Earnings management in the Libyan corporations

Alhussien Ramadan Elseraiti

A thesis submitted to The University of Gloucestershire
in accordance with the requirements for the degree of
Doctor of Philosophy
in the Faculty of Business, Education & Professional Studies,
the Department of Accounting and Finance

PhD

May2011

DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of the University of Gloucestershire and is original except where indicated by specific reference in the text. No part of the thesis has been submitted as part of any other academic award. The thesis has not been presented to any other education institution in the United Kingdom or overseas.

Any views expressed in the thesis are those of the author and in no way represent those of the University.

Signed .... Date....29/02/2012...

ACKNOWLEDGEMENTS

I sincerely thanks Almighty Allah for his guidance and blessing on all aspects of life and providing me with the strength to carry out this research and to overcome obstacles during this long process.

Thanking all those individuals who have helped and supported me throughout this thesis, special thanks must go to Professor Robert Greenwood, my Principal Supervisor, for his help, guidance, and sound advice, which have made this project achievable.

Special thanks to the members of the CILC language centre and learning centre at the University of Gloucestershire for their assistance and help. I also thank the friendly and keen assistance of members at the Business School for their valuable input.

I would also like to extend my profound thanks to all those who have helped me in collecting the data needed for this study. Thanks go to those who gave of their valuable time to complete the questionnaire survey, followed by those who helped in the distribution and collection of the questionnaire, and those who helped me in the interview survey.

Further, I would like thank all my colleagues and friends in the UK for their kindness and friendship throughout my stay in the UK. Also, many thanks to all the other people whom I have not previously mentioned for their help, advice, and support during my PhD stage.

Last but certainly not least, my very special thanks go to my beloved family for their love, prayer, support, and encouragement throughout the years of my study.

ABSTRACT

International accounting scandals around the world have triggered a wave of interest and discussion on the transparency and integrity of financial statements. Prior literature has stated that due to a variety of motivations and by using different techniques, the management of corporations might intend to influence the figures in financial reporting. The preferred term used in the accounting literature to describe this issue is 'earnings management', which is a very interesting and topical issue for researchers. Therefore, this research investigates the earnings management phenomenon in the Libyan environment. In this research, secondary data, which was accruals-based models, and primary data analysis, which included a questionnaire survey combined with semi-structured interviews, were used to achieve the objectives of this research, that are: to determine the existence and the direction of earnings management in the Libyan context; the motivations and techniques behind that; and the earnings management constraints, which include internal accounting standards, corporate governance mechanism and audit quality.

The analysis of secondary data examined the existence and the direction of earnings management in Libyan companies. Accruals-based models were applied on a sample of state-owned and private companies. The results indicated that the majority of the companies that engaged in earnings management by using income-increasing policies accruals were state-owned companies. However, the majority of the companies that engaged in earnings management by using income-decreasing policies accruals were private companies. The above results indicated that there are linkages between the direction of earnings management and the nature of company ownership in the Libyan environment. Further, as regards the relationship between the direction of earnings management and company size, the results of the state-owned companies group indicated that company size was positively and significantly associated with discretionary total accruals. On the other hand, the results of the private companies group indicated that company size was negatively and significantly linked to discretionary total accruals.

The primary data analysis was used to investigate three main issues: the motivations behind the practice of earnings management; the most frequently used techniques to practice earnings management; and the earnings management constraints, which include accounting standards, internal corporate governance mechanism and audit quality. These subjects were investigated by using a questionnaire survey administered to external auditors, financial managers and senior accountants, internal auditors, lenders, tax officers and accounting academics. Also, a series of semi-structured interviews was combined with the questionnaire survey, which was conducted with selected respondents to the survey. Results indicated that the main incentives for practising earnings management in Libyan state-owned companies were: to mitigate the threat of displacement (i.e. safeguard job position) and/or enhance management reputation, to report profits, to increase the value of management compensation, and to meet regulatory objectives. On the other hand, the main incentives for the private companies were to decrease the amount of taxes and to enhance the chance of obtaining bank loans.

