stores.

(2) Responsibilities regarding the budget

These include helping the entity solve any problem regarding the budget as well as making sure that the budget is being complied with.

(3) Responsibilities regarding accounting matters

Such as giving permission for loans and agreeing to let the entity pay any amount due to the government in the form of instalments.

(4) Responsibilities for purchases and stores

Giving the permission for acquiring goods, as well as permitting the re-ordering of items which the stores run out of and also checking the stores to ensure there is adequate control.

(5) Managerial responsibilities

Such as studying the amount of work carried and assessing the need for establishing new accounting

divisions or, indeed, getting rid of some of the existing ones.

### **Financial managers & agents**

Like the financial controllers, the financial managers and agents are employees of the ministry of finance and are therefore independent from the entity they work in. They have a whole range of duties the aim of which can be simply defined as making sure that the budget is being implemented properly.

Looking at the responsibilities of the representatives of the ministry of finance, it becomes clear that the type of work they carry out is compliance checks. The aim of such work is to confirm that the entity under review complies with laws and regulations in implementing the budget. There is no sign of an effectiveness or efficiency audit carried out by those representatives.

#### **(b) Centralised audit**

This is performed by various departments within the ministry of finance. Each centralised department has assigned duties.

These departments are:

- The central department for government accounts, purchases, stores and financial control.
- The central department for treasury and overseas contracts.



- The ministry of finance agency for budget affairs.

Again, the main responsibilities of these departments are concerned with financial and compliance controls. The difference between this type of work and the so called decentralised audit is that the former one is post-spending checks while the latter is pre-spending. However both of them do not extend including a performance audit, or even rise to the standard and concept of audit.

**(c) Control through the central bank**

This type of control is achieved by keeping all government funds in the central bank so that the central bank is in control of the public entities' revenue and expenditures. The current account of the entity in the central bank works as a control account over the financial activities of this entity.

It is quiet clear from examining the role of the ministry of finance that the type of work it performs is financial control and it is rather concerned with compliance with financial laws and regulations and does not match the concept of auditing.

**3.4.2 The role of the central auditing organisation**

Since the legislative authority does not have the time required to perform the control over the financial activities of the government and

the public sector, it has assigned this responsibility to the central auditing organisation (CAO). According to Act No. 144 for 1988 “The CAO is an independent institution which follows the House of Assembly ( the Parliament ). Its objective is to achieve control over government resources and those resources of public entities. It helps the House of Assembly in performing its duties”.

The CAO performs the following types of control:

- 1) Financial control
- 2) Control over performance and plans implementation
- 3) Legal control over any decision made regarding any financial violations.

The CAO audits the following:

- 1) Local and central government.
- 2 Public sector companies and their affiliated organisations.
- 3) Any organisation which is not considered a public sector company but whose capital might include no less than 25% owned by public sector company or one of the public banks.
- 4) Professional and trade unions.
- 5) Political parties, National and parties' newspapers.
- 6) Any other organisation whose internal regulations requires it to be audited by the CAO.

### **3.4.2.1 The CAO and Independence**

To enable the auditing authority to perform its duties in a secure and sound atmosphere, independence has to be guaranteed to this auditing authority. Impairments to independence can be a serious constraint to auditing.

The CAO Act has confirmed and reinforced the CAO's independence from the government. The Act considers the CAO as an independent audit institution that helps the People's Assembly ( the Parliament ) accomplish control over public funds. The guarantees of CAO independence have been cited in its act as follows:

- (1) The president of the CAO is appointed by a combination of nomination by the President of the Republic and approval of the People's Assembly. He can only be removed from the office by presidential decree after approval by a majority of the People's Assembly members. Should he resign, his resignation is submitted to the People's Assembly.
- (2) To maintain an independent attitude by auditors and to avoid the appearance of conflict of interest, the CAO auditors are not allowed to

assume any job that conflicts with their audit work. Also, the CAO Act regulates the provisions concerning cases in which the CAO members are liable, and cases in which they can be removed from office.

- (3) To fully accomplish its mission, the CAO is guaranteed necessary financial resources. Accordingly, the CAO financing requirements are included as a lump-sum in a separate section of the state budget. Then the president of the CAO sends a detailed draft budget directly to the People's Assembly for its approval.
- (4) The CAO has complete discretion in deciding what subjects to look at, and how to examine them within a predetermined plan prepared by its various control divisions.
- (5) The CAO also has complete access to the registers in public entities, accounts and the documents pertaining to them, and all other documents, registers or papers necessary to

complete its audit work fairly, accurately and thoroughly.

- (6) The CAO Act has given its President the same authorities of personnel affair given to the Minister of Administrative Development and to the Head of Civil Service Commission who are responsible for managing human resources in all government departments, corporations and publicly owned companies.

#### **3.4.2.2 The CAO Reporting Procedures**

The annual and periodic reports of the CAO are presented to the speaker of the People's Assembly who refers them to the respective specialised committees. They are then discussed in the presence of the representing CAO auditors and the officials of the audited entities, who give evidence and explain why the matters mentioned in the report were allowed to happen. The committee then makes recommendations which, once approved by the Assembly in full session, must be implemented by the auditees.

The CAO consists of six central departments:

- (1) The central department for financial control over central and local governments.
- (2) The central department for financial control over public sector companies.
- (3) The central department for following-up plans implementation and performance evaluation.
- (4) The central department for control over financial violations.
- (5) The central department for research and operations.
- (6) The general secretariat.

The type of work carried out by the first two departments is merely of a financial nature. The objective of the audit performed by these departments is to check that the audited entity complied with the financial laws and regulations in collecting revenues or spending on their expenditures. Normally is a post-spending audit. The departments do not perform any aspect of the modern audit, i.e. economy, efficiency and effectiveness.

### **3.4.2.3 The central department for following-up plans implementation and performance evaluation**

This department controls implementation of social and economical plans; investment, production, export, consumption and employment programme to confirm that plans objectives are achieved. In achieving these the department does the following:

- 1) Audit the implementation of investment projects with the planned cost.
- 2) Audit the implementation of projects in the planned time.
- 3) Check that the objectives are achieved in terms of goods and services, also in terms of quality and quantity.
- 4) Audit the human resources in terms of number, cost, and type compared with planned.
- 5) Evaluate the cost of production to ensure that the production method used is the most economic, and the input used is achieving the maximum output which could be produced. Hence, ensuring that the projects or programmes are run as efficiently as possible.
- 6) Discover any aspect of wastage and find a way to put things in the right order.

- 7) Ensure that projects are achieving their export goals.
- 8) Evaluate the consequences of implementing projects and evaluate the results and compare them with the resources and costs used in achieving them.

Looking at the work of the central department for following-up plans implementation and performance evaluation, it seems that the department has the basis required for carrying out auditing in its modern concept. But when it comes to practice, this type of audit is still in its infancy. It is not fully implemented in the different areas of the public sector and still suffers some limitations. For example, when the researcher talked to some auditors working in the CAO some of them saw working for the department as a disadvantage and not as rewarding as working in one of the other departments. Some have even added that by working in the central department for following-up plans implementation and performance evaluation auditors are less likely to get the experience gained by other auditors in other departments of the CAO. The researcher thinks that this is because of the lack of training programmes and understanding of the work carried out by auditors working in such a department. Also, working for such a department does not give the auditors the financial auditing experience to allow them to join one of the private external auditors firms and get better



working conditions. These are some of many limitations hindering the implementation of auditing in its broader scope. Such limitations will be discussed in a later section of this research.

The central department for following-up plans implementation and performance evaluation carries out its work only in some areas of the national health service, and also to a very limited extent in education and public sector companies. However, after reading some of the reports produced by this department the researcher noticed that the work done does not rise to the concept of the performance audit. The following points can be made about these reports:

- The report relies heavily on a group of comparative tables which compare the end results of the audited year with those of the previous year. It also compares the actual results with the planned objectives.
- In preparing these tables the auditor relies totally on the information given to him by the audited entity, instead of collecting the data himself or even checking the integrity of the data provided.

- The auditor does not evaluate the system of control within the audited entity to ensure that a certain control is kept over the efficiency and effectiveness by which the programme is carried out.
- The performance indicators used are not always suitable or adequate measures. Such indicators are always set up and used without testing their suitability to the activity under review.
- There seems to be no system of following-up for the recommendations made in the report. Some recommendations are repeated over the years. Also, the unit under review does not pay any attention to responding to the report unlike with financial reports where no-response means no authorisation for the new budget.  
  
Moreover, it is quiet clear from the loss achieved by many public sector organisations one year after the other that those organisations do not implement the required recommendations.
- The report itself is prepared long after the period under review has ended and sometimes it can take up to a year

before the report is issued. Also, though these reports are meant to be performance reports, consideration is given to financial factors rather than to efficiency and effectiveness.

- Finally, there is no system of evaluating the reports themselves to test their suitability to the objectives for which they are prepared.

Examining the duties and responsibilities of the central auditing organisation indicates that auditing as currently performed does not fully match the modern concept of auditing. There is still much emphasis on the financial side of auditing with the efficiency and effectiveness aspects yet to receive adequate attention. This leaves a lot to be desired in order to reach the higher standard of auditing in government as practised in some more developed countries.

### **3.5 The National Audit Office**

Prior to the mid 1980s and for over a century, public auditing in the United Kingdom had an unchanged statutory framework. Public auditing was carried out by the Office of Comptroller and Auditor General (C&AG) which was created by the Exchequer and Audit Departments Act 1866. The Office was headed by the Comptroller and Auditor General. The 1866 act was slightly

modified by the 1921 amending Act. Then during the 1970s and early 1980s more interest was paid to the state of control of public expenditure and the role of C&AG. The situation was once commented on as “the control of public expenditure is near to the top of the charts recording popular interest” [Normanton, 1981: 33]. The demand for greater public and parliamentary accountability for all bodies receiving public funds was growing.. Such growing concern was described in the following comment:

“Over the last 100 years honourable members have eulogised over the system of audit .... It does a very useful job within its limitations, but these limitations are now so scandalously great that they constitute a major constitutional weakness.... It is time for change”

[Normanton, 1981: 33]

This resulted in sessions of parliamentary reviews into the scope and nature of the C&AG's work. In 1980 the Chancellor of the Exchequer presented the government's Green Paper on “The Role of the Comptroller and Auditor General” as the first step in the government's review of the Exchequer and Audit Departments Act. In the same year an inquiry by the Committee of Public Accounts (CPA) reported in its recommendations important developments in the status and functions of the C&AG and his staff. The result of this debate was the promulgation of the National Audit Act 1983.

Then in January 1984, as a result of the National Audit Act 1983, the National Audit Office (NAO) was established to take over the responsibilities of the

Exchequer and Audit Department. The NAO is headed by the Comptroller and Auditor General who appoints the staff required to carry out the NAO responsibilities as stated by the Act:

“There shall be a National Audit Office consisting of (a) the Comptroller and Auditor General, who shall be the head of that office; and (b) the staff appointed by him under this section” [National Audit Act, 1983: Section 3 (1)].

The NAO is granted total independence through the following conditions:

- (1) The C&AG is appointed by the Queen on a motion for an address by the House of Commons made by the Prime Minister after agreement with the chairman of the CPA. The C&AG can be removed from his office only by the Queen on an address from both Houses of Parliament. The 1983 Act further strengthened the position of C&AG by making him an officer of the House of Commons. Therefore, his duties are carried out on behalf of the Parliament to which he reports directly without being instructed by the House or having to answer to any minister of the government. However, the C&AG works in close association with the Committee of Public Accounts.
- (2) The C&AG salary is paid out of the Consolidated Fund without requiring the annual approval of the Executive or of the Parliament. The NAO budget is prepared by the C&AG and is then presented to the Public Accounts Commission for parliamentary approval.

- (3) The C&AG appoints his own staff and determines their grades, salaries and conditions of service.
- (4) The C&AG has discretionary power to decide on the examinations to be carried out, the extent and conduct of these investigations and the contents of any report. The C&AG cannot be instructed by any member of the government or even by the Parliament as to what kind of work he should carry out, however he is open to any suggestion and works in tandem with the Committee of Public Accounts.

The NAO is managed by a Senior Management Group consisting of the C&AG and three Assistant Auditor Generals whom are his principal advisers, the Director of Policy and Planning and the Director of Establishments and Accounts. The power of the final decision rests with the C&AG. The chart in Exhibit 3.1 explains how the NAO is organised. Each line division is headed by a Director of Audit and assigned to the audit of individual departments and other bodies, or to cover specialist audit areas. Meanwhile, central divisions are responsible for personnel, administration, finance and training; for guidance on audit standards and methods, research and international liaison; for policy and planning; and for special studies on economy, efficiency and effectiveness.

The National Audit Office's headquarters in London is home for its senior management and certain other staff, the rest of the staff are accommodated in

the organisations or departments they audit. The NAO has overseas offices in Paris, Geneva and Rome.

The duties of the NAO are determined by the statute, however the C&AG has discretionary powers to carry out other examinations and report the results.

The main responsibilities of the C&AG are: [NAO, 1983]

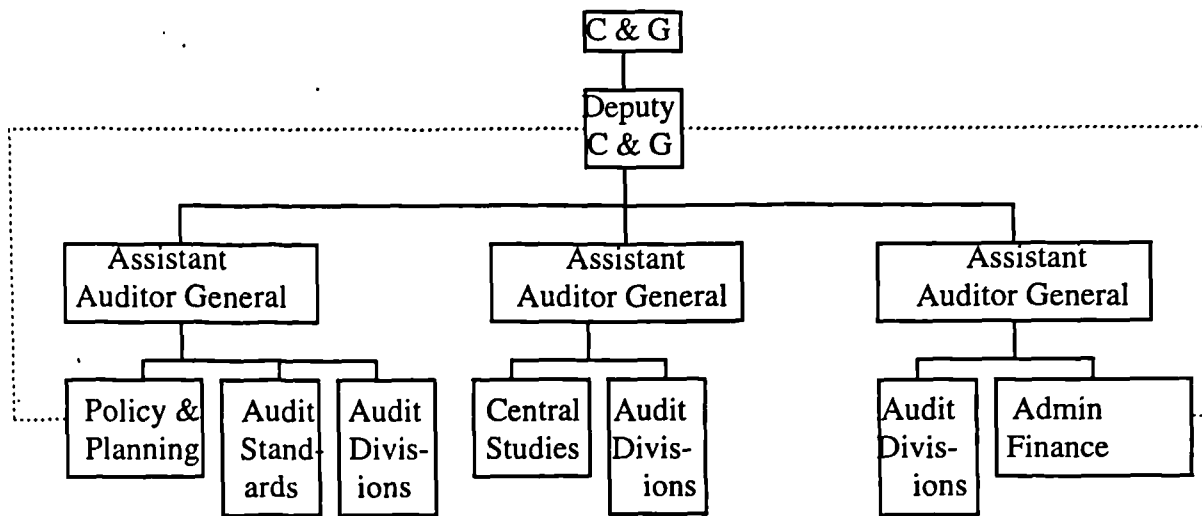
- \* Audit and certify the appropriation accounts of all government departments.
- \* Audit the revenue accounts.
- \* Audit and certify departmental trading accounts and related activities.
- \* Examine departmental store accounts.
- \* Audit and certify other accounts as laid down by the Exchequer and Audit Departments Acts and other statutes.
- \* Report as necessary to Parliament on the results of these audits,

In addition to the above stated responsibilities the C&AG might, if he wishes to do so, carry out the below mentioned duties:

- ◆ Audit and certify other accounts by agreement.
- ◆ Have rights of access to a wide range of bodies where he is not the appointed auditor but which are largely financed by public funds.
- ◆ Examine the economy, efficiency and effectiveness of expenditure and the use of resources by bodies where he is appointed auditor or has right of access either under statute or by agreement.
- ◆ Report to Parliament on the results of these examinations.

### EXHIBIT 3.1

#### Organisation structure of the NAO



Audit divisions are assigned to areas and programmes of expenditure and revenue in such fields as:

- \* Defence \* Overseas services \* International organisations \* Agriculture
- \* Trade and industry \* Employment \* Transport \* Environment \* Law and order
- \* Education \* Health \* Social security \* Inland revenue \* Customs and excise
- \* Computers \* Property services \* Manpower, pay and pensions

**Source:** The National Audit Office, National Audit Office, p.4



On the other hand the C&AG is restricted from carrying out some responsibilities such as:

- \* Formally disallowing expenditure, nor himself giving judgements or ruling on questions of legality.
- \* Auditing or having access to the accounts of nationalised industries or local authorities.
- \* Having a general power to “follow public money wherever it goes” with rights of access to companies, organisations or individuals receiving grants, subsidies or other assistance from public funds.
- \* Questioning the merits of policy objectives when carrying out examinations of economy, efficiency and effectiveness.
- \* Examining questions of maladministrations by departments affecting individual members of the public (this is the field of the Parliamentary Commissioner for Administration)
- \* Reporting other than to Parliament ( except on his audits of international organisations, where he reports to governing bodies).

The types of accounts to be audited by the C&AG include:

### ***Appropriation accounts***

These are the main accounts of government departments.

### ***Revenue accounts***

These are the main accounts of revenue paid into the Exchequer from taxation, customs and excise duties, etc.

### ***Production, trading and trading fund accounts***

Accounts of trading and manufacturing activities, such as Royal Mint.

### ***Other accounts of departments and public sector bodies***

These are miscellaneous accounts ranging from small cash and minor trust fund accounts to those of bodies dealing with regional developments, unemployment measures, etc.

### ***United Nations, Commonwealth and other international accounts***

These include the accounts of main UN agencies such as UNSECO, FAO, etc.

## **3.5.1 NAO and VFM audit**

Looking at the duties and responsibilities of the C&AG, it is clear that the NAO is not restricted to financial auditing. The National Audit Act 1983 made it clear that the NAO could carry out value-for-money (VFM) auditing. The Act [Section 6 (1)]states that “The Comptroller and Auditor General may carry out examinations into the economy, efficiency and effectiveness with which any department, authority or other body to which this section applies has used its resources in discharging its functions”.

However, this does not mean in any way that prior to 1983 value-for-money audit was not practised by the C&AG; the VFM audit is thought to have been practised as far back as the late nineteenth century. Sir Douglas Henely states “Value-for-money audit has been commonly used in the UK as a convenient description of evolving interests and work of E&AD over many decades, with its origin sometimes pinpointed in the year 1888 when there was an interesting confrontation between the C&AG and the Army Council over a little matter of contracts for army ribbon, from which the former emerged the winner” [Henley, Holtham, Likierman and Perrin, 1983: 215].

Then the practice of value-for-money auditing became more widely practised in the twentieth century. The development continued in the post-war years, but VFM auditing was limited in both scope and size.

This means that VFM auditing was performed even before the National Audit Act 1983, but it had no statutory support as there was no direct and explicit prerogative in the 1866 and 1931 Audit Acts which empowered the C&AG and his E&AD to perform VFM audit.

### **3.5.2 NAO reporting procedures**

The C&AG reports to the Parliament on the results of both audits, i.e. financial audits of accounts and value-for-money audits. In the case of international organisations such as UN agencies, the C&AG reports to

the governing bodies of the organisations concerned. However, many matters arising from the certification audit or VFM audit are raised and resolved satisfactory with audited bodies without the need for a formal published report. [NAO, 1983: 10]

The C&AG, having completed his work, submits his report to the Parliament. Parliament is then expected to review the findings of the reports and take any action required, but this task is normally delegated to the Public Accounts Committee.

Finally, it should be noted that the form of the C&AG reports is not prescribed. He has wide discretion to decide on their timing and contents. However, findings of audits are normally discussed with management in the audited organisation before publication to ensure that the facts are complete and fairly presented. In case of unresolved issues the replies to the criticisms and other findings are often incorporated in the report. The final decisions on the report contents rests always with the C&AG.

### **3.6 Similarities and differences between the CAO and NAO**

The Egyptian CAO and the UK's NAO enjoy similar legal status providing them with the legal independence required to perform their tasks properly. Both organisations report directly to their respective Parliaments. They are both funded by a separate fund in the budget to further strengthen the

appearance of their independence. In both cases the head of the organisation sends his draft budget to the Parliament for authorisation of funds. However, in the Egyptian case there are always complaints about insufficiency of funds.