Further, the results showed that manipulation of the value of inventory, improper assets revaluation, incorrect capitalising rather than expensing of expenditures, manipulation of accrual estimation, incorrect use of expenses on asset acquisition, and related-party transactions were the most frequently used techniques to practice earnings management in Libya. Finally, the results showed a consensus among respondents on the importance of accounting standard, internal corporate governance mechanisms, audit quality as policies to constraint earnings management in the Libya environment.

ABLE OF CONTENTS

DECLARATION ii
ACKNOWLEDGEMENTS iii
ABSTRACT iv
TABLE OF CONTENTS vi
LIST OF TABLES x
LIST OF FICURES xi
LIST OF ABBREVIATIONS USED xii

CHABTER ONE: INTERODUCTION
1.1 Introduction 1
1.2 Background Information 2
1.3 Research Motivations 4
1.4 Research Objectives 5
1.5 Research Questions 6
1.6 Research Methodology 6
1.7 Summary of Finding 7
1.8 Libyan Background 8
1.9 Structure of the Thesis 13

CHPATER TWO: THE LITERATURE REVIEW OF EARNINGS MANAGEMENT AND THE FACTORS THAT CONSTRICT EARNINGS MANAGEMENT
2.1 Overview of Earnings Management 16
2.1.1 Definition of Earnings Management 17
2.1.2 Perspectives of Earnings Management 18
2.1.3 The Accrual Process 19
2.1.4 Patterns of Earnings Management 23
2.1.4.1 Big Bath 23
2.1.4.2 Income Minimization 24
2.1.4.3 Income Maximization 25
2.1.4.4 Income Smoothing 25
2.1.5 Earnings Management Techniques 26
2.1.6 Earnings Management Motivations 33
2.1.6.1 Capital Market Motivations 33
2.1.6.2 External Contract Motivations 35
2.1.6.3 Regulatory Motivations 36
2.1.6.3.1 Tax Motivation 36
2.1.6.3.2 Political Motivation 36
2.1.6.4 Management Compensation Contract Motivation 37
2.1.6.5 Behavioural Motivations 38
2.1.6.5.1 Motivation during CEO Changes 38
2.1.6.5.2 Job Anxiety 39
2.1.6.6 Communicating Information Motivations 40
2.1.7 Factors Affecting Motivations Preferences 40
2.2 The factors that Affect In Earnings Management Practicing 42
2.2.1 Political Forces 43

2.2.2 Culture 43
2.2.3 Accounting Standards 44
2.2.4 Corporate Governance 45
2.2.4.1 The Impact of Ownership Structure on Corporate Governance 47
2.2.4.2 The Impact of an Effective Board of Directors on the Restraint of Earnings Management 50
2.2.4.2.1 Board Independence 51
2.2.4.2.2 Other Board Characteristics 53
2.2.4.3 Impact of an Effective Audit Committee on the Restraint of Earnings Management 54
2.2.4.3.1 Responsibilities of Audit Committee 55
2.2.4.3.2 Independence and Qualifications of Audit Committee 56
2.2.4.4 Impact of an Effective Internal Auditor on the Restraint of Earnings Management 57
2.2.5 External Audit Quality 61
2.2.5.1 Length of Tenure and Audit Quality 63
2.2.5.2 Non-Services and Audit Quality 66
2.2.5.3 Audit Firm Size and Audit Quality 68
2.2.5.4 Impact of Audit Fees and Competition on Audit Quality 69
2.2.5.5 Lawsuit and Audit Quality 70
2.2.5.6 Other Factors that affect Audit Quality 71
2.3 Summary 74

CHAPATER TREE: RESEARCH METHODOLOGY

3.1 Introduction 76
3.2 Research Objectives 77
3.3 Research Questions 77
3.4 Theoretical Approach 79
3.5 Research Mechanics 84
3.6 Data Collection and Analysis Methods 85
3.6.1 Secondary Data Analysis 85
3.6.1.1 Estimating Earnings Management Approaches 86
3.6.1.2 The Aggregate Accrual Approach Models 90
3.6.1.2.1 The Healy Model (1985) 91
3.6.1.2.2 The DeAngelo Model (1986) 91
3.6.1.2.3 The industry Model 93
3.6.1.2.4 The Jones Model 95
3.6.1.2.5 The Modified Jones Model 97
3.6.1.2.6 The Kang and Sivaramakrishnan Model (KS model) 100
3.6.1.2.7 The Margin Model 102
3.6.1.2.8 The Dechow and Dichev Model (measures of accruals quality) 104
3.6.2 Questionnaire Survey 108
3.6.2.1 Choosing the Research Tool 108
3.6.2.2 Source of Ideas for Questionnaire 110
3.6.2.3 Questionnaire Design 110
3.6.2.4 Pilot Study 115
3.6.2.5 Administration of the Questionnaire Survey 116
3.6.2.6 Statistical Methods Employed for Data Analysis 117
3.6.2.7 Reliability and Validity 119