The C&AG and the head of Egypt's CAO have discretionary powers in running the affairs of their respective organisations. Both of them have complete freedom in appointing the staff required by their organisations, and deciding on their terms of employment. But it should be taken into consideration that in Egypt salaries are also organised by other Acts which might restrict the minimum and maximum amounts paid to the staff as they are still considered public employees. This also applies to the NAO as the Act states that “Employment as a member of the staff of the National Audit Office shall be included among the kinds of employment to which a superannuating scheme under Section (1) of the Superannuating Act 1972 can apply; and in exercising his powers under Section (3) above the Comptroller and Auditor General shall have regard to the desirability of keeping the remuneration and other terms and conditions of employment of the staff of that office broadly in line with those applying to persons employed in the civil service of the state” [National Audit Act, 1983: Section 3 (4)].

Moreover, the C&AG and the president of the CAO have been granted total discretion in deciding on the kind of work they would carry out and in deciding the scope of such work. Nevertheless, it seems that the scope of work carried out by the NAO is wider than that carried out by the CAO. The CAO still

concentrates more on financial matters and compliance with laws and regulations. The NAO seems to have gone further down the road in practising VFM auditing and has developed a better framework for VFM audit than that of the Egyptian CAO. The areas covered by VFM auditing in the UK are more than those in Egypt, however both the National Audit Act 1983 and the 1988 CAO Act have given the C&AG and the President of the CAO the right to carry out VFM auditing. Nowadays in Egypt the topic of VFM auditing is starting to raise the kind of interest it raised in the UK during the last three decades, and its inevitable that VFM auditing is going to be performed in many more new areas.

Auditors working in the NAO are faced by some problems experienced by their Egyptian counterparts. Auditors working for the NAO follow the standards and approach adopted by the audit profession generally. The NAO auditors, like their counterparts in the CAO, do not enjoy the advantage enjoyed by auditors working for the American GAO of having guidelines set out to help them in carrying out their work. However another advantage the NAO auditors do have over the CAO auditors is the existence of some professional bodies which are specialised in public sector finance and accounting such as CIPFA. There are close links between the NAO and CIPFA, and it is inevitable that most of guidelines issued by CIPFA are followed by the NAO auditors. Furthermore, auditors working for the NAO are required to train for 3-4 years to acquire a full professional accountancy qualification, normally that of CIPFA.

One of the main differences between the NAO and CAO is the contents of their reports. The reports produced by the CAO contain the findings of audits and suggestions on how to amend any wrongdoing. These reports are then presented to the speaker of the Parliament who refers them to the concerned parliamentary committee. This Committee discusses the CAO reports with officials of the audited entities in the presence of the representing CAO auditors, and on completing these discussions the Committee makes recommendations which must be implemented by the auditees after approval by Parliament in full session.

On the other hand, the NAO has been criticised for long having presented reports which are merely a picture of what is going on in the audited entity since the reports do not include any suggestions or recommendations. The procedures followed are for the NAO to submit its report to Parliament and then reading the report and deciding what action needs to be taken by the audited entity to remedy any problem mentioned in the report. This task is normally delegated to the Public Accounts Committee. The PAC in turn reviews the report and its findings and makes the necessary recommendations and follow-up of these recommendations. In doing this the PAC works in tandem with the NAO but the process is nonetheless criticised for being completed internally. A member of Parliament asked "Is there not, therefore, a gap at the moment, where there is no outside, overseeing body which can suggest to the departments that what they are doing may be unnecessary or may even be counter-productive; such a role as played by your (NAO's)

opposite number in the United States in the GAO” [The House of Commons, 1980-81].

The audited entities also made it clear that they would like the NAO reports to include recommendations telling them what to do to correct what is going wrong rather than leaving them wondering what to do.

One other major difference between the NAO and CAO is that the former has an auditor who is appointed by Public Accounts Committee to carry out economy, efficiency and effectiveness examinations of the NAO use of resources. The Egyptian CAO does not have such an auditor.

### **3.7 The Audit Commission For Local Authorities In England and Wales**

Local authorities in England and Wales are audited by the Audit Commission for Local Authorities in England and Wales, while the audit of local authorities in Scotland is carried out by the Commission for Local Authority Accounts in Scotland. The Audit Commission for Local Authorities in England and Wales (the Commission) was established in April 1983 as a result of the Local Government Finance Act 1982.

The commission has two main responsibilities: [Glynn, 1985: 160]

- (1) To secure continued integrity of Local Government, so that confidence in the institutions of government is not eroded by concerns over fraud and corruption.



- (2) To help authorities improve the returns on the £25+ billion invested annually in goods and services, as required by section 15, viz.:
- “An auditor shall by examination of the accounts and otherwise satisfy himself ... that the body whose accounts are being audited has proper arrangements for securing economy, efficiency and effectiveness in the use of its resources.”

In a booklet entitled “Mission and Priorities”, the Audit Commission [1983: 8] sees its mission as being to:

- 1) Identify specific local opportunities to improve value for money, in the course of the annual audit effort - by reference to other steps that have already been taken successfully in other authorities facing similar problems.
- 2) Promote good management practice, by documenting achievements and training auditors to spot potential improvements, and publishing the results of Special studies.
- 3) Encourage; even promote; action, through (auditors') reports to officers and members, management letters to the authority and (if necessary) reports in the public interest.
- 4) Monitor implementation performance during annual audits, drawing attention as required to any shortfall.

5) Co-ordinate the efforts of related organisations.

By executing the above stated missions the Commission is aiming at improving the way local authorities are run by encouraging authorities and helping them when they need help and motivating them to help themselves. In doing so the Commission has adopted four different ways; these ways are:

1. Appointing auditors to audit the accounts of all local authorities in England and Wales.
2. Undertaking studies which make recommendations for improving economy, efficiency and effectiveness of services.
3. Encouraging authorities to learn from one another and thus to apply good management practice which has proved effective elsewhere.
4. Carrying out studies to investigate the impact on local authorities of legislation or central government action or advice.

In another booklet the Commission explained the role of its auditors as, “First they must ensure that local authorities are spending money and reporting their financial situation in accordance with the Law and that there are safeguards against fraud and corruption, and secondly they seek to help the authorities help themselves by showing services can be provided as cost effectively as possible”.

The role of the Commission is seen by Venables and Impey [1991: 24] as to undertake the following duties:

- (1) Independent appraisal functions.
- (2) Pursuance of VFM.
- (3) Ensuring legality of income expenditure.
- (4) Evaluation of management performance.
- (5) Encouragement of exchange of ideas.
- (6) Evaluation of internal audit.
- (7) Report directly to the Public.

Thus, the commission is not only interested in financial regularities, it regards VFM auditing as being particularly important. Every year the Commission supply each authority with what is called an 'Authority Profile' which is a summary of comparative statistics and trend information available to the authority. This report draws the attention of the authority to issues likely to be investigated by VFM auditing in the course of the audit. The Commission annually identifies specific areas within the authorities for investigation; each of these areas is termed a 'Flavour of the year' and believed to have high potential for savings and improvement, or in need of special attention. For example; in 1986 the flavours were: Teaching costs in secondary schools; Social services, Road maintenance; Management of major projects; Computers; Financial management; and Central overheads. These flavours are included in the audit plans. Exhibit 3.2 provides an overview of the proposed VFM projects for the financial years 1986 to 1989, however the report 'profile' and the 'flavour' are continuously updated as the results of 'Special Studies' emerge. These 'Special Studies' are exercises undertaken by the

commission and a number of authorities. Every year the commission specifies areas within local authorities and then attempts to take part in the exercise, and when an adequate number of authorities agree to take part the commission sets up teams to carry out the checks and examinations. The composition of these teams differs from one project to another, but they include specialists in each proposed area, seconded from the local authorities. On completing the special study a report is produced by the Commission summarising the procedures followed, the data needed and how they were collected. The report also includes the performance measurement criteria, both that available and that developed by the team. [Nemeh, 1986: 281]

The Commission consists of a chairman and 13 members, who represent the interest of rate-payers, authorities, employees and accountants. The day-to-day operation of the commission rests with its controller. The commission meets monthly and is a self-financing body; its income comes mainly from fees from local authorities for audit work. Exhibit 3.3 shows the proposed organisation structure of the Commission.

The audit work of the Commission is performed by the District Audit Service, whose statutory responsibilities were transferred from the Department of the Environment to the Commission, and private sector firms approved by the Commission. At the moment the majority of audit appointments remain with the District Audit Service, but the intention is to ultimately provide for a 50/50

split of appointments between the Commission's own staff ( the District Audit Service ) and the private sector.

The duties of auditors working for the Audit Commission in England and Wales are stated in the Local Government Finance Act 1982. Section 15 of this Act states that “the auditor should satisfy himself that the accounts are properly prepared and the authority has made proper arrangements for economy, efficiency and effectiveness in its use of resources; and to report on matters of public interest which come to his attention, whether or not those matters arise out of the accounts. In carrying out his duties, the auditor must comply with the Code of practice”.

The Commission then issued its "Code of Local Government Audit Practice" which focused on the VFM audit. The Code states that “the achievement of economy, efficiency and effectiveness depends upon the existence of sound arrangements for planning, appraisal, authorisation and control of the resources” [Venables and Impey, 1991: 268].

The auditor therefore is left with a great deal of flexibility as to how to achieve his objectives. However, the requirement for effectiveness is to a certain extent a new area and therefore the interpretations of what is meant and how to practice effectiveness audit might vary from one group of auditors to another.

Since the Commission is a self-financed body it might face the problem of lack of funds necessary for carrying out its responsibilities. Also, it might face the problem of finding a way of allocating the scarce resources between the different types of audit while achieving the maximum return possible. The latter problem is particularly important since there is a current outcry for more VFM audits.

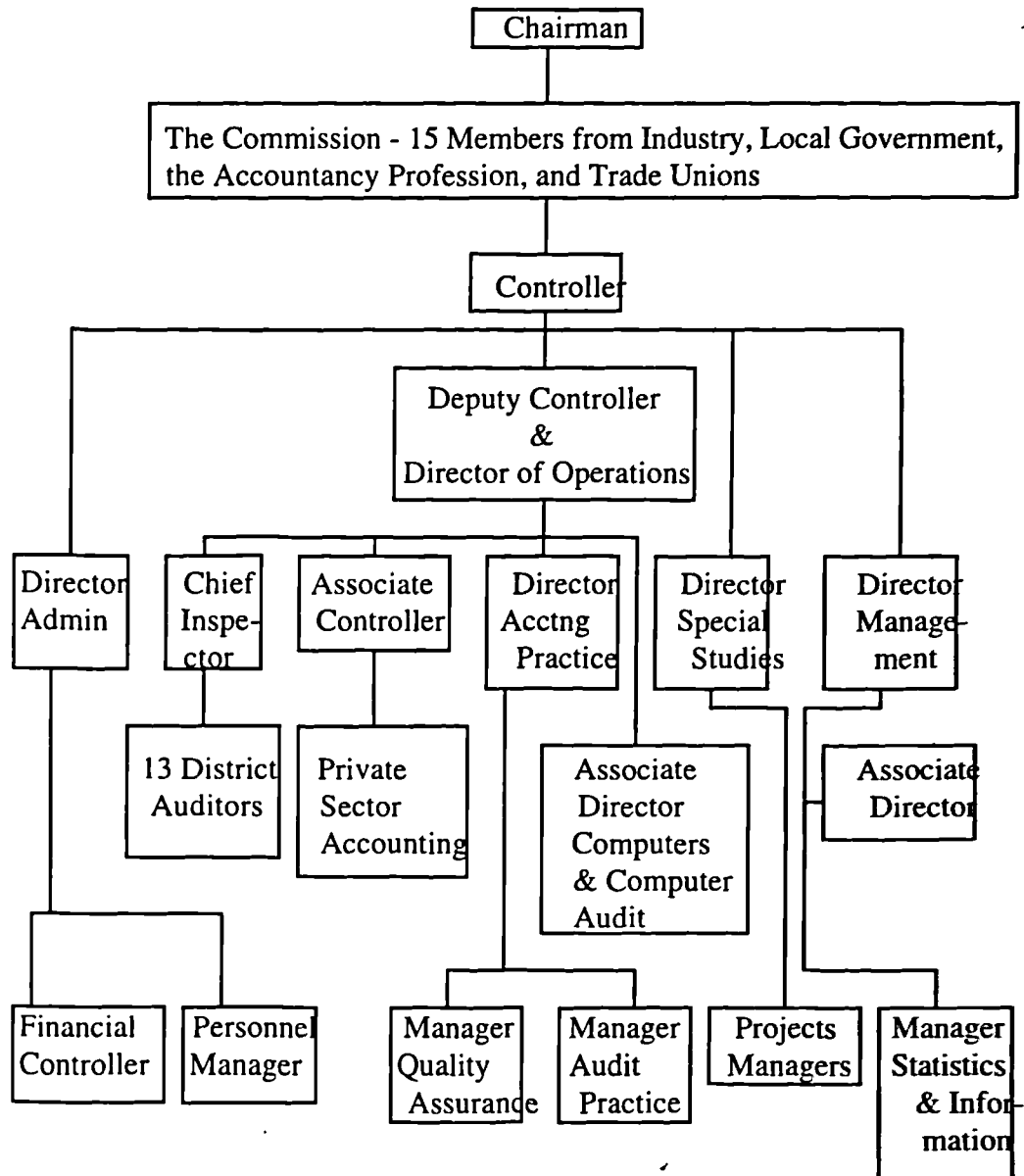
**Ehibit 3.2**  
**Proposed VFM Projects**  
**Audit rounds beginning in December**

Area	1986-7	1987-8	1988-9
Education	Secondary Schools' Teaching Costs	Education Overheads	Primary Schools
Social Services		Care of the Mentally Ill & Mentally Handicapped	Social Services Overheads & Organisation
Highways	Maintenance (Districts)	Maintenance (Counties)	
Housing / Property	Council Housing Maintenance	Property Management	Old Operations
Other Costs / Services		Computing / Central Overheads	Police Operations

**Source:** The Audit commission for Local Authority in England and Wales.

Commission Paper 86/4 Provisional Para 27

**Exhibit 3.3**  
**Organisation Structure of the Audit Commission**



**Source:** The Audit Commission for Local Authority in England and Wales.  
" Auditing Local Government: A Guide to the work of the Audit Commission ". p.5



### **3.8 The Commission For Local Authority Accounts In Scotland**

The Commission was established in 1975 as a result of the Local Government (Scotland) Act 1973. Subsection (1) of section (97) of this Act proposed the establishment of a new “body, to be known as the Commission for Local Authority in Scotland”. The Commission has between nine and twelve members, who are appointed by the Secretary of State for Scotland. The majority of the Commission funds come in the form of contributions from local authorities while the rest comes from government grants.

The Commission's audit work is carried out either by the Commission's own staff or by private firms of accountants but, unlike with the Commission in England and Wales, the majority of the Scottish Commission's audit work is carried by private firms. In Scotland, the local authorities auditors' duties are contained in the Local Government (Scotland) Act 1983. All auditors are expected to observe the Standards for the External audit of Scottish Local Authorities, published by the Commission for Local Authority Accounts in Scotland. This publication (at p.29) gives the auditors the same mandate as that provided by Section 15 of the Local Government Finance Act 1982.

[Glynn, 1987: 104] And with regards to VFM auditing, the auditor has statutory duties to “satisfy himself by examination and otherwise that the authority has made proper arrangements for securing economy, efficiency and effectiveness in the its use of resources” [Glynn,1986].

From what is stated above it is obvious that the way local authorities in England and Wales and those in Scotland are audited is almost the same. Both of the auditing bodies in those areas have started in the last decade or so to allocate more of their resources into performing VFM audits.

## **SUMMARY & CONCLUSION**

This chapter was devoted to providing a brief description of the state of the auditing profession in Egypt and examining the similarities and differences between the audit practice in Egypt and the UK.

The first part of the chapter provided a historical background of auditing in Egypt and it was apparent that in the 1960s and early 1970s the auditing profession suffered badly as result of some changes in political ideology. This culminated in the decision to nationalise most of Egypt's economy which led to the nullification of the practice of auditing; the task of auditing the nationalised entities was given to two newly formed public organisations .

The second phase was after 1974, when a change in policies followed the adoption of the open-door policy. These changes have given a new life to the auditing profession , and since that date the profession has continued to develop and improve. Nowadays, it could be said that the objective of Egyptian external auditors when carrying out their work is to a great extent similar to that of external auditors in the UK. Also, it was quite clear that the duties of Egyptian external auditors are almost identical to their counterparts in the UK. It is clear that these similarities are true at least in theory.

The chapter then looked at the state of internal auditing in Egypt, and it was obvious that though firms are required by company law to keep a good system of internal auditing, the practice of internal auditing seems to suffer from a general lack of

guidance. This is due to the non-existence of a professional body that looks after the interest of the profession. However, some organisations and industries have their own set of standards and guidelines for their internal auditors to follow.

The chapter also examined the structure of auditing the public sector in both Egypt and the UK. It was found that Egypt's CAO enjoys similar legal status to that of the NAO in the UK, however the CAO does not have the necessary means for the practice of modern auditing as the NAO. This was due to factors such as lack of well qualified staff, lack of guidelines and standards, and insufficient funds. Also, it was apparent that the work performed by the ministry of finance, which is basically a pre and post-budget control, is mistakenly referred to as auditing.

The final remark that could be made is that though the auditing profession in Egypt seems to lag behind the practice seen in more developed countries, the situation has improved dramatically in the past few years and continues to improve. The potentials for the advancement of the auditing profession both internal and external are there - all that is needed is organisation and a clear set of standards and guidelines.

## **CHAPTER FOUR**

### **4. A CONCEPTUAL FRAMEWORK FOR INTERNAL AUDITING**

A look at the available literature reveals that there is little research carried out on the idea of conceptual framework for auditing generally and internal auditing in particular. The field of accounting and auditing in general suffers from a lack of research examining the area of conceptual framework, apart from a few attempts mainly in financial accounting. The problem of insufficient research in auditing was highlighted in the study by Needles [1989]. This study reviewed the literature for the 10-year period 1978-1987 covering periodicals throughout the world. The study found that the amount of auditing research is very small but this, in itself, is not the problem as Needles rightly pointed out. The real problem lies in the quality of the limited research that exists; Needles found that almost all of the research that existed was of a descriptive nature.

This situation seems to have hardly changed since Needles conducted his study as my research reviewed all major periodicals in accounting and auditing with little success. Furthermore, the research also focused on publications of major universities to look at doctorate projects in auditing. This research also concluded that the number of doctorate projects on auditing is very small when compared with research on accounting matters. Also, the research revealed

that even within accounting research the area of conceptual framework has attracted a very small amount of interest, if any.

An explanation of this lack of research in the area of conceptual framework of accounting and auditing is provided by the late Professor Edward Stamp [1982b] who believed that “there is a great aversion in Britain to the very term conceptual framework”. He recalled that while involved in raising money to undertake research in this field, he was advised by very senior people in the City of London that it would be a waste of time to ask for money for research work on a conceptual framework. This was because people would think he was living on cloud nine and would not want anything to do with it. He stated that monied people in the City of London would simply be unable to see how a conceptual framework could be relevant to accounting.

Taking all the above into consideration it might seem a bit peculiar why anyone would want to carry out a research on the conceptual framework of auditing, but the next few paragraphs will outline why it is important to carry out research in such a field.

#### **4.1 Classification of Auditing Research:**

Various models have been developed for classifying research approaches in international accounting and auditing. Jaggi [1973] placed studies of accounting in developing countries into three categories: descriptive (which provide information about the current state of accounting); conceptual (which

develop a model or framework to examine the existing system); and hypothesis-testing (in which hypothesis describing what should exist are developed and then tested for validity).

Another model was provided by Muller [1979] in which he categorised research in international accounting into descriptive, comparative, empirical, traditional normative, bibliographical-historical, and behavioural.

A similar model was developed by Wallace [1986] in which she classified research into: prescriptive; descriptive; conceptual; comparative; replicative; theory development; modelling; empirical testing; and multi-methods. A simpler model was developed by Bindon and Gernon [1987] classifying research into descriptive, comparative, analytical, and empirical assuming that this classification provides the basis for forming general observations about the current level of development of research.