3.6.2.7.1 Reliability 119
3.6.2.7.2 Validity 120
3.6.3 Semi-Structured Interview 121
3.6.3.1 Sample Selection and Transcription of Semi-Structured Interviews 123
3.7 Summary 124

CHAPTER FOUR: SECONDARY ANALYSIS OF DATA
4.1 Introduction 126
4.2 Earnings management proxies 126
4.3 Measuring discretionary accruals 135
4.3.1 Proxy of discretionary accruals 135
4.3.2 Correlation Analysis 136
4.4 Existence and direction of earnings management in the Libyan companies 137
4.4.1 Existence of earnings management 139
4.4.2 Direction of earnings management 142
4.4.1.1 The nature of companies' ownership 142
4.4.1.2 Company size 144
4.5 Summary and conclusions 145

CHAPTER FIVE: ANALYSIS OF QUESTIONNAIRE SURVEY AND SEMI-STRUCTURED INTERVIEW FINDINGS RELATED TO EARNINGS MANAGEMENT MOTIVATIONS AND TECHENQUES

5.1 Introduction 146
5.2 Descriptive Statistics of Respondents and Background Information 147
5.3 Earnings Management Motivations 149
5.4 Earnings Management Techniques 160
5.5 Summary and Conclusions 165

CHAPTER SIX: ANALYSIS OF QUESTIONNAIRE SURVEY AND SEMI-STRUCTURED INTERVIEW FINDINGS
6.1 Introduction 168
6.2 Earnings Management Constraints in the Libyan Environment 168
6.2.1 Accounting Standards 169
6.2.2 Internal Corporate Governance Mechanisms 171
6.2.2.1 Greater Reliance on Internal Corporate Governance Mechanisms 171
6.2.2.2 The Existence of an Effective Audit Committee 175
6.2.2.2.1 Audit Committee Functions 175
6.2.2.2.2 Attributes of Audit Committee Members 180
6.2.2.3 The Existence of an Effective Internal Audit Function 183
6.2.2.4 The Existence of a Competent and Independent Board of Directors 187
6.2.3 External Audit Quality 192
6.2.3.1 The Impact of External Auditors on Earnings Management 192
6.2.3.2 The Impact of Lengthy Tenure on External Audit Quality 196
6.2.3.3 The Impact of Non-Auditing Services on External Audit Quality 200
6.2.3.4 The Impact of other Components on External Audit Quality 203
6.3 Summary and Conclusions 210

CHAPTER SEVEN: SUMMARY CONCLUSION

7.1 Summary and Review of Findings 212
7.1.1 Overview of the Thesis 212
7.1.2 Review of Findings 213
7.1.2.1 Findings of Secondary Data Analysis 213
7.1.2.2 Findings of Questionnaire Survey and Semi-Structured Interview 214
7.2 Contributions of Study 217
7.3 Scope and Limitations of the Study 218
7.4 Future Research 220

REFERENCES 221

APPENDICES 249
1-Questionnaire Survey (English) 250
2-Interview Questions (English) 260
3-Mann-Whitney test results 261

LIST OF TABLES

Tables		Page
2.1	Potential Earnings Management Techniques and Activities	29
3.1	The relationship between research questions, objectives, and methods	79
3.2	Reliability analysis Cronbach's Alpa	121
4.1	Firm-specific coefficients of the first versions model during the period 2007-2009	131
4.2	Firm-specific coefficients of the second versions model during the period 2007-2009	132
4.3	Firm-specific coefficients of the third versions model during the period 2007-2009	133
4.4	Firm-specific coefficients of the fourth versions model during the period 2007-2009	134
4.5	Correlation Analysis	137
4.6	Descriptive statistics results for discretionary total accruals and discretionary current accruals for all the companies of the sample	140
4.7	Descriptive statistics results for discretionary total accruals and discretionary current accruals for income-increasing group	141
4.8	The relationship between the direction of earnings management and ownership nature	143
4.9	The result from regression model to investigate the relationship between The direction of earnings management and company size	144
5.1	Responses to the questionnaire	149
5.2	Respondents' experience	149
5.3	Respondents' educational qualification	150
5.4	Respondent's educational specialisation	150
5.5	Overall Analysis of Earnings management Motivations in state-owned companies	152-153
5.6	Overall Analysis of Earnings management Motivations in private companies	157-158
5.7	Overall Analysis of Earnings management techniques	163-164
6.1	Overall Analysis of Earnings management Constraints/Accounting Standards	170
6.2	Greater reliance on internal corporate governance mechanisms	173
6.3	Audit committee functions	178-179
6.4	Attributes Of Audit Committee Members	182
6.5	Functions of Internal Audit	185
6.6	The Existence of a Competent and Independent Board of Directors	190-191
6.7	The Impact of External Auditors on Earnings Management	195
6.8	The Impact of Lengthy Tenure on External Audit Quality	198
6.9	The Impact of Non-auditing Services on External Audit Quality	202
6.10	The Impact of other Components on External Audit Quality	204

LIST OF FIGURES

Figures		Page
1.1	Outline of the Thesis	15
2.1	The different types of accounts manipulation	24
2.2	Effects of Operating versus Accounting Choices	27
2.3	Management discretion over accounting choices	28
3.1	Contents of the methodology chapter	78
3.2	The interrelationship between the building blocks of research	80
3.3	The process of questionnaire construction	117

LIST OF ABBREVIATIONS USED

AAA	American Accounting Association
BRC	The Blue Ribbon Committee
CCR	The Cadbury Committee Report
CEO	Chief Executive Officer
DA	Discretionary Accruals
FASB	Financial Accounting Standards
GAAP	Generally Accepted Accounting Principles
IAASB	International Auditing and Assurance Standards Board
IAS	International Accounting Standards
IIARF	Institute of Internal Auditors Research Foundation
IPOs	Initial Public Offerings
NACD	National Association of Corporate Directors
NDA	Non-discretionary Accruals
NYSE	New York Stock Exchange
ROA	Income Before Extraordinary Items
SEC	Securities and Exchange commission
TA	Total Accruals

CHAPTER ONE
INTRODUCTION

1.1 Introduction

The purpose of financial reports is to provide information about the organisation's financial performance, and the financial position of the organisation, to internal and external users to enable them to evaluate the performance of the organisation and make reasonable decisions. The quality of financial reports is important to parties who are using the information included in them, because it affects their decisions. Financial reports of low quality provide information that leads to problems in the allocation of resources (Schipper & Vincent, 2003).

According to Schipper (1989, p. 92), earnings management is a "purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain, as opposed to say, merely facilitating the neutral operation of the process". Moreover, Healy and Whalen (1999, p. 368) define earnings management as "when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers".

According to Leuza et al. (2003), financial reports with extensive earnings management inaccurately reflect corporations' performance, and thus weaken users' ability to assess the corporation performance. Therefore, practicing earnings management may cause misrepresentation or may reduce the transparency of financial reports, which will affect the decisions of users of financial reports, who rely on their accuracy.

The rest of this chapter is organised as follows: Section 1.2 presents background information related to earnings management research. Section 1.3 discusses the motivations for carrying out this study. Section 1.4 presents the study objectives and questions. The methodology that was adopted in this study is described in Section 1.5, while Section 1.6 provides the structure of this research.