This study is going to combine the three broad areas of research, in that it will follow a descriptive approach in describing the current state of the art of auditing. Then it will take a conceptual approach in developing a conceptual framework for internal auditing, and in the final stage a hypothesis-testing approach will be followed in examining whether the perception and practice of internal auditing conforms with the conceptual framework. The review of literature showed the need for such a study since most of the previous studies fell under the descriptive approach. Some comparative studies merely

compared the state of the art of one country, usually developing, with the state of the art in another country, usually developed.



## 4.2 What is a Conceptual Framework?

To many people the term 'conceptual framework' is very ambiguous though it is often used by people in various walks of life. One of the earliest definitions was provided by W. A. Paton and A. C. Littleton in 1940. They defined it as "a coherent, co-ordinated, consistent body of doctrine". [Solomons, 1986]

The Financial Accounting Standards Board [FASB, 1976] has defined conceptual framework as "a constitution, a coherent system of interrelated objectives and fundamentals that can lead to consistent standards and that prescribes the nature, function and limits of financial accounting and financial statements". This definition has received a broad acceptance over the years though some have argued the use of the word "constitution" ; Solomons [1986] argued that likening the conceptual framework to constitution would not strengthen the case for a conceptual framework. He argued his case by stressing the differences between a constitution and a conceptual framework, viz.:

- 1) A constitution has the force of law while a conceptual framework has no such authority except what flows from its intellectual persuasiveness.
- 2) Constitutions contain many arbitrary elements while conceptual frameworks have no room for arbitrariness.
- 3) There are significant differences among the nations of the world in their constitutional arrangements while conceptual frameworks might have some important national differences - this is a mere speculation

because no country other than the United States has yet made any serious attempt to construct one - but it is doubtful whether the differences would be as fundamental as the differences between different constitutions.

Solomons' argument is valid as far as it goes but a conceptual framework could still have a constitutional aspect related to it. A conceptual framework is an attempt to gather the fundamentals and principles of a certain profession, and if these fundamentals and principles are exclusive and true it would be expected from the people practising this profession to comply with such a framework. So it is far more important to understand the reasons and objectives of any framework project than to stop at the definition because the importance of any conceptual framework lies in the ideas and concepts it includes and whether or not those ideas serve the field of interest. Instead of concentrating at the definition of the term 'conceptual framework', our attention should be focused at the definitions encompassed within the framework. It must be ensured that those definitions represent the true reality of the matters in the field studied.

This leads us to look at the purpose of conceptual frameworks and their potential in fields of study. As Professor Macve [1981: 14] put it, a conceptual framework should be regarded rather as a common basis for identifying issues, for asking questions and for carrying out research than as a package of solutions.

Therefore, the aim of developing a conceptual framework is to provide a structure and direction to practitioners within a certain field so it will enhance the provision of an efficient service to users and society. This structure will help in thinking about and answering the problems faced in an organised manner; Solomons [1986: 124] expressed the same view when he stated that “a conceptual framework is a guiding model of the overall order, a utopia, and guiding conception of an internally consistent model” . In his study on the conceptual framework of financial accounting, Professor Macve [1981: 22-23] described the attempt to develop an agreed conceptual framework as an attempt to establish a common framework of theory that will both identify the important basic questions to be asked and, it is hoped, produce substantial areas of agreement about how the answers are to be found.

This corresponds to the view of the FASB which was stressed in the conceptual framework at its outset in 1976. It was said that “a conceptual framework can provide a constant thread of reason, a basis for solution - a constitution - to guide the FASB. It will narrow the range of alternatives to be considered by the Board because some alternatives will clearly be ‘unconstitutional’”.

Having looked at the different definitions of ‘conceptual framework’, it would be of a great benefit to remind ourselves that when we talk about developing a conceptual framework, what we really mean is trying to develop a body that encompasses the different concepts related to a certain field of knowledge.

And also to identify the main objectives that the field is trying to achieve, define the functions of this field, and explain the nature of the different interrelationships that exist within that field.

#### **4.2.1 The Components of a Conceptual Framework:**

Having considered the different definitions of the 'conceptual framework', the next stage will involve determining the components of a conceptual framework. These are:

##### **(1) CONCEPTUAL COMPONENTS:**

These include the objectives, qualitative characteristics, and the main concepts and elements that exist in the field of knowledge.

##### **(2) OPERATIONAL COMPONENTS:**

These are the performance procedures and the measurement criteria accepted by that particular field of knowledge.

##### **(3) ORGANISATIONAL COMPONENTS:**

These include the professional structure of the field of knowledge itself, and the relationship structure of members of the profession within their respective organisations.

#### **(4) EXTERNAL COMPONENTS:**

These include the relationships that exist between the profession and different aspects of the external environment such as laws, traditions, culture...etc.

### **4.3 A Conceptual Framework for Internal Auditing:**

Based on all the above, we can attempt to draw a conceptual framework for internal auditing which will be as follows:

#### **4.3.1 Conceptual Components:**

##### **4.3.1.1 Definition of internal auditing:**

The Institute of Internal Auditors defined internal auditing as “an independent appraisal function established within an organisation to examine and evaluate its activities as a service to the organisation” [IIA, 1995].

A more comprehensive definition is given by Sawyer [1988:7] in which he defines modern internal auditing as “ ... a systematic, objective appraisal by internal auditors of the diverse operations and controls within an organisation to determine whether (1) financial and operating information is accurate and reliable, (2) risks to the enterprise are identified and minimised, (3) external regulations and acceptable internal

policies and procedures are followed, (4) satisfactory standards are met, (5) resources are used efficiently and economically, and (6) the organisation's objectives are effectively achieved - all for the purpose of assisting members of the organisation in the effective discharge of their responsibilities”.

Sawyer's definition of internal auditing goes beyond the simple definition of the internal auditing function as defined by the IIA into stating the responsibilities of internal auditors and the scope of their work. However, the basic nature of internal auditing is the same in both definitions, thus internal auditing is widely defined as a control function which works by examining, appraising and evaluating controls within an organisation; this function is performed as a service to the organisation. Though in the early definitions internal auditing was seen as a service to management, it was later recognised that the service should be directed towards serving the organisation itself as a whole.

#### **4.3.1.2 Objectives of internal auditing:**

The definition of internal auditing makes it clear that its main objective is to serve the organisation through the help and advice it provides to all members of the organisation. This objective is highlighted in the Statement of Responsibilities of Internal Auditing. The statement states the objective of internal

auditing as "... to assist members of the organisation, including those in management and on the board, in the effective discharge of their responsibilities. To this end, internal auditing furnishes them with analyses, appraisals, recommendations, counsel, and information concerning the activities reviewed. The audit objective includes promoting effective control at reasonable cost. The members of the organisation assisted by internal auditing include those in management and the board of directors" [IIA, 1995]. This objective, stated in the 1995 version of the Statement, differs from the objective stated in the original Statement in 1947 when the objective was to "... assist management in achieving the most efficient administration of the operations of the organisation" [IIA, 1947]. Here again we find that the emphasis has shifted from "management" to "organisation", therefore the latest statement has made it clear that the service of internal auditing does not belong to a particular group of people within the organisation, rather to the organisation as a whole represented by its members. This does not mean that the service provided to management is reduced but rather the objective of internal auditing has expanded. Management are still the main users of the service but the Statement quite rightly did not want to give the impression that the sole objective of internal auditing is to serve management, and management only. This is justifiable since all members of

the organisation, at least theoretically, are open to the review carried out by internal auditing. The services provided by internal auditing should be available to all members of the organisation; this will help in increasing the credibility of internal auditing and make it easier to get the acceptance of all members of the organisation. This acceptance is of crucial importance if internal auditors are to perform their task successfully.

Furthermore, the amended version of the statement mentioned some of the means through which the objective of providing the service is achieved. The statement states analyses, appraisals, recommendations and, in a change from the 1947 statement another mean was added, namely counsel. The addition of the word counsel is significant because it eliminates the possibility of the role of the internal auditor being misconceived as a critic. Thus, by adding counsel as one of the means of providing the internal auditing service the statement had made the role more of a counsellor than a critic. But perhaps the most significant addition concerns the cost factor. The 1971 Statement pointed out that in promoting effective control the internal audit function has to consider the cost of achieving its objective, and a good balance should be attained between the existence of effective control and the cost of such control. Faced with



increasing pressure, organisations all around the world are trying to be as cost-effective as possible and the internal auditing function has to consider this important factor when trying to promote a better control. After all, one of the concepts of the modern internal auditing is economy - this is something that will be looked at later in this chapter.

The objective of internal auditing then can be simply described as providing a service to members of the organisation. This service can be in the form of provision of analyses, appraisals, counsel and recommendations; these could be through reports or less formally through direct counselling.

#### **4.3.1.3 Scope of internal auditing:**

As can be seen from the objective mentioned above, internal auditing no longer restricts itself to serving one group only or covering one aspect of the several activities performed within the organisation. The new concept of the objective of internal auditing has meant that the extent and scope of internal auditing is expanded to include all kinds of activities; financial aspects of business has become only one of many areas which fall under the review of internal auditing.

The Statement of Responsibilities of Internal Auditing states that in order to achieve the objective mentioned above the scope of internal auditing should encompass the examination and evaluation of the adequacy and effectiveness of the organisation's system of internal control and the quality of performance in carrying out assigned responsibilities. This scope should include: [IIA, 1995]

- (1) Reviewing the reliability and integrity of financial and operating information and the means used to identify, measure, classify, and report such information.
- (2) Reviewing the systems established to ensure compliance with those policies, plans, procedures, laws, and regulations which could have a significant impact on operations and reports, and determining whether the organisation is in compliance.
- (3) Reviewing the means of safeguarding assets and, as appropriate, verifying the existence of such assets.
- (4) Appraising the economy and efficiency with which resources are employed.

- (5) Reviewing operations or programmes to ascertain whether results are consistent with established objectives and goals and whether the operations or programmes are being carried out as planned.

The scope is widened to go further than merely examining the integrity and reliability of financial information as this is only the first of five main means of achieving the objective of internal auditing mentioned earlier. Those means also include assessing the degree of compliance with policies and internal and external regulations that exist; the verification of assets and safeguarding them is one of the established tasks of the auditing process in general, whether internal or external, which is still included in the modern concept of the scope of auditing. However, it has to be mentioned that to place emphasis on the verification process only is a great mistake since there are other elements of control with equal importance and that is why the new scope has to extend to cover other elements of the control process. The new concept of the scope of what we could call modern internal auditing is represented by the last two points made in the Statement. Those two points have taken the scope of internal auditing into new dimensions and have brought the “Three Es” concept to the scope of internal auditing. Thus, appraising the economy and the efficiency with which resources

are employed has become one of the dimensions of the **scope of internal auditing** which differentiate it from external auditing.

Also, examining the effectiveness in meeting the predetermined objectives is another feature which distinguish the new extended scope from the more familiar scope of auditing.

Therefore, the scope of internal auditing extends to cover all types of activities within the organisation; all operations within the organisation, no matter how diverse they are, can be subject to the internal auditing review and examination. Hence, all types of operations whether financial or non-financial are within the limits of the activities of internal auditing. Those activities permit internal auditors to have access to all records, operations and people as long as the professional conduct of such activities is permitted. Though the scope has drawn its limits beyond reviewing financial controls, examining the reliability of financial information still represents part of the audit task. But the information examined does not have to be financial. All information, be it financial or operational, should be examined for reliability; what is meant by the term reliability is to be explained later in this chapter.

The scope continues to include the more familiar roles of ensuring that assets are safeguarded and necessary precautions

are taken in order to minimise future risks. The audit task also includes identifying such risks and providing recommendations on how to minimise, if not to avoid, them. Compliance with laws and regulations also has to be ensured but internal audit task goes beyond merely ensuring compliance with applicable external regulations into ensuring that internal policies, laws and regulations are also complied with. Then there are the modern tasks of auditing that involve examining the degree of economy and efficiency with which resources are utilised. The new scope also means that internal auditors have to ensure that predetermined goals and objectives are being achieved. The auditor's task includes determining whether appropriate objectives exist. However, some argue that it is not the auditor's job to examine the merit of the policies and objectives determined by management.

#### **4.3.1.4 Common Concepts:**

There are some concepts that are commonly used within the audit field. Such concepts have to be clearly defined in order to reach a high degree of uniform understanding among internal auditors which will undoubtedly lead to a higher degree of professionalism. In the following few paragraphs an attempt will be made to define and explain the meaning of some of those concepts.

### **(1) Internal Control:**

This is probably the most common concept within the field of internal auditing. The internal auditor's task revolves around such controls to ensure their effectiveness. The concept of control has been recognised by auditors for a long time. It was first known as an internal check, defined by George E. Bennett [1930] as "the co-ordination of a system of accounts and related office procedures in such a manner that the work of one employee independently performing his own prescribed duties continually checks the work of another as to certain elements involving the possibility of fraud". This definition as it can be seen restricts the function of control to financial matters and detecting fraud. Thus a more broad definition was needed and this, in turn, was provided by the American Institute of Certified Public Accountants (AICPA) in 1949. The institute's Committee on Auditing Procedures gave the following definition:

"Internal control comprises the plan of organisation and all of the co-ordinate methods and measures adopted within a business to safeguard its assets, check the accuracy and reliability of its accounting data, promote operational efficiency, and encourage adherence to prescribed managerial policies".

This definition possibly is broader than the meaning sometimes attributed to the term. It recognises that a system of internal

control extends beyond those matters which relate directly to the functions of the accounting and financial department.

Careful study of the above definition reveals that it extended internal control beyond the restricted limits of financial control and into broader dimensions. The definition added new aspects to the goal of control; control is no longer restricted to ensure the reliability of financial information - it extends to compliance with policies and promoting efficiency. Though this definition still did not encompass the full meaning of control, it was a step in the right direction. This definition was followed by others by the accounting bodies but most of them moved back from the broad concept of control to a concept which is more restricted to financial matters.

In the field of internal auditing a broad definition is a necessity in order to meet the broad scope of internal auditing. Sawyer [1988: 89] defined control as "... the employment of all the means devised in an enterprise to promote, direct, restrain, govern, and check upon its various activities for the purpose of seeing that enterprise objectives are met. These means of control include, but are not limited to, form of organisation, policies, systems, procedures, instructions, standards, committees, charts of accounts, forecasts, budgets, schedules,

reports, records, checklists, methods, devices, and internal auditing”.

This definition included one of the goals of control which was missing in the definition provided by the AICPA; ensuring the achievement of the organisation's objectives. Sawyer's definition included some of the means of control, one of which, as mentioned in the definition, was internal auditing. However, to eliminate any possibility of confusion my definition of control will exclude internal auditing as a mean of control; this does not affect my perception of internal auditing as a control which works by reviewing and examining other controls.

After a study which lasted three years and involved experts from different fields of knowledge including internal auditing, external auditing, finance, management and representatives of different levels of management, the Committee of Sponsoring Organisations of the Treadway Commission (COSO) published a report defining internal control and the criteria for measuring the effectiveness of systems of internal control. The report gives a definition of internal control which represents a consensus viewpoint and accommodates different perspectives of internal auditing. The report defines internal control as “... a process, effected by an entity's board of directors, management,



and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- \* Effective and efficiency of operations.
- \* Reliability of financial reporting.
- \* Compliance with applicable laws and regulations.” [Bishop, Stemberg and Grubr, 1992]

The report also gives five components of internal control.

These are: control environment, risk assessment, control activities, information and communication, and monitoring.

These five components correspond to the five aspects of the scope of internal auditing as stated by the IIA which gives credit to the definition provided by the report since its definition of internal control is as broad as the scope of internal auditing.

However, it should be emphasised that more important than the definition of internal control is its objective; the definition provided by the COSO report paid a great deal of attention to the objective of internal control. Also, the difference between internal and external controls is that the latter is exerted by forces outside the organisation while the former is exerted from within the organisation.

## **(2) The Three Es:**

This differentiates between the old concept of internal auditing and so called modern internal auditing. As mentioned above, the modern broad scope of auditing promotes economy, efficiency, and effectiveness; these three represent what is called the “Three Es” or as some people call it “value for money”.

What is really meant by these concepts? As Chambers, Selim and Vinten [1988: 82] explained the meanings of these three concepts overlap and there is a degree of doubt over whether it is possible to exclude any one of these terms from the scope of an audit without having to exclude them all.

However, it is of great importance to explain the meaning of each of these terms and the difference between them which the following paragraphs set out to do.

### **(a) Economy:**

A simple definition for the term is provided by Glynn [1985: 29] who defines economy as “acquiring resources of an appropriate quality for the minimum cost”. This definition explains that economy means getting the required resources or inputs with minimum cost possible. This point is also mentioned by Henley, Holtham, Likierman and Perrin [1989: 38] when they state that “economy defines the minimal cost of inputs to an activity,

whether achieved by purchasing cheaply or by closely restricting the consumption of resources”.

Thus, taken on its own economy means reducing the cost of inputs, so that its only concern is inputs and the cost of acquiring them. Chambers, Selim and Vinten [1988:83] give a management oriented definition viewing economy as “resources consumed vis-à-vis planned consumption”. Here, the planning aspect of management is considered and the importance of this is that not only should resources be acquired at the lowest cost, and the consumption of these resources kept to a minimum, but consumption of resources also has to match the planned consumption, if it could not be less.

**(b) Efficiency:**

Efficiency is defined simply as “seeking to ensure that the maximum output is obtained from the resources devoted to a department, or alternatively, ensuring that only the minimum level of resources are devoted to a given level of output” [Glynn, 1985: 29].

Therefore, unlike with ‘economy’, we are not looking at the inputs on their own but in relation with outputs, and what efficiency is really about is achieving the best mix which either

gives us the highest output with the same level of input used or the same level of output using less inputs.

This view is supported by the definition given by Henley, Holtham, Likierman and Perrin [1989: 39] where they define efficiency as “the relationship achieved between the outputs of a service or activity and the volume or value of inputs consumed in generating those outputs. Thus efficiency is essentially a ratio relationship which can be improved by increasing the outputs relative to inputs”.

Chambers, Selim and Vinten [1989: 83] give a similar definition when they define efficiency as “the ratio of resources consumption to benefits produced”. Hence, the concept of efficiency takes us a step further than economy where we considered input on its own. Efficiency takes the relationship between inputs and outputs into consideration, trying to achieve the best ratio between the inputs used and the outputs produced. Efficiency is different from productivity as the former take all types of inputs into consideration rather than taking one type only such as labour cost.

**(c) Effectiveness:**

This is defined as “ensuring that the output from any given activity is achieving the desired results” [Glynn, 195: 30], or in other words “the degree of success or failure attained in meeting objectives” [Henley, Holtham, Likierman and Perrin, 1989: 39], or in a more management oriented terms “a measure of actual performance against planned performance” [Chambers, Selim and Vinten, 1988: 83]. Therefore, effectiveness is ensuring that organisation objectives are met and predetermined goals are achieved. This is another step further from economy and efficiency as we are no longer only interested that resources are acquired at the lowest attainable cost and that we are maximising the output produced from these inputs but the output has to meet the predetermined objectives.

Effectiveness does not only relate to objectives in terms of productivity but the achievement of all the planned objectives and goals as set by management of organisation.

However, these three concepts do not work in isolation from each other; rather they interrelate, and the achievement of one concept is necessary for the achievement of the others.

## **4.3.2 Operational Components:**

### **4.3.2.1 Performance of Audit Work:**

There are certain elements which have to exist for the audit task to be performed effectively. These are:

#### **4.3.2.1.1 Planning audit work:**

The first stage in performing audit work is to plan for the work with reference to planning the audit task, not planning the work of the internal audit department.

The latter will be discussed in the organisational components section of the conceptual framework.

This planning process involves:

##### **1) Selecting the auditee**

The selection of the auditee can be done through one of three methods: first, there might be an established overall plan within the internal audit department and the selection in this case will be built on a systematic process whereby activities or departments are audited in cycle; second, the selection might be on an ad hoc basis where operations are chosen on a perpetual basis either to find causes or solution to a given problem, or to answer management and the board's needs; third, operation might be chosen as an answer to a request

made by the auditee. Needless to say that the ideal situation is to have an overall audit plan whereby auditors can decide systematically what area needs to be reviewed. This plan should be based on risk analysis. However, this overall plan should have a contingency allowance which gives time to meet any needs which might arise through ad hoc audit requirements or to answer auditees' requests.

## **2) Selecting the auditors**

Having decided on the operation to be audited the next step of the planning process is to choose the auditors best equipped to carry out the audit work. Here there are some considerations which should be taken into account such as avoiding assigning auditors who have just left the operation to be audited to join the audit department. Such auditors, if selected, might feel their objectivity impaired. The selection also has to be made on the basis of knowledge required for performing the audit task, so if the task is to audit a highly computerised operation auditors have to have an adequate level of knowledge in EDP. Alternatively if it is an engineering operation the auditor should have some knowledge of engineering and so forth.

This does not mean that the auditor has to be an expert in the area to be reviewed but the auditor should be an expert of control and should have some knowledge of other fields and the higher the level of this knowledge the better.

Another factor to be considered when choosing the auditors is the level of auditee management they are going to deal with. However, it has to be said that auditors usually work in teams so the make-up of the team could be of auditors with different types of knowledge and seniority levels.

### **3) Setting the time required**

Every audit task should be assigned a certain amount of time according to its importance and time available. Ideally, when the overall audit plan is prepared a time schedule should be set allocating time for each audit task.

### **4) Determining audit objectives and scope**

When the operation to be reviewed is chosen the objectives of the audit have to be set so auditors will know exactly what is expected from them. Then the



scope of the audit should be determined so auditors do not go astray.

#### **5) Preliminary survey**

In this stage auditors familiarise themselves with the operation they are about to audit and set out to understand the nature of the operation. This familiarisation could be done through talking to the auditees, visiting the site of the operation to get a first hand account of the nature of the operation, and examining any documents that explain the nature of the operation and how it works. At the end of this stage auditors should determine what is done, who does it, and how it is done. Also during this stage, auditors could review any previous audit files for the operation under review.

#### **6) Preliminary communication**

During the planning process auditors should establish channels of communication with the auditees. The auditee should be informed about the time schedule of the audit, unless the nature of the audit requires otherwise, and the objective of such audit. It is also during this stage that auditors decide who is going to

be the recipient of the report within the audited department. This stage is significant because it is when the initial contact is made between the auditor and auditee. If planned well it could make the task of the auditor much easier, because if the understanding and acceptance of the auditee is won the auditor's job should run smoothly. Thus, auditors should pay extra care in initialising and establishing good channels of communication with the auditee. However, they have to remember always that their job is not to please the auditee but to complete their task effectively. What they have to aim for, however, is not to intimidate the auditee and lose their trust even before starting the audit work.

## **7) Audit Programme**

Having chosen the auditee and the auditor, determined the nature and objectives of the operation, determined the objective of the audit and carried out the preliminary survey, an audit programme should be set. This programme is a schedule of the work to be done and the way of going about and performing this work, the type of

examination to be performed and the time it will take to complete the work.

However, it should be noted that the audit programme must give room to auditors to make on site judgement, and the programme has to be flexible to cater for any unforeseen circumstances. So, the objective of the audit programme is to determine what is to be done, when it is to be done, how it is to be done, who will do it, and how long it will take.

Sawyer [1988:220] considers the useful audit programme as one that "... combines the concepts of objectives, risks, and controls. The management-oriented audit programme should begin with an identification of the operation's objectives. The audit objectives will then list the steps needed to determine whether the organisation's objectives are met". The audit programme then has to be reviewed and approved by the head of the internal department.

#### **4.3.2.1.2 Field Work:**

The next stage after the planning phase is to start performing the necessary tests and examination in order to reach a conclusion regarding the operation under review. This is a systematic process during which the auditor follows the objective and procedures set in the audit programme. This process is carried out in steps, these are:

##### **1) Descriptions of controls**

Here the auditor maps out the system of control that exists and this usually is done through flowcharts or narrative description, the aim of which is to help the auditor understand how the system works.

Furthermore, the auditor could start his testing process by walking-through the system of control.

This would also help in discovering any limitations of the system as well as helping to understand it.

##### **2) Evaluating controls**

Having described and understood the system of controls that exists within the operation being reviewed, the auditor starts evaluating these controls.

This process is the preparatory process for the full

testing process. During this evaluation process the auditor assesses the system of internal control that exists, detects the strengths and weaknesses of controls, and assesses the risk associated with these controls. At the end of this stage the auditor should reach a decision on whether he \ she should carry out the tests as set in the audit programme or whether changes in the objective and scope of the tests should be made, or even whether it is really necessary to continue the audit review of the operation.

### **3) Testing**

Following the evaluation of internal controls, the auditors then carry out tests that help them reach a conclusion on the objective of the audit. Testing is more extensive than evaluation, so in this instance auditors try to assess the effect of the control weaknesses and strength that were detected during the evaluation process. The testing process is the centre of the audit process. It has three dimensions: (1) reviewing the operations and the various controls designed to make the operation both effective and efficient; (2) testing the operations to determine if they are in compliance with the designed controls

system; (3) evaluating the design of the control system and the effect of either compliance or non-compliance with the controls. [Ratliff, Loebbecke, Mcfaland and Wallace, 1991: 187]

In achieving these dimensions auditors carry out examinations of records and documents, analytically review the information contained in these records and interview auditee management and any other personnel. These are only some of the means of performing the testing task but, since this study is not particularly concerned with the techniques, there is no need to elaborate.

#### **4) Findings and conclusions**

At the end of the testing process the auditors should reach a conclusion regarding the degree of economy, efficiency, and effectiveness with which the operation is run. It is important to emphasise that findings do not have to be negative only. They could either be adverse or favourable findings; auditors who report good as well as unfavourable findings gain everyone's respect including that of the auditees. The findings might reveal a misconduct or deviation from the

standards, that the operation's objectives are not met, ... etc. The auditors then have to reach a conclusion on the meaning and impact of the findings. The conclusion could be: that controls are satisfactory and objectives met and therefore there is no need to take any action; or that there are some insignificant control weaknesses, or that there some significant control weaknesses, and that the system of control does not work at all and changes are needed.

Auditors have to rank findings according to their importance; the impact of some findings may prove to be more costly than others. Also, when considering recommendations the cost of these recommendations have to be studied carefully in relation to the importance and cost of the findings. However, in all cases auditors should provide recommendations on how to improve or remedy any limitation that exists within the system of internal control.

## **5) Working papers**

While performing their work auditors come across a wide variety of working papers, these have to be

properly filed and kept. These working papers may include the audit programme, records of preliminary planning and surveys, the results of field work, audit evidence, and other documents relating to the audit.

Working papers are of great importance to the auditors for several reasons: they help the auditors in detecting deficiencies; support their argument and the audit report; help in carrying out the work in an organised manner; help as a reference in future audits; offer basis for quality reviews within the audit department; and provide a means of evaluation for external auditors when assessing the work of internal auditors. To do so working papers have to be accurate, clear, organised, professional, well documented, well controlled, well kept and filed, and written as work progresses. Extra care, however, must be given to collecting and filing audit evidence as it represents vital support to audit findings and recommendations.



#### **4.3.2.1.3 Reporting Findings and Recommendations:**

Having finished the field work, auditors start preparing the audit report. However, the process of report writing is a continuous one right from the start of the audit task.

During the field work auditors write down their findings and when the field work is finished these drafts are used in writing the final report. Different audit departments have different policies as to who should write the final report; some leave it to the head of the team of auditors that performed the audit, some write it as a group work, and with others the responsibility of writing the report is left to a senior member of the audit department, in some cases the head of the department.

Reports are the shop window of the audit department being the product that other people look at when considering the value of audit work. Thus efforts must be made to make them useful, timely, effective, clear, and the right length. Reports usually contain the audit objectives, scope, questions, general procedures, findings, and recommendations.

Findings and recommendations should be discussed with the auditee management before issuing the final report, and if agreement cannot be reached the auditees' view should be included in the final report. Reports are issued at different times according to the policy of the organisation and the importance of the findings; reports could be issued monthly, quarterly, at the end of each audit, and annually. Usually it is a combination between one of the first three and an annual report with the annual report being a summary of all the work and findings for the year and aimed at the board of directors.

#### **4.3.2.1.4 Following-up Audit Recommendations:**

The audit work does not end with the issuing of the audit report. After the report is issued, auditors carry out a follow-up process to ensure that actions have been taken to implement the recommendations contained in the report. Often the report states the time and the procedures of the follow-up so auditees would know what is expected from them and by when. And in some cases other parties - such as an audit committee if one exists - would ensure the follow-up process is carried out.

#### **4.3.2.2 Audit Measures:**

In performing their task auditors use different types of measures to meet the audit objectives. These measures could: test the degree of reliability of information; confirm compliance with policies and regulations; and examine economy, efficiency, and effectiveness in achieving the objectives. The measures of the reliability of information are simple ones and most auditors are familiar with them. Auditors must ensure that information, both financial and operational, is valid and true and to attain this auditors have in their grasp different techniques and measures. Likewise, measures for testing compliance with policies and regulations are quite straightforward, all that auditors have to do is to establish what law and policies exist and test the degree of compliance with such laws and regulations. The question is what measures need to be used to achieve the objectives of the Three Es audit. The first of the three is economy which aims at reducing the cost of inputs, but what is a lower cost, and how it could be measured? Auditors have to rely on their judgement in deciding if the operation is economical or not, but this judgement should be based on adequate knowledge. Such knowledge could be attained through the careful

study of the operation under review and understanding the inputs needed and the way they are acquired; measuring economy could be done through comparing this year's information with information from previous years taking into consideration the changes in price levels. They should also compare the cost of acquiring the inputs for the operation with similar operations within the organisation or with other organisations.

Correspondingly, measuring efficiency could be done through comparing this year's information with: targets set at the beginning of the year; information from previous years; information from different geographical areas or divisions within the organisations; and information from organisations from the same industry.

Measuring efficiency involves measuring the ratio of the usage of inputs to the outputs produced. Thus, there are two aspects that auditors are measuring: First, measuring the usage of inputs ensures that the less the amount of inputs used the higher the degree of efficiency, providing the level of output is not curtailed. Good control over resources, elimination of duplication of efforts, and proper staffing are some of the indicators

of efficient use of the resources. Second, measuring the level of output allows the higher the level of output the higher the degree of efficiency, providing there is no increase in the inputs used. Measuring the level of outputs could be difficult, especially if the organisation is a service producing institution but auditors have to decide from the start of the audit task how the output should be measured.

Therefore, there are no standard measures for efficiency; the types of measures will differ according to the type of activities and the nature of the organisation.

Nevertheless, what auditors have to bear in mind is that they are measuring the degree of efficiency in using resources to produce a given level of output.

More difficult is measuring the degree of effectiveness and this results from the difficulty in producing criteria through which effectiveness could be measured.

Effectiveness means the accomplishment of the predetermined objectives of the operation or the organisation and to measure this auditors have to be able to understand the way management think and the mechanics of the management process. Auditors have to

understand the meaning of the objectives set by management and the ways of meeting these objectives.

A set of criteria for evaluating the degree of effectiveness in achieving these objectives should be developed. This set of criteria would then make the process of effectiveness evaluation a straightforward task. The indicators of effectiveness that auditors should look for are:

- (1) Objectives are clearly set and understood by members of the organisation.
- (2) Plans are set on how to implement these objectives.
- (3) Resources required for achieving the objectives are provided.
- (4) Control over operations and the implementation of objectives exists.
- (5) Objectives are met.

### **4.3.3 Organisational Components:**

The organisational components of the conceptual framework of internal auditing have two facets, one relates to the organisational structure of the profession in general and the other relates to the structure of the audit department within the organisation. In the following few paragraphs an attempt will be made to describe the ideal structure both for the profession in general and within organisations.

#### **4.3.3.1 General Organisational Structure:**

The profession of internal auditing is governed by the Institute of Internal Auditors which has chapters in more than 100 countries, which has issued a set of Standards for the Professional Practice of Internal Auditing. Through their guidelines these standards provide professional guidance for internal auditing in matters related to the practice of internal auditing, as well as providing a benchmark for the degree of competency in performing audit work and managing the internal auditing department. The Institute has also issued A Statement of Responsibilities of Internal Auditing which defines the meaning of internal auditing, its objective, and its role and responsibilities. In addition, the Institute issued A Code of Ethics which sets norms and values that members of the IIA agree to abide by when they join the Institute.

Furthermore, the Institute also offers a professional qualification in internal auditing which further promotes the degree of competency among internal auditors. This qualification means that internal auditors, like other professionals, will be better equipped with a qualification that helps increase the degree of professionalism. It also puts internal auditors on an equal footing with other practitioners such as accountants who for long had their professional qualification well established, and have long criticised internal auditing for not having any professional qualifications to support their practice. Apart from the professional qualification, the IIA offers different courses which help in further improving the skills of internal auditors and further developing the profession in general.

Ideally all internal auditors should join the Institute of Internal Auditors, abide by the Code of Ethics, and comply with the Standards. Internal auditors should aim at getting the professional qualification. However, the fact remains that though the number of IIA members is increasing steadily, many practising internal auditors are yet to join the Institute. This also applies to the number of people taking the professional qualification programme. Those internal auditors should try and join the IIA, but even if they are not members yet they



should try and improve their practice by following the standards set by the IIA.

Moreover, there are some countries that do not have chapters of the IIA. In such cases membership of the IIA is a privilege to a few individuals who had the opportunity while staying abroad in a country that has an IIA chapter. It would be of great benefit to everyone if countries that have a well established IIA chapters, such as the United States of America and United Kingdom, help countries that do not have chapters to set up a local chapter if there is a willingness among practitioners there to do so.

Meanwhile, internal auditors in those countries that do not have IIA chapters could join other professional bodies such as accounting bodies which can be found in almost all countries around the globe.

Therefore, the expectation would be that in order to promote a higher degree of professionalism, especially in appearance internal auditors in countries that have chapters of the IIA should become members of these chapters and should aim at attaining the professional qualification offered by their local IIA chapter. While internal auditors in countries that do not have

local chapters of the IIA should try and gain membership in one of the professional bodies that cover part of the internal audit duties such as accounting, law ... etc. The hope is that one day internal auditing will have caught up with other professions where most of the practitioners are members of the respective professional body and hold its professional qualification. The profession of internal auditing then is governed by the IIA and internal auditors should comply with the standards and statements issued by the IIA when conducting auditing work.

#### **4.3.3.2 Organisational Structure of the Audit Department:**

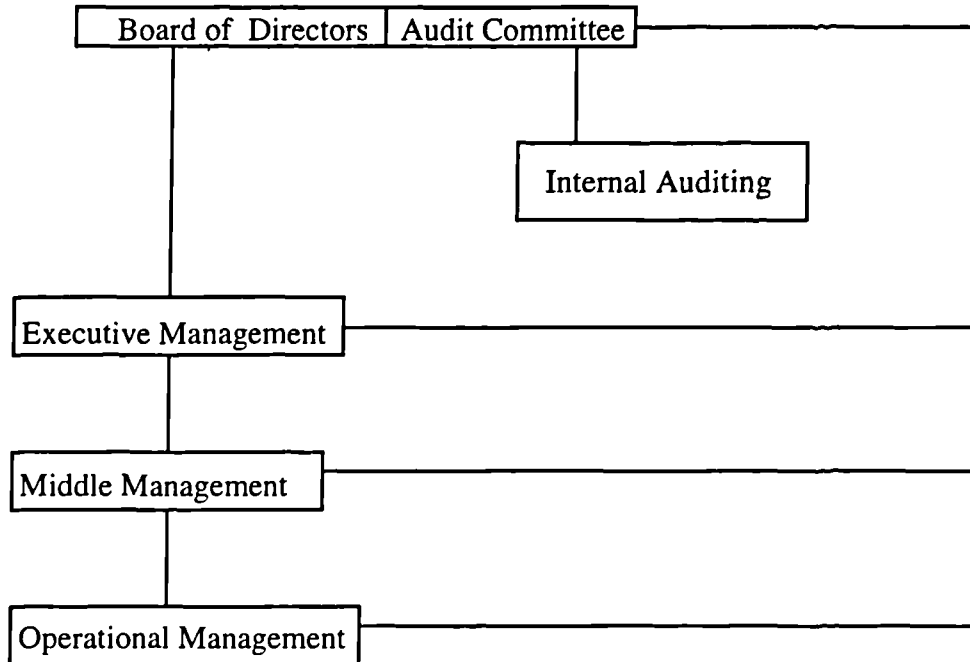
As seen from the definition and objective of internal auditing, internal auditing is a service to the organisation which means that the audit department has to have a place within the organisational structure that allows this service to be provided effectively. There are different elements that affect the audit department's ability to perform its task competently - these are:

##### **4.3.3.2.1 Organisation Status:**

One of the most, if not the most, important elements that determine how well the audit department carries out its task is the organisational status of the internal department. As a department that provides services to all members of the organisation, the internal audit

department ought to have the necessary provisions to allow it to remain objective. This means that the department has to be taken out of the line management structure of the organisation. However, different organisations have different strategies as to where they locate their internal audit departments. Some internal audit departments fall under the control of the financial section, some under accounting section, and others have the internal audit as a section on its own. Though the size of the organisation and the audit department itself play a role in determining the location of the department, the ideal position for the audit department is as a separate one that falls outside the control of any other department. This means that the audit department will directly report to the highest level of management within the organisation which could be the chief executive, the board, or the audit committee if one exists. Exhibit (4.1) gives a possible positioning of the internal audit department. This positioning ensures that the department will have direct communication channels with the highest level of management (the board) and the audit committee, if one exists.

**Exhibit 4.1**  
**Ideal Positioning of Internal Auditing**



( Taken from Ratliff R., Internal Auditing, 1991, p.22)

To support the organisation status, the head of the internal department should write a statement that details the responsibilities and authorities of the audit department and get this statement, known as the Charter, approved by the board of directors. Having the charter and long term plans approved by the board of directors gives the internal audit department the support that furthers independence. This is also strengthened by keeping direct and continuing communication between the head of the internal audit department and the board of directors.

#### **4.3.3.2.2 Organising the Internal Audit Department:**

The way the internal audit department is organised plays an important role in how well the duties of the department are executed. Organising the department has different aspects which, if done properly, ensure success in the job. These aspects are:

##### **(1) Staffing:**

Performing the audit task requires auditors to have various knowledge and skills. The change in the concept and perception of internal auditing means that the coverage of the new scope of audit needs

skills that go beyond traditional financial auditing skills. However, this does not suggest that the individual internal auditor is a superman who should be competent in all fields of knowledge, rather the audit team should comprise members with different knowledge so that the team possesses the knowledge and proficiency needed to perform any audit task required. Nevertheless, if the audit department is too small to have a number of auditors who have competent knowledge in various fields, then the audit department should at least have access to such proficiencies either from within or without the organisation. Hence, when the head of the internal audit department is selecting his members of staff he has to consider the type of audit work to be carried out and the skills required to perform it professionally and competently. He should try and select members with different skills, but it is important to remember that there are some qualities that should be possessed by all auditors. These are:

- Proficiency in applying internal auditing principles and techniques.
- Proficiency in understanding and appraising controls.

- General understanding and appreciation of various fields of knowledge.
- The ability to work with and understand financial and accounting information.
- The ability to understand management principles and mechanics.
- The ability to work with people and communicate effectively.
- The ability to adopt to different situations and cultures.

## **(2) Training and Development Programmes:**

Having auditors with various skills is not the end of the road since development of science and knowledge never stops. Therefore, it is of equal importance that the head of the internal audit department develops a plan of continuous development programmes which means that auditors will continuously join development programmes that help them develop new skills or improve the ones they already possess. These programmes could be done internally through on-job training, special courses, and rotation of staff or it could be done externally by getting the staff to

attend courses offered by the IIA, universities and colleges, and consulting firms.

The length of such programmes varies according to the nature and objective of each one. Also, auditors should attend such programmes in rotation so that everyone could participate without affecting the flow of work.