1.2 Background Information

In the literature review, attempts have been made to investigate the extent to which financial statements are manipulated through different techniques to reach different goals. Research into earnings management has been quite diverse, and has looked into different areas and used different approaches. According to Ronen and Yaari (2007), earnings management research can be classified into: theoretical researchand empirical research. Firstly, examples of theoretical research include the study of Lambert (1984), who examines real smoothing strategy whereby management uses its flexibility in making investment and production decisions to reduce the variability of the firm's value. Dye (1988) rationalises the external and internal demand for cosmetic earnings management. The external demand follows from the capital market's need to price the firm, and the internal demand follows from the principal-agent relationship between owners and management. Also, Ronen el at., (2003) examined the effect of earnings management on voluntary disclosure and the demand for additional information.

Secondly, empirical research and accounting literature have provided a number of approaches that have varying characteristics. McNichols (2000) provides three approaches that are typically employed to estimate the discretionary element, which are the aggregate accruals, specific accrual and distributional approaches. The aggregate accruals approach utilises the change in total accruals as a measure of discretionary accruals. The accruals-based approach is commonly utilised as signals for earnings management activity (Healy, 1985; Jones, 1991; Dechow et al., 1995). The aggregate accruals approach was used by Healy (1985), who studied managerial accounting decisions and assumed that managers managed earnings to increase their compensation. Healy (1985) examines earnings management by comparing the mean of total accruals across the sample corporations separated into three groups, conditional on the earnings management direction. DeAnglo (1986) specifies total accruals as the aggregate of discretionary and non-discretionary accruals. Dechow and Slona (1991) developed the industry model to detect earnings management. Jones (1991) studies earnings management in U.S corporations during import relief investigations by the U.S International Trade Commission (ITC). Moreover, Jones separates discretionary accruals from non-discretionary accruals; this approach has been used by several studies such as Dechow et al. (1995), Becker et al. (1998), Teoh et al. (1998a, b), Guidry et al. (1999), Bartov et al. (2001), Larcker and Richardson (2004), Peasnell et al. (2005), Kothari et al. (2005). Moreover, Dechow and Dichev (2002) present a model that facades on the quality of working capital accruals and earnings.

Instead of measuring earnings management by using aggregate accruals, the specific accruals approach focuses on a set of specific accrual or the influence of managers' discretion on specific accrual to test earnings management (McNichols, 2000; Marquardt & Wiedman, 2004). The previous studies of specific accrual in the literature can be classified into two categories: single accrual studies, such as McNichols and Wilson (1988) and Petroni (1992); and set of accruals studies, such as Beneish (1997) and Marquardt and Wiedman (2004).

The distributional approach tests expected frequencies of earnings, and assumes that management has motivations to meet certain earnings benchmarks, such as sustaining recent profit performance or reporting positive profits. According to Goncharov (2005), the distribution approach tests the existence of earnings management by using a distribution of scaled performance measures (i.e. earnings and changes in earnings). Moreover, it focuses on the statistical properties of earnings to determine behaviour that affects earnings, and it is based on the distribution of earnings after management (McNichols, 2000).

Recent years have shown an increaseed attention to earnings management phenomenon. A growing body of empirical studies has investigated earnings management in the developed countries generally and in the US especially. These studies investigate the existence of earnings management and why earnings management takes place, and how it is achieved. Examples of studies that investigate why earnings management takes place are: Healy (1985), Watts and Zimmerman (1986), Jones (1991), Gaver et al. (1995), Guidry et al. (1999), DuCharme et al. (2004) and Burgstahler (2006) , Noronha et al. (2008), Ball and Shivakumarb (2008), and Chen and Tsai (2010). Studies that investigate how earnings management is achieved are Dechow and Skinner (2000), Mulford and Comiskey (2002), Nelson et al. (2002), Schitlit (2002), Nelson et al. (2003), Ortega and Grant (2003), McKee (2005) and Ronen and Yaari (2007, and Ahmad-Zaluki et al. (2011).

1.3 Research Motivations

This study was greatly motivated to investigate the earnings management phenomenon because of the growing body of research that has been examining earnings management in developed countries. However, research is still lacking in developing countries generally and in Libya specifically, where more studies need to be done. Moreover, the results of studies on developed countries are not always applicable to developing countries. This is due to the fact that companies located in developing countries have received little attention in the literature and have a different environment to companies located in developed countries such as poor management performance, not many listed companies, weak corporate governance structure, unsophisticated users, weak accounting profession and family-controlled firms (Baralexis, 2004).