#### **4.3.3.2.3 The Structure of the Internal Audit Department:**

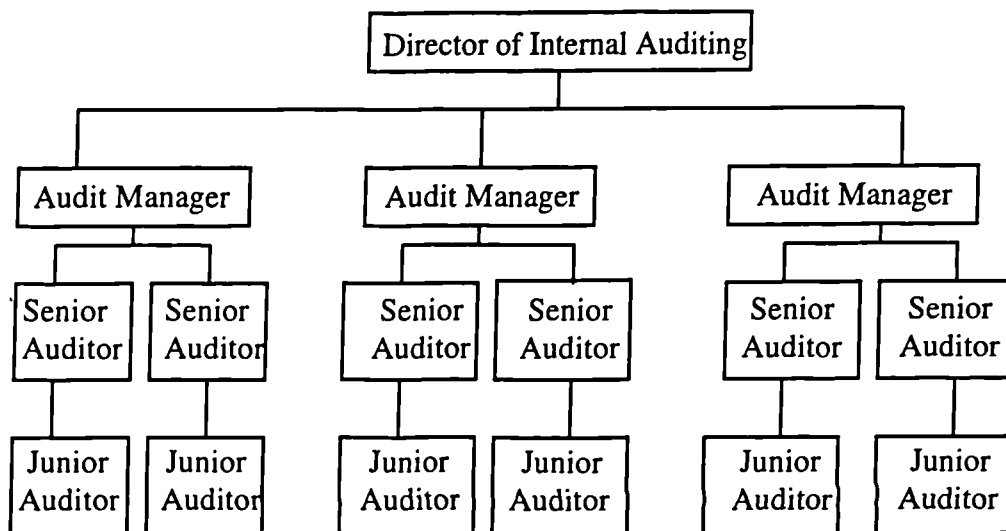
There is no one conclusive way of structuring organisations as different organisations follow different theories when drawing the overall structure of the organisation or the structure of individual departments. However, careful consideration should be given when deciding how the audit department is going to be organised, and the department should provide a degree of flexibility and mobility in order for the audit work to be discharged effectively.

The audit department should have auditors with different levels of experience and different managerial levels. There should be three levels of auditors: audit managers, senior auditors, junior auditors. The



classification of auditors should be done according to experience and skills. The head of the department should have excellent communication skills since he always communicating with the top management. He should also possess all the qualities of top management, and thus should be a competent planner, co-ordinator, organiser, and supervisor. Audit managers are the next level of auditors and they should possess a good deal of experience in auditing and supervision. They are responsible for planning and running individual audit work. Next are the senior auditors who also possess adequate experience but not as much as audit managers, after whom come junior auditors who have little experience. When audit teams are formed they should include auditors from all three different levels.

**Exhibit 4.2**  
**The Structure of the Internal Audit Department**



#### **4.3.3.2.4 Establishing the Department Rules, Policies, Plans, and Procedures:**

Having established the department, acquired the necessary resources and attained the approval of top management, the head of the internal audit department should start setting the overall policies and rules for the department. This differs according to the size and structure of the department, but the policy of the department should be conveyed clearly to all members and each member should have full understanding of his \ her role and how it fits with the overall mechanism of the department. In the case of a large department it may be essential that there more clear formal policies and procedures - the need for audit manuals is more apparent than with small departments where informal communication is much easier. However, if possible, the audit department should aim at having their policies and procedures clearly and formally set. They also should try and produce audit manuals because it makes the job of auditors much easier having some sort of written procedure to refer to. Communication and supervision depend on the structure of the department. In small departments it could be done

on a daily basis since the work net is smaller than with large departments where a more comprehensive system is needed. All of this is left to the judgement of the head of the department because he\ her is the one who should know what is best for his department. Nonetheless, there are some necessities that should exist like having the policies, procedures, and plans competently set and conveyed clearly and effectively to everyone concerned.

#### **4.3.3.2.5 Relations with Others:**

##### **(1) Auditees:**

The relationship between the auditor and the auditee is an important factor that influences the audit function. Auditors should maintain a good relationship with the auditees but they should remain independent and not do anything that would impair their objectivity, even in appearance. The question of objectivity is one of great potential since auditors will be accepted and their recommendations welcomed only if they are seen to be objective, so it is not only the case of being objective but also the appearance of being objective that should be striven for by auditors.

The point about objectivity does not mean that auditors should treat auditees indifferently, rather they should strike a balance between keeping a good working relationship with the auditees and maintaining their objectivity. A good relationship could be reached through trust and when the auditees know that they have been treated fairly by the auditors who are not there to try and pick on their mistakes but to report on the effectiveness of operational controls with its advantages and limitations.

That is why when we talked about reporting we stressed the importance of reporting good findings as well as deficiency findings. A good relationship could be achieved when auditees perceive auditors as advisors rather than policemen. When talking about auditees we mean all members of the operation under review including the auditee's management, with whom auditors are more concerned about keeping a good relationship. One of the issues raised here is that though auditors are there to serve all members of the organisation, including operations' managers, internal auditors are an independent function and it is

in everyone's interest that they should remain independent and objective. Therefore, it should be understood that while internal auditors aim at keeping a good relationship with auditees, they are also trying to remain objective.

## **(2) The Board:**

The relationship with the board is one of dual responsibility with each party relying on the other to give them the support needed to perform their task and meet their duties effectively. Internal auditors need the support of the board in order to get the recognition needed for the effective execution of audit duties. The auditors' task is made much easier if they know they have the support of the board and are given all the resources and authorities needed.

On the other hand, the board relies on internal auditors to provide them with the information, analysis, and recommendations necessary for the effective discharge of their responsibilities. The change in the work environment and growth in the size of organisations has meant that top management can no longer keep a constant close grasp of everything that is going within their organisation.

Under these conditions internal auditors play an important role as they represent the connection between the board and what is going on in the organisation. However, internal auditors should avoid giving the impression that they are merely a proxy for top management, the message to be conveyed to all members of organisation is that internal auditing is there to help them all members to perform their job competently and effectively.

### **(3) Audit Committee:**

In the past few years the use of audit committees as a medium between auditors and top management has become more common. Their job is to enhance the position of auditors and give them the objectivity and independence from management. Audit committees also help in promoting better relationship between internal and external auditors. The relationship between internal auditors and the audit committee should be a close one since the audit committee is primarily concerned with improving the audit practice within the organisation whether it is an internal or external audit. Therefore it is expected that the relationship will be built on an understanding of the

role, objectives, and standards of auditing. However, not every organisation has the privilege of having an audit committee, especially in less developed countries where audit committees are virtually non-existent, though the need for them is great.



#### **4.3.4 External Components:**

The framework of internal auditing has two external components - one deals with the relationship between internal and external auditing, the other is concerned with the environmental responsibilities of internal auditing.

##### **4.3.4.1 The Relationship with External Auditors:**

The relationship between internal and external auditors is one that affects the work of both parties. External auditors rely on internal auditors' work when carrying out their task and the degree of this reliance is based on two factors as set by the AICPA Statement on Auditing Standards No. 9. These are: (1) the internal auditors' competence and (2) their objectivity.

Therefore, from the external auditors point of view their relationship with internal auditors is a working relationship that help them in performing their task and save time spent in auditing. This relationship is bound to be better if external auditors perceive internal auditors as professional, competent and objective practitioners. However, it is important to point out that external auditors are only interested in the financial side of operations, unlike internal auditors whose scope is much wider than that of their external counterparts.

On the other hand, the internal auditors view their relationship with external auditors as a co-operative relationship. The aim of internal auditors is to ensure and improve economy, efficiency, and effectiveness and one way of doing this is by ensuring that their work is of a quality that can be relied upon by external auditors. As a result the cost of external auditing would be reduced to meet economy needs. Likewise, it cannot be denied that the external auditing profession, having established itself long before internal auditing, has a lot to offer to internal auditors; internal auditors can learn from the experience of the external auditors and how they developed their profession. And in areas where external auditors have an expertise and have developed techniques, these techniques could be utilised by internal auditors.

These are the general parameters of the relationship between internal and external auditors, which also include the importance of working together for the advance of the auditing profession. There is no doubt that one of the parties cannot do without the other and the work and success of one party is crucial for ensuring the success of the other. And in today's conditions one cannot keep himself locked in his own environment; it is the mixing with other professions and learning from experience that results in improvement of knowledge, a

technique invented by internal auditors could be taken by external auditors and improved upon and vice versa.

Internal auditors are experts on controls and operational auditing and they can offer much help to external auditors in this area. Correspondingly, external auditors have developed expertise on financial matters and internal auditors could learn from that.

Nonetheless, it is everyone's duty to meet the objective of his \ her profession and comply with its standards without compromise. Thus, while aiming at having a good relationship, auditors from both sides have to remember that they have responsibility to meet and an objectivity that must not be impaired for the sake of any relationship.

Looking at the relationship in terms of carrying out the task of auditing, a particular job would mean that both external and internal auditors should try and communicate to one another the goals and objective of what is being done. There should be an exchange of plans and programmes so that duplication of work could be kept to a minimum. Also, each party should be granted access to the other's working papers unless there is confidential information that should not be disclosed. There

should be an exchange of audit reports with a copy of the internal audit's report made available to external auditors. As long as there is no information that should be kept in secrecy internal auditors should make their findings and reports available to their external counterparts. On the other hand, internal auditors should be given the right to read the external audit's reports and any other communication with management; this exchange of reports and letters of communication should help both groups of auditors in assessing the situation and it might result in a change of the scope or emphasis of audit.

The co-ordination of work between internal and external auditors is arranged by the audit committee if one exists, otherwise it is the responsibility of the board to ensure a maximum degree of co-ordination between both groups of auditors. Nevertheless, the head of the internal audit department has to hold a meeting with the external auditor and discuss the work to be done and work out ways of co-ordination. The head of internal auditing could agree to assign some internal auditors to carry out some work on behalf of external auditors, but it should be understood that they are performing the work in that capacity and they are not being perceived as doing internal audit work.

The co-ordination between internal and external auditors should be regularly evaluated by the head of internal auditing and any problems preventing the improvement of co-ordination should be sorted out. The result of this evaluation of co-ordination should be then communicated to the board, or audit committee if one exists. Moreover, the head of internal auditing could be asked by management to evaluate the performance of external auditors, in this case external auditors would be treated like any other auditee and the degree of economy, efficiency, and effectiveness of their work would be evaluated. However, in doing so they should be treated as any other auditee and a good relationship should be maintained and the result of this evaluation should then be reported to the board. This option of internal auditors reviewing the work of external auditors is not really a practised option currently but this does not mean that it could not be carried out. Similarly, external auditors could be asked to review the performance of the internal audit department as a part of the quality assurance programme. In this case internal auditors should provide external auditors with all the information needed to complete the review task.

It is important to point out that when either group of auditors is asked to review the performance of the other, this task is an

additional task which should not affect the working relationship that exists concerning auditing the organisation's operations.

#### **4.3.4.2 Environmental Responsibilities Of Internal Auditing:**

In the past few years the awareness of the effect and relationship between activities and the environment has become one of the issues most talked about. Internal audit is no exception and the relation between the *profession and the* environment has to be considered seriously. This relationship means that the internal auditing profession has a responsibility towards society and the environment and in order to fulfil this responsibility auditors have to carry out a new auditing task which would be called environmental auditing. But what is environmental auditing and how it could be done? Since the topic is new, a clear definition is yet to be developed as to the meaning of environmental auditing. The Institute of Internal Auditors [IIA, 1993: 1] define it as “a management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organisation, management and equipment are performing with the aim of helping to safeguard the environment by (1) facilitating management control of environmental practices; (2) assessing

compliance with company policies, which would include meeting regulatory requirements”.

Therefore, the task of environmental auditing requires ensuring two aspects: First, auditors have to ensure compliance with laws and regulations which falls within the scope we talked about earlier in this chapter. What is needed here is for internal auditors to ensure compliance with regulations generally and also with regulations regarding any environmental matter. Thus, when auditors are examining compliance with rules and regulations as part of the new expanded scope they should also ensure that any regulation that relates to the environment are complied with. Second, auditors have to ensure that their organisation has an environmental policy, because the first step of a good control system has to start with a policy. Thus, internal auditors have to ask themselves if such a policy exists. However, the existence of the policy in itself does not represent the goal and the auditors have to ensure that the policy is well thought and developed and constantly reviewed to ensure keeping pace with the rapid changes in the environment. Having ensured that the environmental policy is well developed, the auditors then have to ensure that the policy receives adequate support from top management, and that the policy is communicated to, and understood, by all members of the

organisation because the responsibility to the environment is everyone's responsibility.

To put it in a few words, environmental auditing is by no means beyond the auditor's ability. It might be necessary for expertise on environmental matters to be sought from outside but this is not only the case with environmental auditing. This is the case with any new discipline and as time goes by internal auditing would develop its own expertise on the matter. Nonetheless, the objectives and procedures are the same and internal auditors are still able to ensure that there is compliance with laws and regulations. Objectives do exist and are clearly understood by members of the organisation and resources are provided for the achievement of the objectives, and an adequate system of control is in place to ensure the economic, efficient and effective discharge of the organisation's environmental policy.

This environmental responsibility represents part of the relationship between the internal auditing profession and society in general. This relationship means that the profession has duties and an obligation towards the society on which it relies for the provision of resources, especially the human resources. Hence, a good relationship between internal auditing and society is a necessity and to achieve such a good relationship

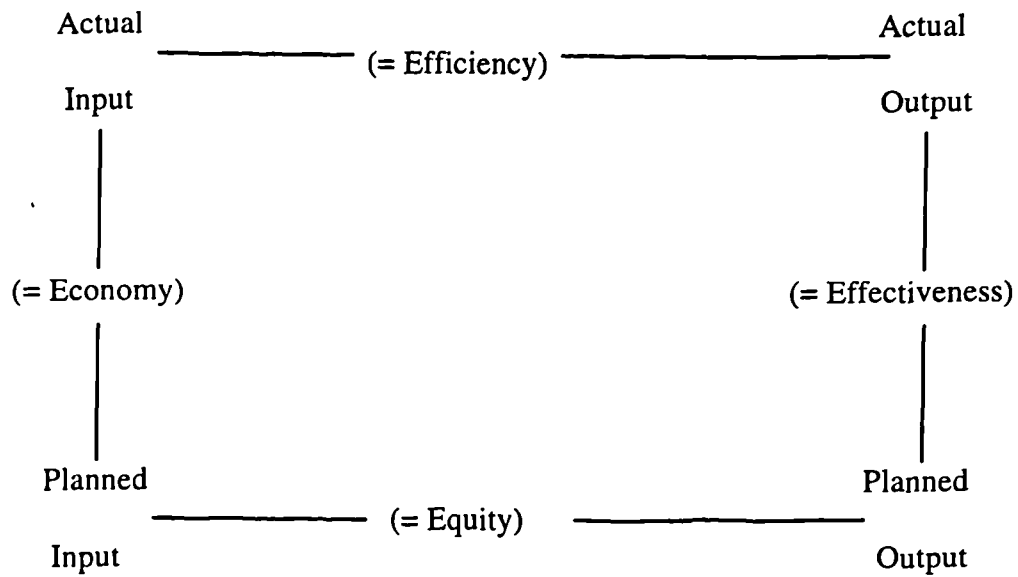


the society has to recognise the value of internal auditing. This could be achieved if internal auditors perform their job competently and professionally enough to get the respect required for any relationship. Internal auditors also have to consider the social effects when auditing operations and this is sometimes called social auditing but, in fact, it is not a different audit in itself but rather evaluating the implications of operations on the society and ensuring that any unfavourable effects are eliminated. This should be done when auditing all operations and activities.

This would mean that there is a new concept to be added to the “Three Es”, something Chambers, Selim and Vinten [1988: 83] call Equity and which is concerned about the environmental and social responsibilities of the organisation. Exhibit (4.3) shows how the new concept would fit with the other three. In this the interpretation economy is doing things cheaply, efficiency is doing things the right way, effectiveness is doing the right things, and equity is doing right.

### EXHIBIT 4.3

#### The meaning of the "4 Es"



(Taken from Chambers et al, Internal Auditing, 1988, p.83)

## **SUMMARY & CONCLUSION**

This chapter represents the conceptual phase of the research. In it an attempt was made to determine the characteristics that could form a conceptual framework for internal auditing. It concluded in constructing a conceptual model for the internal audit profession, though it has to be re-emphasised that no claim is made that the model developed in this research is the perfect model that answers all the questions. Rather it is merely a model that helps define the important questions to be asked and tries to find a general agreement on how these questions could be answered. The model attempts to construct the theory behind internal auditing into a comprehensive, coherent body that is internally consistent. The model is trying to provide an ideal perspective of what could and should be. This makes the model a good basis for assessing what exists in practice.

It was found that the characteristics of such a conceptual model fall under four main categories. First, **conceptual components** which represent the basis of the definition, objectives, and main concepts that constitute the qualitative characteristics of the common body of knowledge for internal audit. Second, **operational components** which represents the procedures for the application of the concepts and objectives as defined by the conceptual components. These are the performance procedures and are the strategies of putting into practice the ideologies and objectives of the internal audit profession as envisaged by the conceptual model. Third, **organisational components** which refer to the internal factors that affect internal auditing. These factors are internal in the sense they are within the internal audit profession itself and within any

organisation where internal auditing operates. Thus, it is concerned with the organisation of the profession itself, and with the status and location of the internal audit department within the organisation and the relationship between internal auditors and members of the organisation. It is also concerned with the organisation of the internal audit department itself. Fourth, there are **external components** concerned with the interrelationships between internal and external auditing, as well as the environmental responsibilities of internal auditing.

These four components bring together all the concepts and interrelationships that could constitute a conceptual model for internal auditing. A summary of this model is given in exhibit 4.4 This may be used as a guiding model to help explore more about the perception and practice of internal auditing and could be used as a benchmark against which to compare what exists in real life.

The model developed in this chapter will be used in the next few chapters to assess the way internal auditors working in Egypt perceive their profession, and also to examine the state of the practice of internal auditing in Egyptian public and private sector organisations.

## **EXHIBIT (4.4)**

### **A CONCEPTUAL FRAMEWORK FOR INTERNAL AUDITING**

#### **1. Conceptual Components:**

- 1.1 Definition
- 1.2 Objectives
- 1.3 Common Concepts

#### **2. Operational Components:**

- 2.1 Planing The Audit
  - 2.1.1 *Selecting The Auditee*
  - 2.1.2 *Selecting The Auditor*
  - 2.1.3 *Setting The Time*
  - 2.1.4 *Determining The Objective & Scope*
  - 2.1.5 *Preliminary Survey*
  - 2.1.6 *Audit Programme*
- 2.2 Field Work
  - 2.2.1 *Descriptions Of Controls*
  - 2.2.2 *Evaluating Controls*
  - 2.2.3 *Testing*
  - 2.2.4 *Findings & Conclusions*
  - 2.2.5 *Working Papers*
- 2.3 Reporting Findings & Recommendations
- 2.4 Follow-up
- 2.5 Audit Measures

#### **3. Organisational Components**

- 3.1 General Organisational Structure
- 3.2 Organisational Status Of The Audit Department
- 3.3 Organising The Internal Audit Department
  - 3.3.1 *Staffing*
  - 3.3.2 *Training Programmes*
  - 3.3.3 *Establishing Plans, Rules And Policies*
- 3.4 Relationship With Auditees
- 3.5 Audit Committee
- 3.6 Quality Assurance

#### **4. External Components**

- 4.1 Relationship With External Auditors
- 4.2 Environmental Responsibilities

## **CHAPTER FIVE**

### **5. RESEARCH HYPOTHESES AND METHODOLOGY**

#### **5.1 Research Hypotheses:**

This study aims to achieve many objectives: **First**, to examine the degree of practicality of the conceptual model developed in the previous chapter. The question here is " what is the degree of Compatibility between the conceptual model and the practice? Do practicing internal auditors perceive their profession as it is set in the conceptual model?". **Second**, to examine whether the perception of the model would vary according to the type of ownership, that is whether there is any difference in the perception among auditors in private and public sector organisations. **Finally**, to examine whether the perception of the model would vary according to the level of auditors, that is to examine whether internal audit managers perceive the conceptual model of the profession in a different way from that of less experienced internal auditors.

To achieve these objectives a number of hypotheses are developed. These are:

#### **The First Hypothesis:**

**H1: Internal auditors working in the private sector have a different perception of the conceptual model for internal auditing from that held by internal auditors working in the public sector.**

This hypothesis examines the proposition that internal auditors working in the private sector have a perception of the conceptual model that differs from the perception held by internal auditors working in the public sector. This hypothesis is built on the following assumptions:

- A1:** Internal auditors in the private sector have a perception of the conceptual components of the model that is different from that held by internal auditors in the public sector.
- A2:** Internal auditors in the private sector have a perception of the operational components of the model that is different from that held by internal auditors in the public sector.
- A3:** Internal auditors in the private sector have a perception of the organisational components of the model that is different from that held by internal auditors in the public sector.
- A4:** Internal auditors in the private sector have a perception of the external components of the model that is different from that held by internal auditors in the public sector.

**The Second Hypothesis:**

- H2:** The perception of the conceptual model for internal auditing varies according to the different levels of internal auditors.

This hypothesis examines the proposition that there is difference in the perception of the conceptual model between different levels of internal auditors; i.e. internal auditors, Senior internal auditors, internal audit managers and the heads of internal audit departments. This hypothesis is built on the following assumptions:

**A5 :** The perception of the conceptual components of the model differs from one level of internal auditors to another.

**A6:** The perception of the operational components of the model differs from one level of internal auditors to another.

**A7:** The perception of the organisational components of the model differs from one level of internal auditors to another.

**A8:** The perception of the external components of the model differs from one level of internal auditors to another.

### **The Third Hypothesis:**

**H3: There is a significant difference between the practice of internal auditing in the public sector and the practice of internal audit in the private sector in Egypt.**



This hypothesis examines the proposition that the practice of internal auditing in the public sector differs from the practice of internal auditing in the private sector. This hypothesis is built on the following assumptions:

**A9:** The practice of the conceptual aspects of internal auditing in the public sector is significantly different from practice in private sector.

**A10:** The practice of the operational aspects of internal auditing in the public sector is significantly different from practice in private sector.

**A11:** The practice of the organisational aspects of internal auditing in the public sector is significantly different from practice in private sector.

**A12:** The practice of the external aspects of internal auditing in the public sector is significantly different from practice in private sector.

## **5.2 RESEARCH METHODOLOGY:**

### **5.2.1 Data Collection in Egypt:**

The data collection process was done through two questionnaires especially developed for the purpose of this study. The first questionnaire was used to collect data on the perception of the conceptual model - data collected using the first questionnaire will be used to examine the first two hypotheses. The second questionnaire

was used to collect data on the practice of internal audit and data collected using the second questionnaire will be used to examine the third hypothesis. The structure of the statements included in the two questionnaires are explained in tables (5.1) and (5.2).

The two questionnaires included a number of statements to which the subject had to respond using a five-point Likert scale that ranges from "strongly disagree" represented by the score of (1) to "strongly agree" represented by the score of (5); between the two extremes there is a score of (2) to "disagree", (3) to "uncertain", and (4) to "agree".

The wordings of some of the statements have been reversed to attempt to reduce response set bias, and at the end of each questionnaire the subject was asked to respond to a few questions about his \ her organisation and himself \ herself.

**TABLE (5.1)**  
**STRUCTURE OF ITEMS INCLUDED IN THE PERCEPTION QUESTIONNAIRE**

Item No.	Component	Element
1-6	Conceptual	Definition & Objectives of Internal Auditing
7-9	Conceptual	Scope of Audit Work
10-12	Conceptual	Common Concepts
13-14	Operational	Planning the Audit (Selecting the Auditee)
15	Operational	Planning the Audit (Selecting the Auditor)
16	Operational	Planning the Audit (Setting the Time)
17	Operational	Planning the Audit (Determining the Objective & Scope)
18	Operational	Planning the Audit (Preliminary Survey)
19	Operational	Planning the Audit (Audit Programme)
20-25	Operational	Field Work
26-27	Operational	Reporting Findings & Recommendations
28-29	Operational	Follow-up
30	Operational	Audit Measures
31-35	Organisational	Organisational Status
36-38	Organisational	Staffing
39-40	Organisational	Training & Development
41-47	Organisational	Establishing Plans, Rules & Policies
48-53	Organisational	Relationship with Auditees
54-55	Organisational	Audit Committee
56-59	Organisational	Quality Assurance
60-65	External	Relationship with External Auditors
66-67	External	Environmental Responsibilities

**TABLE (5.2)**  
**STRUCTURE OF ITEMS INCLUDED IN THE PRACTICE QUESTIONNAIRE**

Item No.	Component	Element
1-3	Conceptual	Definition & Objectives of Internal Auditing
4-6	Conceptual	Scope of Audit Work
7-9	Operational	Planning the Audit (Selecting the Auditee)
9-10	Operational	Planning the Audit (Selecting the Auditor)
11	Operational	Planning the Audit (Setting the Time)
12	Operational	Planning the Audit (Determining the Objective & Scope)
13	Operational	Planning the Audit (Preliminary Survey)
14	Operational	Planning the Audit (Audit Programme)
15-21	Operational	Field Work
22-23	Operational	Reporting Findings & Recommendations
24-25	Operational	Follow-up
26-28	Operational	Audit Measures
29-34	Organisational	Organisational Status
35-38	Organisational	Staffing
39-43	Organisational	Training & Development
44-52	Organisational	Establishing Plans, Rules & Policies
53-57	Organisational	Relationship with Auditees
58-61	Organisational	Quality Assurance
62-68	External	Relationship with External Auditors
69-71	External	Environmental Responsibilities

### **5.2.2 Subjects:**

The subjects in this study are internal auditors working in Egypt in both the public and private sector. They include three different levels of internal auditors: internal auditors, senior internal auditors or internal audit managers, and heads of internal audit departments.

### **5.2.3 Pilot Testing:**

The two questionnaires were pilot tested before starting the main data collection stage in order to reach the best form of questions and to see whether there should be any change to the form or substance of either of the two questionnaires. This pilot testing stage was done by randomly selecting two heads of internal audit, three senior internal auditors and audit managers, and five internal auditors. These 10 subjects were randomly selected from the same population on which the final questionnaires were tested. In doing so the planned method of administering the main data collection process was employed to explore any difficulties and try to overcome them before starting the real data collection work.

However, the pilot testing process revealed that there were no major problems faced by participants answering the two questionnaires.

There was no need to make any major changes to the questionnaire and only the wordings of two of the statements had to be changed to make them more grammatical. This was because the way some words are

written has to change according to their location in the sentence to comply with the requirements of the Arabic language's grammar.

#### **5.2.4 Sample plan:**

As the objective of this study was to examine the way internal auditors perceive different aspects of the internal audit profession, it was essential to contact as many internal auditors as practically possible. However, since there is no directory for internal auditors working in Egypt, it was decided that the best way to contact as many practicing internal auditors was through contacting organisations in both the public and private sectors.

The research population comprised companies working in Egypt from both the public and private sectors. This population was then divided into two sections the first included public sector companies and the second included private companies. Subsequently, each section was divided into five strata, each representing one of the main sectors of the Egyptian economy namely: Banking, Insurance, Petroleum, Industrial, and services sectors. Then the sample was randomly selected from these strata, and it represented 50% of companies which have offices in Cairo, except in the case of the insurance sector where 100% of companies were contacted. The reasons for only selecting from those organisations working in Cairo were the limited resources in terms of time and cost. Also, Cairo being the financial and industrial capital of

Egypt meant that the majority of companies working in Egypt would have offices there.

The plan then was to contact the head of the internal audit function or a senior member of the audit staff in each of the randomly selected companies. The contact was made in late August 1993 with a high response rate that reached 82% among public sector companies, and 73% among private sector companies. This high response rate was achieved as result of the researcher personally contacting and visiting the selected companies and explaining the objective of the study. However, among those organisations which could not take part in the research were some private sector companies which did not have an internal audit function at all. Table (5.3) gives the response rate achieved in each sector.

Next a visit was made to each of the companies which agreed to participate in the study, where the researcher held a meeting with the head of internal audit or a senior member of the audit staff. In this meeting the researcher selected a sample of the internal auditors working in the respective company. The sample included auditors from the three levels, viz. internal auditors, senior internal auditors or internal audit managers, and chief internal auditor. This sample was then divided into two groups: one replied to the questionnaire regarding the perception aspects, the other group replied to the

questionnaire on the practice aspects of internal auditing. However, the heads of internal audit function had to fill in both questionnaires, that was due to the existence of only one head of internal audit in each organisation. The extent of experience possessed by these heads of internal audit have reduced the danger of bias in answering the two questionnaires. Also, it was strongly emphasised to the respondents that they should not discuss the contents of the questionnaires with each other to avoid any bias, and it is worth mentioning that the respondents showed great understanding of the nature of the study.

The participants were given a period that varied from two days to a week to complete the questionnaire. The researcher then made another visit to each company to collect the completed questionnaires. Doing this has allowed the researcher to meet many practicing internal auditors and talk to them about the internal audit profession, in some cases at the request of the participants. The other advantage of collecting the data in this way was that the researcher had the opportunity to observe the practice of internal auditing in many of these companies.

At the end of the data collection stage the total number of internal auditors who took part in the research reached 561 auditors representing 32 public sector companies and 27 private sector companies. A breakdown of these figures are given in table (5.4).



**TABLE (5.3)**  
**SAMPLE RESPONSE RATE**

Sector	Public Sector	Private Sector
Banking	100%	80%
Insurance	100%	100%
Petroleum	67%	60%
Industrial	75%	59%
Services	67%	64%
Averages	82%	73%

**TABLE (5.4)**  
**NUMBER OF RESPONDENTS TO THE RESEARCH QUESTIONNAIRES**

Respondent	Public Sector		Private Sector	
	Perception	Practice	Perception	Practice
Internal Auditors	91	79	47	38
Senior Internal Auditors / Internal Audit Managers	67	57	33	31
Chief Internal Auditors	32	32	27	27
Total	190	168	107	96

### **5.3 DATA ANALYSIS**

The analysis of data collected using the two questionnaires will be carried out using different statistical techniques. First, a factor analysis will be carried out to examine the way statements included in both questionnaires will form together to reach a factor structure that can be used in testing the research hypotheses. The process of testing the research hypotheses will be performed using both parametric and nonparametric techniques, thus in examining the research hypotheses both the Mann-Whitney and T-test, as well as univariate F-test, will be used in comparing the different elements of the conceptual framework. This phase will also adopt multivariate data analysis to examine the difference between the different groups of internal auditors across different groups of the dependent variables. This usage of multivariate analysis would be supported by univariate post hoc analysis to explain any significant differences that might be revealed.

## **CHAPTER SIX**

### **6. A PRELIMINARY ANALYSIS OF THE RESEARCH DATA**

In this chapter a preliminary analysis of the response to the two research questionnaires will be carried out to examine whether the items included in both questionnaires group together in the same manner as expected and shown in table (5.1 & 5.2). This analysis will be done using the multivariate analysis technique known as factor analysis or, to be more precise, one of the variants of factor analysis techniques known as principal component analysis. The importance of carrying out this analysis is to reach a conclusion on the factors that form both the perception and practice of internal audit. These factors consist of variables given in the two questionnaires. Having deduced how variables come together to form different factors it should be possible to carry out the main data analysis process in the knowledge that it will be based on factors reached through statistically examining the response given by all research groups.

Factor analysis is mainly used to reduce a large number of variables to a few factors, thus making the job of carrying out further analysis much easier. The technique is also used to assess the underlying relationships among different variables and, as in the case here, factor analysis is used to explore how items included in questionnaires form together. In factor analysis all variables are

simultaneously considered and each factor is considered a dependent variable that is a function of some underlying and latent set of factors.

The general purpose of factor analysis is to find a way of condensing the information contained in a number of original variables into a set of new, composite factors with a minimum loss of information [Hair, Anderson, Tatham and Black, 1995: 368]. However, the analysis is merely concerned with finding the underlying relationships between the different variables and it is left to the analyst to come up with an interpretation of the factors revealed as well as to find meaningful names for these factors.

While some use factor analysis to test hypothesised phenomena by comparing the results of the analysis with the pattern previously hypothesised, others hold the view that it is only a starting point for non-factor based research [Child, 1970: 55]. Though in this study the results of factor analysis will be compared with the structure previously considered when the questionnaires were designed, the results of factor analysis will be the base of further statistical analysis performed to examine the research hypotheses.

To make the results of factor analysis meaningful, only some of the factors revealed in the initial solution of the analysis should be extracted. Though there is no exact quantitative basis for deciding the numbers of factors to be extracted, there are some criteria that could be applied in determining the numbers of factors. These are: **Latent Root Criterion** which makes use of the

eigenvalues attached to the various numbers of factors; **A Priori Criterion** under which the analyst already knows how many factors to extract before undertaking the factor analysis; **Percentage of Variance Criterion** which simply uses cumulative percentages of the variance extracted by successive factors; and **Scree Test Criterion** which is derived by plotting the latent roots against the number of factors in their order of extraction and the shape of the resulting curve is used to evaluate the cut-off point. [Hair, Anderson, Tatham and Black, 1995: 377-379]

In practice the analyst seldom uses a single criterion in determining how many factors to extract. In this study the first two criteria will be adopted as they are the most reliable, preferred, and commonly used criteria. In doing so, using the latent root criterion factors with eigenvalues greater than unity are extracted, the rationale for this is that any extracted factor should account for at least the variances of a single variable. While using the percentage of variance criterion meant that all the factors that accounts for at least 95% of the variance would be retained.

Another important concept is the rotation of factors which is considered to be necessary by most analysts. This is because direct unrotated solutions are not sufficient and do not provide information that offers the most adequate interpretation of the variables under examination. While initial unrotated factors achieve the objective of data reduction, rotation of factors usually provide solutions that are easier to interpret.

There are two main methods of rotation, namely orthogonal and oblique. The difference between the two methods is that under the orthogonal rotational approach the underlying factor axes of the data are kept uncorrelated to each other, while under the oblique approach the axes rotate freely producing linearly independent but not necessarily orthogonal dimensions. However, the orthogonal method is more widely utilised because of its availability in most computer packages and also because the analytical procedures for performing oblique rotations are not as well developed and are still subject to considerable controversy. Nevertheless, it was proved that both methods produce very similar results and thus this study adopted the orthogonal approach, and in particular the Varimax method which centres on simplifying the columns of the factor matrix and gives clear variable-factor correlation. [Cattell, 1952; Child, 1970; Dillon and Goldstein, 1984; Hair et al, 1995; Noursis, 1988; and Rummel, 1970]

## **6.1 Perception Response**

The variables considered in this analysis are the items included in the first questionnaire, the perception questionnaire. The items pooled in this questionnaire were 67 items, thus the variables analysed were 67 with 297 cases. However, the analysis was carried out twice: first on the 190 cases that represented the response received from the public respondents, and the second on the 107 cases that represented the response of the private sector. The reason for dividing the cases into two groups before factor analysing them was that one of the research hypotheses predicted a difference in the perception of

internal audit between the public and private sectors. Though a similar difference was hypothesised among different groups of auditors within the same sector, a division of analysis could not be done since the number of cases has to be at least as many as the number of variables to make such analysis statistically possible.

Tables (6.1) and (6.2) represent the result of the factor analysis carried out on the response to the perception questionnaire from the public and private sectors respectively. The results shows the rotated factors after extracting 19 factors. The number of factors extracted was based on the results from the preliminary factor analysis of the variables and from that analysis 19 factors were extracted and rotated. The basis of choosing those factors were that they accounted for 75% of the variance in the case of the public sector and 79% in the private sector, and it is acceptable to consider a solution that accounts for 60% of the total variance as a satisfactory solution. [Hair, Anderson, Tatham and Black, 1995] Also, all factors that accounted for a variance of at least a single variable were extracted. It is important to remember here that when the questionnaire was first constructed, and before the collection of data, it was thought that items included would form together in 22 factors. These represented different elements of the conceptual framework developed in chapter five as shown in table (5.1).

Both tables show the rotated solution using the VMAX rotation method. The reason for rotating factors is to reach a better structure solution that is simpler

to interpret. The rotation of factors provides a more meaningful factor solution and in most cases improves the interpretation by reducing some of the ambiguities that often accompany initial unrotated factor solutions. [Child, 1970; Dillon and Goldstein, 1984; Hair et al,1995] The figures shown under each factor are the loading of the different variable on the factor concerned. It was decided only to show loading greater than 0.30 because these are considered significant.

In table (6.1) factor 1 includes items 1-6 & 10-12 while in table (6.2) the factor includes items 1-6, 10-12 & 31-35. This means that in both sectors items examining the “Definition & Objective of Internal Audit” and those on “Common Concepts” are linked together. Furthermore, in the private sector those items are also factored together with items on the organisational status of the internal department, though in the case of the public sector, items 31-35 are represented by an independent factor as it can be seen in factor 3 in table (6.1). However, when the questionnaire was constructed it was thought that items 1-6, 10-12 and 31-35 would form three different factors examining three different elements of the conceptual framework. Since there are no theoretical or statistical reasons to stop the break down of these items into the three factors planned, it was decided to break factor 1 in table (6.1) into two independent factors and factor 1 in table (6.2) into three factors. The new factors were necessary for the purpose of uniformity in order to carry out the main research analysis. The new factors are shown in table (6.3).



Looking at items 7-9 in both tables it can be seen that they form one single factor as planned. This is factor 14 in table (6.1) and factor 7 in table (6.2); this factor is examining the “Scope of Audit Work”. Similarly items 13-14 are represented by a single factor in both tables. These items examine process of selecting the auditee, and the same applies to item 15 which examines the process of selecting the auditor.

On the other hand, items 16,17,18 &19 were thought to form different factors when the questionnaire was developed, but looking at the results of the factor analysis in both sectors it is apparent that in the two sectors the four statements came together to form a single factor that would be kept and renamed “Planning the Audit”. Note that this is the same name used when the questionnaire was developed, only it was thought that each item which examines one aspect of the planning process would form a factor on its own. However, after looking at the results of the factor analysis it was clear that there was no reason to divide the factors and they could all be grouped together under one factor.

Moreover, in both tables items 20-23 & 25 are forming one factor, but unlike the reconsidered factor structure, item 24 does not fall under the same factor and instead falls under the factor including items 26-27. An explanation for this is that item 24 was perceived to examine the process of “Reporting Findings and Recommendations” as do items 26-27, while items 20-23 & 25 examine “field work”. Meanwhile, as expected, items 28-29 which examine

“Follow-up” have formed one single factor in both tables. Item 30 also formed a single factor in both cases, concerned with “Audit Measures”. When the questionnaire was developed, and before data collection, it was thought that items 36-40 would form two different factors examining “Staffing” for the first three items and “Training & Development” in the case of questions 39 and 40, but both tables show that items 37-40 fall under a single factor which could be named “Staffing, Training and Development”. However, the situation is different from item 36 which falls under the same factor as other staffing items in the public sector, while in the private sector the same item forms a single independent factor. This item examines the perception of auditors in regard to membership of the Institute of Internal Auditors, therefore a decision was made to put it as an independent factor since it is acceptable to break down items that factor together rather than to put together items that do not factor together.

On the other hand, items 41-47 examine “Establishing Plans, Rules and Policies” in both sectors, and as expected gathered under the same factor. Contrary to that, items 48-53 were expected to be under a single factor examining “Relations with auditees”. Instead, in both tables these six statements formed into two different factors, the first includes items 48,49 and 53 which all examine relationships with auditees except the part related to the audit report. The second factor included statements 50, 51 and 52 which deals with the relationship with auditees regarding the audit report.

The statements relating to the “Audit Committee” , i.e. statements 54-55, have grouped together under a single factor in both sectors as expected. Similarly, statements 56-59 on “Quality Assurance” came under a single independent factor in both the public and private sectors, again as expected.

When it comes to examining the perception on relationship with external auditors , the six statements that were meant to fall under a single independent factor have grouped together in a different way which was the same in both sectors as it is apparent from the tables. In both cases the statements formed two independent factors , the first containing statements 60 and 62-64 and the other statements 61 and 65. Finally statements 66-67 which examines “Environmental Responsibilities”, have come under an independent factor as expected.