Consequently, the first motivation of this research is to understand the earnings management phenomenon in the Libyan environment, where, to the best of the researcher's knowledge, this study is the first of its kind in the Libyan context. The Libyan environment is different from developed countries because of several reasons, such as: firstly, the extensive presence of state-owned and family-owned companies, and a small number of listed companies because of the fact that Libyan capital market was established in 2007. Therefore, this study examines the earnings management in the unlisted companies of state-owned and private companies. Secondly, the different economic system, cultural and legal environment from that in developed countries. Thirdly, corporate governance is in an early stage in Libya.

The second motivation of this study arises from the accounting environment in Libya is still not developed and there are many steps that need to be taken over a period of time to facilitate its development. Such as, the Libyan Accounting Standards has not been issuaned yet. As a result, companies that are working in the Libyan environment are uncertain as to which accounting standards should be applied. This uncertainty has caused some defects that led to some misstatements occurring from fraud and/or errors.

The third motivation of this study occurs from the need for light to be shed on corporate governance and the important role of external auditors in overseeing the integrity of financial statements, to pay more attention to the importance of these factors, which may be useful to both regulators and professional bodies in their efforts to enhance the quality of financial statements.

The fourth motivation of this study arises from the fact that that Libyan economy has witnessed several changes from the beginning of 2004. This is due to the fact that the financial sanctions on Libya were lifted on September 2003, after more than 10 years, which results with Libya being back on the world stage. However, Libya still faces the challenge of modernising its government structures and expanding its infrastructure. This study is a comprehensive study of earnings management phenomenon in Libya because it investigates the existence of earnings management, why earnings management take place, how it is achieved, and how it can be constrained. Therefore, this study is important because it is useful to have better understanding of earnings management phenomenon, accounting standards, corporate governance and audit quality as mechanisms to restrict earnings management in Libya. Moreover, it is expected to help in economic development in Libya by indicating the steps which should be considered to enhance the quality of financial statements in order to help policy makers and regulatory bodies in Libya to identify problems and possible implications of monitoring mechanisms, and to devise appropriate policies and regulations to enhance corporate control. This will benefit the country in different ways, such as decreasing earnings management levels, which may increase the confidence in the economy as financial information may become more transparent and credible. As a result, it will attract more local and foreign investments which, in turn, will assist to develop Libyan's economic.

1.4 Research Objectives

Based on the motivations for this study detailed above, the objectives of this study are as follows:

1- To examine the existence and direction of earnings management in the Libyan context.
2- To identify the motivations behind the practice of earnings management in Libyan corporations.

3- To found out the techniques used to practice earnings management in Libyan corporations.
4- To determine the procedures that should be taken to constrain earnings management and improve the quality of financial reporting in Libyan corporations.

1.5 Research Questions

Taking into account the findings of the literature review, and in the line with the motivations and objectives presented above, the main research questions formulated to achieve the research objectives of this study are as follows:

1- To what extent is earnings management practiced in Libyan corporations?
2- What are the motives that encourage the practice of earnings management in Libyan corporations?
3- What are the most frequent techniques used to practice earnings management in Libyan corporations?
4- What are the procedures that should be taken to constrain earnings management and improve the quality of financial reporting in Libyan corporations?

1.6 Research Methodology

This study is conducted in two stages: firstly, analysis of secondary data to investigate whether Libyan companies are practising earnings management and to overview the direction of earnings management in Libyan companies. This study follows the common technique that is used to detect accruals manipulation as described in the earnings management literature by adoption of the aggregate accruals approach, which uses discretionary accruals as a proxy to measure earnings management in the Libyan companies. Total accruals (TA) divided into discretionary accruals (DA) and nondiscretionary accruals (NDA) components. Discretionary accruals are the difference between actual accruals and expected nondiscretionary accruals. Four different versions derived from The Modified Jones Model were used in this study. This model was applied because it is the most common technique used to detect earnings management, and the data required for using this model are available in the Libyan environment. The sample size was 87 companies over four years. The sample size was 87 financial statements of Libyan unlisted companies that are 45 state-owned and 42 private companies, which includes data over three years from 2007 to 2009. Applying this sample leads to a total number of observations of 261 company-years.

Secondly, to collect data concerning the practice of earnings management in Libyan companies, six groups were asked to participate in this research through two-stages: firstly, completing a questionnaire survey, 500 questionnaires were distributed and the overall response rate was 60.4%. Secondly, the questionnaire was combined with semi-structured interviews with 18 interviewees, all of them answered the questionnaire to supplement and amplify the data obtained from the questionnaire and to reduce the potential for errors. The six groups consisted of external auditors, financial managers, senior accountants, internal auditors, lenders, tax officers and accounting academics. The main reason for choosing these groups of respondents is that all these groups should have expertise and knowledge from their daily work about earnings management and accounting manipulation issues. Further information on the research methodology is provided in Chapter 3.

1.7 Summary of Findings

The analysis of secondary data examined the existence and the direction of earnings management in Libyan companies. Accruals-based models were applied on a sample of state-owned and private companies. The results indicated that the majority of the companies that engaged in earnings management by using income-increasing policies accruals were state-owned companies. However, the majority of the companies that engaged in earnings management by using income-decreasing policies accruals were private companies. The above results indicated that there are linkages between the direction of earnings management and the nature of company ownership in the Libyan environment. Further, as regards the relationship between the direction of earnings management and company size, the results of the state-owned companies group indicated that company size was positively and significantly associated with discretionary total accruals. On the other hand, the results of the private companies group indicated that company size was negatively and significantly linked to discretionary total accruals.

The primary data analysis was used to investigate three main issues: the motivations behind the practice of earnings management; the most frequently used techniques to practice earnings management; and the earnings management constraints, which include accounting standards, internal corporate governance mechanism and audit quality. These subjects were investigated by using a questionnaire survey administered to external auditors, financial managers and senior accountants, internal auditors, lenders, tax officers and accounting academics. Moreover, a series of semi-structured interviews was combined with the questionnaire survey, which was conducted with selected respondents to the survey. Results indicated that the main incentives for practising earnings management in Libyan state-owned companies were: to mitigate the threat of displacement (i.e. safeguard job position) and/or enhance management reputation, to report profits, to increase the value of management compensation, and to meet regulatory objectives. On the other hand, the main incentives for the private companies were to decrease the amount of taxes and to enhance the chance of obtaining bank loans.

Further, the results showed that manipulation of the value of inventory, improper assets revaluation, incorrect capitalising rather than expensing of expenditures, manipulation of accrual estimation, incorrect use of expenses on asset acquisition, and related-party transactions were the most frequently used techniques to practice earnings management in Libya. Finally, the results showed a consensus among respondents on the importance of accounting standard, internal corporate governance mechanisms, audit quality as policies to constraint earnings management in the Libya environment.

1.8 Libya Background

This section aims to provide a background to, and characteristics of Libya's economy. The aim of including this part is to draw a complete picture of the Libyan environment. Libya is a developing country, which is an Arabic state and Islam is the State religion. Therefore, the Islamic religion and the Arabic language are two elements that characterize Libyan culture.

1.8.1 Libyan Economic Growth Progress

Libya witnessed an intense shift in its economy in a comparatively short period. In this shift, Libyan economy accelerated its development and had become one of the developing countries (CIB, 2005). Libya was poor before and during the Libyan independence on 24 December, 1951. The economy was on its first steps and was constantly behind other countries. It was depended on primitive agriculture of field crops, raising livestock, or agricultural raw materials. Lack of subsidies and water shortages were the main factors in the inability to expand cultivable earth. Its industry involved trivial manufacturing and the processing of local products into flour, textiles, tobacco, footwear and clothing. This humble industry alongside foreign aid is what economy depended on and, yet, was hindered by the lack of local raw materials, the necessary experienced labour force or the capital investment. Abdussalam (1979) indicates that the remainder of the population lived on handicraft activities that were promoted by the Italian occupation in order to process domestic products

On top of all the above, there was a lack of expertise in the technical and management section as well as the organisational skills, not to mention the spread of illiteracy. All of these factors made Libya depend upon foreign and international agencies, such as the UN and US in order to compensate for the difference between the country's needs and its resources. It was predicted that Libya needed years of foreign and international financial support before it adjusted itself to be able to live within its own domestic insufficient resources (Edwik, 2007).