Having examined the results of factor analysing the response in both sectors, it was important to reach a uniform factor structure of the items included in the questionnaire in order to make it possible to carry out the comparative analysis testing the research hypotheses. Fortunately the difference between the factor structures in the two sectors was minimal, as it could be seen from the tables there are only two situations where difference occur: the first with factor 1 in the private sector which includes items 31-35 together with items 1-6 and 10-12, while in the public sector only items 1-6 and 10-12 come under the same factor and items 31-35 form an independent factor, namely factor 3 in table (6.1). The second situation is with factor 7 in the public sector that

includes items 36-40 while in the private sector only items 37-40 come under a single factor and statement 36 form an independent factor.

Therefore, a new factor structure was derived at taking into consideration both factor structures in the public and private sectors. This structure is presented in table (6.3). The new structure only differs from the two structures in that it has put items 1-6 and 10-12 in two independent factors and not under the same factor.

**TABLE (6.1)**  
**PUBLIC SECTOR - PERCEPTION RESPONSE**  
**VARIMAX ROTATED COMPONENT ANALYSIS FACTOR MATRIX**

Var	Fac 1	Fac 2	Fac 3	Fac 4	Fac 5	Fac 6	Fac 7	Fac 8	Fac 9
1	0.730	-	-	-	-	-	-	-	-
2	0.493	-	-	-	-	-	-	-	-
3	0.610	-	-	-	-	-	-	-	-
4	0.726	-	-	-	-	-	-	-	-
5	0.680	-	-	-	-	-	-	-	-
6	0.555	-	-	-	-	-	-	-	-
10	0.493	-	-	-	-	-	-	-	-
11	0.507	-	-	-	-	-	-	-	-
12	0.665	-	-	-	-	-	-	-	-
20	-	-0.573	-	-	-	-	-	-	-
21	-	-0.511	-	-	-	-	-	-	-
22	-	-0.559	-	-	-	-	-	-	-
23	-	-0.813	-	-	-	-	-	-	-
25	-	-0.678	-	-	-	-	-	-	-
31	-	-	-0.556	-	-	-	-	-	-
32	-	-	-0.323	-	-	-	-	-	-
33	-	-	-0.489	-	-	-	-	-	-
34	-	-	-0.727	-	-	-	-	-	-
35	-	-	-0.829	-	-	-	-	-	-
41	-	-	-	-0.405	-	-	-	-	-
42	-	-	-	-0.756	-	-	-	-	-
43	-	-	-	-0.720	-	-	-	-	-
44	-	-	-	-0.471	-	-	-	-	-
45	-	-	-	-0.550	-	-	-	-	-
46	-	-	-	-0.396	-	-	-	-	-
47	-	-	-	-0.468	-	-	-	-	-
50	-	-	-	-	-0.389	-	-	-	-
51	-	-	-	-	-0.762	-	-	-	-
52	-	-	-	-	-0.575	-	-	-	-
16	-	-	-	-	-	-0.553	-	-	-
17	-	-	-	-	-	-0.476	-	-	-
18	-	-	-	-	-	-0.568	-	-	-
19	-	-	-	-	-	-0.679	-	-	-
36	-	-	-	-	-	-	-0.404	-	-
37	-	-	-	-	-	-	-0.522	-	-
38	-	-	-	-	-	-	0.678	-	-
39	-	-	-	-	-	-	-0.539	-	-
40	-	-	-	-	-	-	-0.520	-	-
28	-	-	-	-	-	-	-	0.518	-
29	-	-	-	-	-	-	-	0.782	-
60	-	-	-	-	-	-	-	-	0.396
62	-	-	-	-	-	-	-	-	0.645
63	-	-	-	-	-	-	-	-	0.438
64	-	-	-	-	-	-	-	-	0.778

**TABLE (6.1) cont.**  
**PUBLIC SECTOR - PERCEPTION RESPONSE**  
**VARIMAX ROTATED COMPONENT ANALYSIS FACTOR MATRIX**

Var	Fac 10	Fac 11	Fac 12	Fac 13	Fac 14	Fac 15	Fac 16	Fac 17	Fac 18	Fac 19
48	-0.836	-	-	-	-	-	-	-	-	-
49	-0.651	-	-	-	-	-	-	-	-	-
53	-0.527	-	-	-	-	-	-	-	-	-
54	-	-0.732	-	-	-	-	-	-	-	-
55	-	-0.781	-	-	-	-	-	-	-	-
30	-	-	-0.849	-	-	-	-	-	-	-
24	-	-	-	0.640	-	-	-	-	-	-
26	-	-	-	0.522	-	-	-	-	-	-
27	-	-	-	0.646	-	-	-	-	-	-
7	-	-	-	-	-0.639	-	-	-	-	-
8	-	-	-	-	-0.544	-	-	-	-	-
9	-	-	-	-	-0.562	-	-	-	-	-
56	-	-	-	-	-	0.454	-	-	-	-
57	-	-	-	-	-	0.631	-	-	-	-
58	-	-	-	-	-	0.513	-	-	-	-
59	-	-	-	-	-	0.485	-	-	-	-
13	-	-	-	-	-	-	0.619	-	-	-
14	-	-	-	-	-	-	0.796	-	-	-
15	-	-	-	-	-	-	-	0.831	-	-
61	-	-	-	-	-	-	-	-	-0.420	-
65	-	-	-	-	-	-	-	-	-0.765	-
66	-	-	-	-	-	-	-	-	-	-0.747
67	-	-	-	-	-	-	-	-	-	-0.544

**TABLE (6.2)**  
**PRIVATE SECTOR - PERCEPTION RESPONSE**  
**VARIMAX ROTATED COMPONENT ANALYSIS FACTOR MATRIX**

Var	Fac 1	Fac 2	Fac 3	Fac 4	Fac 5	Fac 6	Fac 7	Fac 8	Fac 9
1	0.387	-	-	-	-	-	-	-	-
2	0.516	-	-	-	-	-	-	-	-
3	0.629	-	-	-	-	-	-	-	-
4	0.542	-	-	-	-	-	-	-	-
5	0.559	-	-	-	-	-	-	-	-
6	0.499	-	-	-	-	-	-	-	-
10	0.724	-	-	-	-	-	-	-	-
11	0.525	-	-	-	-	-	-	-	-
12	0.541	-	-	-	-	-	-	-	-
31	0.651	-	-	-	-	-	-	-	-
32	0.531	-	-	-	-	-	-	-	-
33	0.547	-	-	-	-	-	-	-	-
34	0.500	-	-	-	-	-	-	-	-
35	0.324	-	-	-	-	-	-	-	-
41	-	-0.472	-	-	-	-	-	-	-
42	-	-0.468	-	-	-	-	-	-	-
43	-	-0.704	-	-	-	-	-	-	-
44	-	-0.853	-	-	-	-	-	-	-
45	-	-0.616	-	-	-	-	-	-	-
46	-	-0.648	-	-	-	-	-	-	-
47	-	-0.792	-	-	-	-	-	-	-
56	-	-	0.753	-	-	-	-	-	-
57	-	-	0.797	-	-	-	-	-	-
58	-	-	0.570	-	-	-	-	-	-
59	-	-	0.588	-	-	-	-	-	-
16	-	-	-	-0.719	-	-	-	-	-
17	-	-	-	-0.615	-	-	-	-	-
18	-	-	-	-0.530	-	-	-	-	-
19	-	-	-	-0.680	-	-	-	-	-
20	-	-	-	-	0.760	-	-	-	-
21	-	-	-	-	0.738	-	-	-	-
22	-	-	-	-	0.738	-	-	-	-
23	-	-	-	-	0.526	-	-	-	-
25	-	-	-	-	0.767	-	-	-	-
48	-	-	-	-	-	-0.829	-	-	-
49	-	-	-	-	-	-0.703	-	-	-
53	-	-	-	-	-	-0.609	-	-	-
7	-	-	-	-	-	-	-0.419	-	-
8	-	-	-	-	-	-	-0.774	-	-
9	-	-	-	-	-	-	-0.758	-	-
37	-	-	-	-	-	-	-	-0.535	-
38	-	-	-	-	-	-	-	-0.756	-
39	-	-	-	-	-	-	-	-0.540	-
40	-	-	-	-	-	-	-	-0.561	-
24	-	-	-	-	-	-	-	-	-0.632
26	-	-	-	-	-	-	-	-	-0.498
27	-	-	-	-	-	-	-	-	-0.715

**TABLE (6.2) cont.**  
**PRIVATE SECTOR - PERCEPTION RESPONSE**  
**VARIMAX ROTATED COMPONENT ANALYSIS FACTOR MATRIX**

Var	Fac 10	Fac 11	Fac 12	Fac 13	Fac 14	Fac 15	Fac 16	Fac 17	Fac 18	Fac 19
50	-0.751	-	-	-	-	-	-	-	-	-
51	-0.724	-	-	-	-	-	-	-	-	-
52	-0.397	-	-	-	-	-	-	-	-	-
60	-	-0.563	-	-	-	-	-	-	-	-
62	-	-0.362	-	-	-	-	-	-	-	-
63	-	-0.421	-	-	-	-	-	-	-	-
64	-	-0.629	-	-	-	-	-	-	-	-
66	-	-	0.687	-	-	-	-	-	-	-
67	-	-	0.606	-	-	-	-	-	-	-
28	-	-	-	-0.840	-	-	-	-	-	-
29	-	-	-	-0.463	-	-	-	-	-	-
61	-	-	-	-	-0.545	-	-	-	-	-
65	-	-	-	-	-0.812	-	-	-	-	-
54	-	-	-	-	-	-0.483	-	-	-	-
55	-	-	-	-	-	-0.787	-	-	-	-
15	-	-	-	-	-	-	0.682	-	-	-
13	-	-	-	-	-	-	-	-0.409	-	-
14	-	-	-	-	-	-	-	-0.835	-	-
36	-	-	-	-	-	-	-	-	-0.725	-
30	-	-	-	-	-	-	-	-	-	-0.843



**TABLE (6.3)**  
**PERCEPTION QUESTIONNAIRE**  
**COMBINED FACTOR STRUCTURE**

Item No.	Component	Element
1-6	Conceptual	Definition & Objectives of Internal Auditing
7-9	Conceptual	Scope of Audit Work
10-12	Conceptual	Common Concepts
13-14	Operational	Planning the Audit (Selecting the Auditee)
15	Operational	Planning the Audit (Selecting the Auditor)
16-19	Operational	Planning the Audit (Setting the Time, Objective & Scope, Preliminary Survey, Audit Programme)
20-23 & 25	Operational	Field Work
24 & 26-27	Operational	Reporting Findings & Recommendations
28-29	Operational	Follow-up
30	Operational	Audit Measures
31-35	Organisational	Organisational Status
36	Organisational	Membership of the IIA
37-40	Organisational	Staffing, Training & Development
41-47	Organisational	Establishing Plans, Rules & Policies
48-49 & 53	Organisational	Relationship with Auditees
50-52	Organisational	Relationship with Auditees (and the audit report)
54-55	Organisational	Audit Committee
56-59	Organisational	Quality Assurance
60 & 62-64	External	Relationship with External Auditors (General)
61 & 65	External	Relationship with External Auditors (Co-operation)
66-67	External	Environmental Responsibilities

## **6.2 Practice Response**

The factor analysis carried out on the response to the practice questionnaire is shown in tables (6.4) and (6.5). The analysis included 71 variables which represent the 71 statements included in the questionnaire, and the number of cases was 264 that were divided again into public and private sectors including 168 and 96 cases respectively.

The tables show that the number of factors is 19 which accounted for 79% and 80% of the solution variance in the public and private sectors respectively, and all factors that accounted for at least one variable were extracted. The loading shown are only those greater than of 0.30 because that is the level widely accepted to be significant. The factors shown in the tables are the sorted rotated factors using the VMAX rotation method.

In both tables items 1-3 have come together to form a single independent factor as expected, this factor is concerned with “Definition & Objective of Internal Audit”. While items 5-6, that examine the “Scope of Audit Work”, were expected to form a single factor. However, they only did so in the public sector while in the private sector items 4-5 were under the same independent factor and item 6 formed a factor on its own. This could be down to the fact that item 5 examines the effectiveness aspect of the scope of internal audit which could form an independent facet of internal auditing. Meanwhile, statements 7-8, which were meant to examine the process of “Selecting the auditee”, have come under the same factor in both sectors. However, in the

private sector they formed an independent factor while in the public sector the two statements came under the same factor that also included statements 24-25 which are concerned with “Follow-up”. This could only be due to the pattern of scoring since there is no apparent underlying theoretical relationship between the two aspects examined.

On the other hand, statements 9-10, which examine the process of “Selecting the Auditor”, were expected to form a single independent and did so in both tables. However, statements 11-14 that examine other aspects of planning the audit and were expected to form four different independent factors, have formed in a different way. In the public sector the four statements have formed a single independent factor, and in the private sector also the statements came under the same factor but in this case they formed together with some of the statements that examine “Field Work”. This could be justified since the process of planning the audit and carrying out the field work are very closely linked. Nonetheless, in the private sector two of the statements that examine the “Field Work”, i.e. statements 17-18, have formed together with statements 22-25 concerned with “Reporting Findings & Recommendations” and “Follow-up”. The reason for this is that statements 17-18 deal with the part of the field work that is concerned with the audit report. It should also be noted that when the questionnaire was first constructed it was thought that the reporting and the follow-up statements would form in two independent factors. In the public sector statements 15-21 have factored in a similar way since all statements except 17&18 have come under the same factor, while

statement 17-18 factored together with statements 22-23. However, statements 24-25 have not come under this factor instead formed under another factor.

Furthermore, statements 26-28, which relate to “Audit Measures”, did not factor as expected because in the public sector they all came under one factor, though they shared that factor with the statements testing the field work. In the private sector the same statements have gathered in two independent factors, one including statements 26&27 and the other include statement 28. The reason for this, as in the case with the scope of audit work, is that statement 28 is dealing with the effectiveness aspect and this confirms that in the private sector effectiveness is treated as a separate issue from economy and efficiency. Contrary to this, the statements examining the “Organisational Status”, i.e. statements 29-34, have all come under the same factor. Though in the public sector these statements have formed a single independent factor as expected, in the private sector all the statements again came under the same factor. However, in this case they shared the factor with other statements examining “Establishing plans, rules and policies” which could be justified as the relation of these two elements of the conceptual framework is a close one. Meanwhile, statements 35-38 were expected to form a single independent factor examining “Staffing” but table (6.4) shows that in the public sector these statements all come under the same factor but they group with statements 39&43, two of the statements dealing with “Training & Development” and particularly with the aspects regarding the organisational support of the

training concept and the rotation of audit assignments. However, table (6.5) shows that in the private sector the four statements have formed together into two different factors instead of one factor. The first factor included statements 35&38 which are the two statements regarding job description and performance appraisal, and the other factor included statements 36&37 that are concerned with recruiting auditors.

Moreover, in the private sector all the statements examining “Training & Development” have gathered under a single independent factor as expected. Meanwhile, in the public sector as it was seen before statements 39&43 came under the same factor as the statements on staffing. And the other statements, i.e. statements 40-42, have formed an independent factor. On the other hand, in the public sector statements 44-52 which examine “Establishing plans, rules and policies”, have formed two independent factors, one included statements 44-45, 48&50-52 and the other factor included statements 46-47& 49. But in the private sector these statements came under one factor as planned when the questionnaire was designed but they shared this factor with the statements on organisational status. This could be justified since the link between the two element is a close one and they are both part of the same component of the conceptual framework.

Looking at the tables, it is apparent that statements that would be used to test the “Relationship with auditees” have factored in different ways in both sectors. In the private sector all the statements gathered under one

independent factor while in the public sector all statements except statement 54 came under the same factor with statement 54 forming an independent factor. This statement is concerned with discussing the objective of the audit with the auditee management. Nevertheless, the statements examining “Quality Assurance” have formed a single independent factor as expected, i.e. factors 12 and 5 in tables (6.4) and (6.5) respectively.

Furthermore, the statements that are supposed to examine the “Relationship with External Auditors” and were supposed to form a single factor, did not do so in either sector. In both sectors these seven statements have formed three different factors: the first included statements 62-64 & 66, the second included statements 65 & 68, and statements 67 formed a factor on its own.

Meanwhile, statements 69-71, which are designed to examine “Environmental Responsibilities”, have come under one independent factor as planned in both sectors.

Having examined the factor analysis results from both sectors, it is important to reach a unified structure for the statements included in the practice questionnaire. This structure would be based on the statistical results shown in tables (6.4) and (6.5). This structure is shown in table (6.6) and would be used in carrying out the main research analysis to examine the research hypotheses.

The changes made to the structure are:

- (1) Statements 4-6, that came under one factor in the public sector, have been divided into two factors, one including 4-5 and the other statement 6. This is done to fit with the way these statements factor in the private sector.
- (2) Statements 7-8 are shown as an independent factor as was the case in the private sector. In the public sector these statements were joined by statements 24-25 but a decision was made to break the four statements into two different factors.
- (3) Factor 2 in table (6.5) shows that statements 11-14, 15-16 & 19-21 form one factor, but in table (6.6) they are broken into two factors. Similarly, in the public sector factor 2, which included statements 15-16, 19-21 & 26-28, has been broken down into three different factors.
- (4) In table (6.4) factor 13 included statements 17-18 & 22-23, and in table (6.5) factor 3 included statements 17-18, 22-23 & 24-25. Thus, it was decided that the new structure would have three different factors for these statements respectively.
- (5) In the private sector statements 29-34 & 44-52 were gathered in the same factor, but a decision was made to break this factor into three

independent factors to allow for the structure in the public sector.

These factors are represented by factors 13, 18 and 19 in table (6.6).

- (6) Factor 5 in the table (6.4) included statements 35-39 & 43, but in the unified structure these six statements were divided into three different factors to comply with the structure in the private sectors. These are factors 14,15&16 in table (6.6).
- (7) Table (6.6) reveals that statement 54 is treated as an independent factor - this was done to comply with the factor structure in the public sector.

It is noted that the above listed changes only represent changes made in order to combine the factor analysis in both sectors. Therefore, at all times only the break down of a particular factor in either sector was allowed in order to agree with the other sector.



**TABLE (6.4)**  
**PUBLIC SECTOR - PRACTICE RESPONSE**  
**VARIMAX ROTATED COMPONENT ANALYSIS FACTOR MATRIX**

Var	Fac 1	Fac 2	Fac 3	Fac 4	Fac 5	Fac 6	Fac 7	Fac 8	Fac 9
29	0.565	-	-	-	-	-	-	-	-
30	0.747	-	-	-	-	-	-	-	-
31	0.491	-	-	-	-	-	-	-	-
32	0.495	-	-	-	-	-	-	-	-
33	0.518	-	-	-	-	-	-	-	-
34	0.738	-	-	-	-	-	-	-	-
15	-	0.426	-	-	-	-	-	-	-
16	-	0.615	-	-	-	-	-	-	-
19	-	0.646	-	-	-	-	-	-	-
20	-	0.530	-	-	-	-	-	-	-
21	-	0.755	-	-	-	-	-	-	-
26	-	0.615	-	-	-	-	-	-	-
27	-	0.505	-	-	-	-	-	-	-
28	-	0.374	-	-	-	-	-	-	-
46	-	-	0.736	-	-	-	-	-	-
47	-	-	0.787	-	-	-	-	-	-
49	-	-	0.505	-	-	-	-	-	-
69	-	-	-	-0.679	-	-	-	-	-
70	-	-	-	-0.875	-	-	-	-	-
71	-	-	-	-0.679	-	-	-	-	-
35	-	-	-	-	-0.408	-	-	-	-
36	-	-	-	-	-0.538	-	-	-	-
37	-	-	-	-	-0.633	-	-	-	-
38	-	-	-	-	-0.749	-	-	-	-
39	-	-	-	-	-0.534	-	-	-	-
43	-	-	-	-	-0.501	-	-	-	-
53	-	-	-	-	-	-0.665	-	-	-
55	-	-	-	-	-	-0.715	-	-	-
56	-	-	-	-	-	-0.398	-	-	-
57	-	-	-	-	-	-0.492	-	-	-
62	-	-	-	-	-	-	-0.386	-	-
63	-	-	-	-	-	-	-0.583	-	-
64	-	-	-	-	-	-	-0.720	-	-
66	-	-	-	-	-	-	-0.612	-	-
1	-	-	-	-	-	-	-	0.815	-
2	-	-	-	-	-	-	-	0.526	-
3	-	-	-	-	-	-	-	0.663	-
7	-	-	-	-	-	-	-	-	0.701
8	-	-	-	-	-	-	-	-	0.689
24	-	-	-	-	-	-	-	-	-0.558
25	-	-	-	-	-	-	-	-	-0.406

**TABLE (6.4) cont.**  
**PUBLIC SECTOR - PRACTICE RESPONSE**  
**VARIMAX ROTATED COMPONENT ANALYSIS FACTOR MATRIX**

Var	Fac 10	Fac 11	Fac 12	Fac 13	Fac 14	Fac 15	Fac 16	Fac 17	Fac 18	Fac 19
44	-0.470	-	-	-	-	-	-	-	-	-
45	-0.640	-	-	-	-	-	-	-	-	-
48	-0.450	-	-	-	-	-	-	-	-	-
50	-0.354	-	-	-	-	-	-	-	-	-
51	-0.329	-	-	-	-	-	-	-	-	-
52	-0.357	-	-	-	-	-	-	-	-	-
4	-	0.530	-	-	-	-	-	-	-	-
5	-	0.534	-	-	-	-	-	-	-	-
6	-	0.749	-	-	-	-	-	-	-	-
58	-	-	0.684	-	-	-	-	-	-	-
59	-	-	0.408	-	-	-	-	-	-	-
60	-	-	0.710	-	-	-	-	-	-	-
61	-	-	0.332	-	-	-	-	-	-	-
17	-	-	-	0.750	-	-	-	-	-	-
18	-	-	-	0.489	-	-	-	-	-	-
22	-	-	-	-0.340	-	-	-	-	-	-
23	-	-	-	-0.499	-	-	-	-	-	-
40	-	-	-	-	-0.757	-	-	-	-	-
41	-	-	-	-	-0.458	-	-	-	-	-
42	-	-	-	-	-0.453	-	-	-	-	-
11	-	-	-	-	-	0.762	-	-	-	-
12	-	-	-	-	-	0.448	-	-	-	-
13	-	-	-	-	-	0.400	-	-	-	-
14	-	-	-	-	-	0.425	-	-	-	-
67	-	-	-	-	-	-	-0.804	-	-	-
65	-	-	-	-	-	-	-	-0.696	-	-
68	-	-	-	-	-	-	-	-0.445	-	-
9	-	-	-	-	-	-	-	-	-0.807	-
10	-	-	-	-	-	-	-	-	-0.548	-
54	-	-	-	-	-	-	-	-	-	-0.758

**TABLE (6.5)**  
**PRIVATE SECTOR - PRACTICE RESPONSE**  
**VARIMAX ROTATED COMPONENT ANALYSIS FACTOR MATRIX**

Var	Fac 1	Fac 2	Fac 3	Fac 4	Fac 5	Fac 6	Fac 7	Fac 8	Fac 9
29	0.533	-	-	-	-	-	-	-	-
30	0.474	-	-	-	-	-	-	-	-
31	0.491	-	-	-	-	-	-	-	-
32	0.758	-	-	-	-	-	-	-	-
33	0.640	-	-	-	-	-	-	-	-
34	0.310	-	-	-	-	-	-	-	-
44	0.513	-	-	-	-	-	-	-	-
45	0.783	-	-	-	-	-	-	-	-
46	0.836	-	-	-	-	-	-	-	-
47	0.817	-	-	-	-	-	-	-	-
48	0.633	-	-	-	-	-	-	-	-
49	0.810	-	-	-	-	-	-	-	-
50	0.777	-	-	-	-	-	-	-	-
51	0.486	-	-	-	-	-	-	-	-
52	0.840	-	-	-	-	-	-	-	-
11	-	0.788	-	-	-	-	-	-	-
12	-	0.680	-	-	-	-	-	-	-
13	-	0.427	-	-	-	-	-	-	-
14	-	0.600	-	-	-	-	-	-	-
15	-	0.590	-	-	-	-	-	-	-
16	-	0.826	-	-	-	-	-	-	-
19	-	0.831	-	-	-	-	-	-	-
20	-	0.642	-	-	-	-	-	-	-
21	-	0.533	-	-	-	-	-	-	-
17	-	-	-0.673	-	-	-	-	-	-
18	-	-	-0.606	-	-	-	-	-	-
22	-	-	-0.675	-	-	-	-	-	-
23	-	-	-0.413	-	-	-	-	-	-
24	-	-	-0.373	-	-	-	-	-	-
25	-	-	-0.787	-	-	-	-	-	-
39	-	-	-	0.430	-	-	-	-	-
40	-	-	-	0.462	-	-	-	-	-
41	-	-	-	0.639	-	-	-	-	-
42	-	-	-	0.664	-	-	-	-	-
43	-	-	-	0.838	-	-	-	-	-
58	-	-	-	-	0.571	-	-	-	-
59	-	-	-	-	0.722	-	-	-	-
60	-	-	-	-	0.598	-	-	-	-
61	-	-	-	-	0.674	-	-	-	-
62	-	-	-	-	-	-0.710	-	-	-
63	-	-	-	-	-	-0.536	-	-	-
64	-	-	-	-	-	-0.476	-	-	-
66	-	-	-	-	-	-0.869	-	-	-
7	-	-	-	-	-	-	0.869	-	-
8	-	-	-	-	-	-	0.771	-	-
53	-	-	-	-	-	-	-	-0.779	-
54	-	-	-	-	-	-	-	-0.649	-
55	-	-	-	-	-	-	-	-0.444	-
56	-	-	-	-	-	-	-	-0.425	-
57	-	-	-	-	-	-	-	-0.403	-

**TABLE (6.5) cont.**  
**PRIVATE SECTOR - PRACTICE RESPONSE**  
**VARIMAX ROTATED COMPONENT ANALYSIS FACTOR MATRIX**

Var	Fac 9	Fac 10	Fac 11	Fac 12	Fac 13	Fac 14	Fac 15	Fac 16	Fac 17	Fac 18	Fac 19
69	-0.772	-	-	-	-	-	-	-	-	-	-
70	-0.879	-	-	-	-	-	-	-	-	-	-
71	-0.856	-	-	-	-	-	-	-	-	-	-
1	-	-0.627	-	-	-	-	-	-	-	-	-
2	-	-0.682	-	-	-	-	-	-	-	-	-
3	-	-0.566	-	-	-	-	-	-	-	-	-
36	-	-	-0.491	-	-	-	-	-	-	-	-
37	-	-	-0.834	-	-	-	-	-	-	-	-
35	-	-	-	-0.758	-	-	-	-	-	-	-
38	-	-	-	-0.443	-	-	-	-	-	-	-
4	-	-	-	-	0.763	-	-	-	-	-	-
5	-	-	-	-	0.535	-	-	-	-	-	-
26	-	-	-	-	-	0.687	-	-	-	-	-
27	-	-	-	-	-	0.542	-	-	-	-	-
28	-	-	-	-	-	-	0.744	-	-	-	-
65	-	-	-	-	-	-	-	-0.831	-	-	-
68	-	-	-	-	-	-	-	-0.417	-	-	-
67	-	-	-	-	-	-	-	-	0.668	-	-
6	-	-	-	-	-	-	-	-	-	0.797	-
9	-	-	-	-	-	-	-	-	-	-	0.608
10	-	-	-	-	-	-	-	-	-	-	0.470

**TABLE (6.6)**  
**PRACTICE QUESTIONNAIRE**  
**COMBINED FACTOR STRUCTURE**

Item No.	Component	Element
1-3	Conceptual	Definition & Objectives of Internal Auditing
4-5	Conceptual	Scope of Audit Work
6	Conceptual	Effectiveness Testing
7-8	Operational	Planning the Audit (Selecting the Auditee)
9-10	Operational	Planning the Audit (Selecting the Auditor)
11-14	Operational	Planning the Audit (Setting the Time, Objective & Scope, Preliminary Survey, Audit Programme)
15-16 & 19-21	Operational	Field Work
17-18	Operational	Preparing Draft Report
22-23	Operational	Reporting Findings & Recommendations
24-25	Operational	Follow-up
26-27	Operational	Economy & Efficiency Measures
28	Operational	Effectiveness Measures
29-34	Organisational	Organisational Status
35 & 38	Organisational	Staffing (General Policies)
36-37	Organisational	Staffing (Recruitment)
39 & 43	Organisational	Staffing (Development)
40-42	Organisational	Staffing (Training Programmes)
44-45 & 48 & 50-52	Organisational	Establishing Plans & Rules
46-47 & 49	Organisational	Establishing Audit Department Plans
53 & 55-57	Organisational	Relationship with Auditees
54	Organisational	Relationship with Auditees (Discussing Audit Objectives)
58-61	Organisational	Quality Assurance
62-64 & 66	External	Relationship with External Auditors (Co-operation)
65 & 68	External	Relationship with External Auditors (General)
67	External	Relationship with External Auditors (Benefiting from External Auditors)
69-71	External	Environmental Responsibilities

**TABLE (6.7)**  
**ALL SECTORS - PERCEPTION RESPONSE**  
**VARIMAX ROTATED COMPONENT ANALYSIS FACTOR MATRIX**

Var	Fac 1	Fac 2	Fac 3	Fac 4	Fac 5	Fac 6	Fac 7	Fac 8	Fac 9
41	0.638	-	-	-	-	-	-	-	-
42	0.659	-	-	-	-	-	-	-	-
43	0.745	-	-	-	-	-	-	-	-
44	0.781	-	-	-	-	-	-	-	-
45	0.685	-	-	-	-	-	-	-	-
46	0.675	-	-	-	-	-	-	-	-
47	0.526	-	-	-	-	-	-	-	-
1	-	-0.637	-	-	-	-	-	-	-
2	-	-0.483	-	-	-	-	-	-	-
3	-	-0.584	-	-	-	-	-	-	-
4	-	-0.763	-	-	-	-	-	-	-
5	-	-0.624	-	-	-	-	-	-	-
6	-	-0.373	-	-	-	-	-	-	-
10	-	-0.640	-	-	-	-	-	-	-
11	-	-0.484	-	-	-	-	-	-	-
12	-	-0.581	-	-	-	-	-	-	-
31	-	-	0.563	-	-	-	-	-	-
32	-	-	0.550	-	-	-	-	-	-
33	-	-	0.686	-	-	-	-	-	-
34	-	-	0.709	-	-	-	-	-	-
35	-	-	0.769	-	-	-	-	-	-
20	-	-	-	-0.683	-	-	-	-	-
21	-	-	-	-0.725	-	-	-	-	-
22	-	-	-	-0.548	-	-	-	-	-
23	-	-	-	-0.719	-	-	-	-	-
24	-	-	-	-0.312	-	-	-	-	-
25	-	-	-	-0.710	-	-	-	-	-
26	-	-	-	-0.444	-	-	-	-	-
27	-	-	-	-0.563	-	-	-	-	-
7	-	-	-	-	-0.452	-	-	-	-
8	-	-	-	-	-0.563	-	-	-	-
9	-	-	-	-	-0.746	-	-	-	-
48	-	-	-	-	-	0.822	-	-	-
49	-	-	-	-	-	0.703	-	-	-
53	-	-	-	-	-	0.641	-	-	-
50	-	-	-	-	-	-	0.468	-	-
51	-	-	-	-	-	-	0.750	-	-
52	-	-	-	-	-	-	0.442	-	-
60	-	-	-	-	-	-	-	0.529	-
62	-	-	-	-	-	-	-	0.709	-
63	-	-	-	-	-	-	-	0.565	-
64	-	-	-	-	-	-	-	0.769	-
56	-	-	-	-	-	-	-	-	0.682
57	-	-	-	-	-	-	-	-	0.719
58	-	-	-	-	-	-	-	-	0.454
59	-	-	-	-	-	-	-	-	0.657

**TABLE (6.7) cont.**  
**ALL SECTORS - PERCEPTION RESPONSE**  
**VARIMAX ROTATED COMPONENT ANALYSIS FACTOR MATRIX**

Var	Fac 10	Fac 11	Fac 12	Fac 13	Fac 14	Fac 15	Fac 16	Fac 17	Fac 18	Fac 19
13	0.499	-	-	-	-	-	-	-	-	-
14	0.806	-	-	-	-	-	-	-	-	-
16	-	0.497	-	-	-	-	-	-	-	-
17	-	0.502	-	-	-	-	-	-	-	-
18	-	0.575	-	-	-	-	-	-	-	-
19	-	0.739	-	-	-	-	-	-	-	-
15	-	-	0.432	-	-	-	-	-	-	-
37	-	-	-	-0.707	-	-	-	-	-	-
38	-	-	-	-0.483	-	-	-	-	-	-
39	-	-	-	-0.760	-	-	-	-	-	-
40	-	-	-	-0.710	-	-	-	-	-	-
28	-	-	-	-	0.621	-	-	-	-	-
29	-	-	-	-	0.715	-	-	-	-	-
30	-	-	-	-	-	-0.811	-	-	-	-
61	-	-	-	-	-	-	0.622	-	-	-
65	-	-	-	-	-	-	0.385	-	-	-
36	-	-	-	-	-	-	-	-0.491	-	-
54	-	-	-	-	-	-	-	-	-0.696	-
55	-	-	-	-	-	-	-	-	-0.813	-
66	-	-	-	-	-	-	-	-	-	0.335
67	-	-	-	-	-	-	-	-	-	0.817

**TABLE (6.8)**  
**ALL SECTORS - PRACTICE RESPONSE**  
**VARIMAX ROTATED COMPONENT ANALYSIS FACTOR MATRIX**

Var	Fac 1	Fac 2	Fac 3	Fac 4	Fac 5	Fac 6	Fac 7	Fac 8	Fac 9
29	0.538	-	-	-	-	-	-	-	-
30	0.352	-	-	-	-	-	-	-	-
31	0.373	-	-	-	-	-	-	-	-
32	0.706	-	-	-	-	-	-	-	-
33	0.616	-	-	-	-	-	-	-	-
34	0.436	-	-	-	-	-	-	-	-
44	0.384	-	-	-	-	-	-	-	-
45	0.706	-	-	-	-	-	-	-	-
46	0.733	-	-	-	-	-	-	-	-
47	0.534	-	-	-	-	-	-	-	-
48	0.418	-	-	-	-	-	-	-	-
49	0.653	-	-	-	-	-	-	-	-
50	0.706	-	-	-	-	-	-	-	-
51	0.447	-	-	-	-	-	-	-	-
52	0.691	-	-	-	-	-	-	-	-
62	-	0.616	-	-	-	-	-	-	-
63	-	0.813	-	-	-	-	-	-	-
64	-	0.738	-	-	-	-	-	-	-
66	-	0.591	-	-	-	-	-	-	-
4	-	-	-0.690	-	-	-	-	-	-
5	-	-	-0.719	-	-	-	-	-	-
6	-	-	-0.593	-	-	-	-	-	-
15	-	-	-	0.689	-	-	-	-	-
16	-	-	-	0.701	-	-	-	-	-
19	-	-	-	0.757	-	-	-	-	-
20	-	-	-	0.546	-	-	-	-	-
21	-	-	-	0.736	-	-	-	-	-
35	-	-	-	-	-0.360	-	-	-	-
36	-	-	-	-	-0.388	-	-	-	-
37	-	-	-	-	-0.492	-	-	-	-
38	-	-	-	-	-0.656	-	-	-	-
39	-	-	-	-	-0.652	-	-	-	-
43	-	-	-	-	-0.708	-	-	-	-
69	-	-	-	-	-	0.715	-	-	-
70	-	-	-	-	-	0.896	-	-	-
71	-	-	-	-	-	0.910	-	-	-
26	-	-	-	-	-	-	0.580	-	-
27	-	-	-	-	-	-	0.538	-	-
9	-	-	-	-	-	-	-	-0.588	-
10	-	-	-	-	-	-	-	-0.526	-
53	-	-	-	-	-	-	-	-	-0.775
54	-	-	-	-	-	-	-	-	-0.839
55	-	-	-	-	-	-	-	-	-0.641
56	-	-	-	-	-	-	-	-	-0.453
57	-	-	-	-	-	-	-	-	-0.403



**TABLE (6.8) cont.**  
**ALL SECTOR - PRACTICE RESPONSE**  
**VARIMAX ROTATED COMPONENT ANALYSIS FACTOR MATRIX**

Var	Fac 10	Fac 11	Fac 12	Fac 13	Fac 14	Fac 15	Fac 16	Fac 17	Fac 18	Fac 19
7	-0.758	-	-	-	-	-	-	-	-	-
8	-0.764	-	-	-	-	-	-	-	-	-
40	-	0.569	-	-	-	-	-	-	-	-
41	-	0.385	-	-	-	-	-	-	-	-
42	-	0.775	-	-	-	-	-	-	-	-
22	-	-	-0.490	-	-	-	-	-	-	-
23	-	-	-0.604	-	-	-	-	-	-	-
24	-	-	0.687	-	-	-	-	-	-	-
25	-	-	0.435	-	-	-	-	-	-	-
1	-	-	-	0.378	-	-	-	-	-	-
2	-	-	-	0.336	-	-	-	-	-	-
3	-	-	-	0.771	-	-	-	-	-	-
11	-	-	-	-	-0.371	-	-	-	-	-
12	-	-	-	-	-0.419	-	-	-	-	-
13	-	-	-	-	-0.378	-	-	-	-	-
14	-	-	-	-	-0.480	-	-	-	-	-
58	-	-	-	-	-	0.841	-	-	-	-
59	-	-	-	-	-	0.446	-	-	-	-
60	-	-	-	-	-	0.532	-	-	-	-
61	-	-	-	-	-	0.439	-	-	-	-
17	-	-	-	-	-	-	0.372	-	-	-
18	-	-	-	-	-	-	0.732	-	-	-
28	-	-	-	-	-	-	-	0.759	-	-
65	-	-	-	-	-	-	-	-	0.535	-
68	-	-	-	-	-	-	-	-	0.521	-
67	-	-	-	-	-	-	-	-	-	0.485

## **SUMMARY & CONCLUSION**

This chapter was devoted to analysing the correlation between items included in the two questionnaires especially designed for this research. The analysis was done using the multivariate statistical technique known as factor analysis, and more precisely principle component analysis.

First, the analysis was carried out on items included in the perception questionnaire, and it was found that the different variables examining different aspects of the perception of internal auditing factor together in 19 main factors. The number of factors was the same in both the public and private sectors. When the results of factor analysis are compared with the original structure, it is found that the two structures are similar to the results of factor analysis giving only nineteen factors compared with the 22 in the original design. Having studied the results of factor analysis in the two sectors, a new structure that combines the results of the analysis in both sectors was developed. This structure was made up of 21 factors to allow for the slight deviations between the two sets of results. Then the different items that factored together were examined carefully and a name was given to each factor. The name given to any of the factors reflected the underlying relationship between items grouped under this factor, and at the same time defining one aspect of the perception of the internal audit profession.

Similarly, the response to the practice questionnaire was subjected to factor analysis to examine the underlying relationships between items included in the questionnaire

which represented different aspects of the practice of internal audit. It was found from the statistical test results that the different variables represented by items in the questionnaire group together in 19 factor in each of the two sectors. Having studied the results, a decision was made to break up some of the factors to allow for the differences between the two sets of results, and thus a combined structure was reached. This structure was made up of 26 different factors, again each of these factors was given a name that describe the underlying relationship that correlate the items that group under this factor.

The results of this chapter gain importance in that they give an indication of how different aspects of both the perception and practice of internal auditing are related. Defining the underlying relationships between such aspects is bound to help in determining the cause of any problem that might arise, and also in knowing the effect of change in some aspects of the profession and how it might affect other aspects. It is of great importance to any profession that it is known how the different aspects of the profession correlate.

The two factors structures developed in this chapter are used in the next three chapters in testing the research hypotheses that examine both the perception and practice of internal auditing in one developing country, namely Egypt.