Economy in Libya is not like any other economy of its peers in the North African region such as Algeria, Tunisia, Egypt, Morocco and others. The latter countries have established industrial bases and a considerable agricultural industry unlike the former. However when it comes to natural energy resources, chiefly the light low-sulphur unfinished oil and natural gas, Libya has a vast reserve in that area. After discovering and producing petrol and natural gas, Libya started moving forward and turned from one of the poorest countries in the world to one that is similar in its physical and human infrastructure to its neighbours (Bribsh, 2006).

The oil discovery marked the first phase of a three-stage growth process of the Libyan economy, which has played a significant role in the great changes of development in the Libyan economy. The second phase started 1, September, 1969. In this phase, Libya changed from a Western-oriented capitalist state into an anti-Western socialist country. The government's intervention in the country's economy grew in this phase, an economy that was supported financially by the ever-growing petrol revenues in the 1970s. The government's returns decreased radically during the first two phases which resulted in severe deterioration in the economic activity (Bribsh, 2006). The third phase witnessed a long and overdue economic transformation which started in the mid-1990s after the central economic development and business and property control attempts to improve economy had been unsuccessful. According to Bribsh (2006) Libya has one of the less expanded economies not only amongst the Maghreb Arab countries but also amongst its oil-producing peers despite its significant natural energy resources and its economy relies heavily on the returns from those natural resources. Recently, as Mashat (2005) points out, non-oil activities have witnessed a growth that exceeded the manufacture-process of agricultural goods, as previously revenues from this sector were growing sluggishly, and worked its way into the fields of petro-chemical production, steel, iron, and aluminium. There are other major opportunities in the fields of civil aviation, telecommunications, water, waste management, fishing, and architecture, as part of the longer term aim of building up a stronger productive base when oil revenues become less.

Libya, further, enjoys a strategic location in that it is situated in vicinity to global markets, not to mention the extensive hydrocarbon reserve. The ever-rising price of oil has positively influenced the economic growth as well as the country's current account. In order to reform and develop the economy, Libya set new measures and procedures and to achieve this goal. It started to reduce legislation to regulate information systems together with reporting accounting information to enable assembling national accounting, measuring the economy's growth, development design and routine assessment (Bribsh, 2006). The basic aim for Libya, and any other country for that matter, is to maintain either a stable or an increasing rate of economic development. The regulatory agenda of financial reporting should provide an outline of the necessary information to meet international standards in order to achieve this goal despite several other factors that affect fulfilling this aim.

1.8.2 The Development of Accounting Practices and Auditing

There are two types of ownership in the corporate ownership structures. The first is dispersed ownership structure. The second type is the concentrated ownership structure (CIPE, 2002). In the former, a larger number of owners hold a small number of shares from a given corporation. In the latter, it is quite the opposite, i.e. a small number of owners whether it were families, banks, companies or even individuals hold the largest percentage of shares of a corporation. Zheka (2005) adds another category, i.e. the state ownership. In Libya, it is the unlisted corporates, whether government or family-owned, and a few listed companies determine the ownership structure. This is due to the fact that the capital market was only recently founded in 2007 and the majority, if not all, are either banks or financial firms.

The first recognised body to govern accountancy in Libya dates back to 1952 after Libya gained its independence from the Italian occupation. The corporation was named the State Accounting Bureau (henceforth SAB). In 1955, SAB was established by law No.31 and the Ministry of Treasury was responsible for it. Later, it became under the direct responsibility of the entire Ministries Council of Libya under the Audit Bureau of Law in 1966. The law was revised to ensure the dependence of the SAB.

In 1988, a new body called the Institution for People's Control and Follow-Up in, 1996 renamed as the Institution of People's Control and Follow-Up (IPCFU). The main objectives of this body were to provide the auditing and administration services and control to all state agencies, organisations, and departments that are financially supported or receive loans from either the government or a company that the government holds 25 per cent or more of the shares. In addition, there is large number of auditing service offices that provide auditing service and non-auditing service.

Four important sources influence accounting practice in Libya; government laws and regulations in accordance with the business in Libya; accounting technology and knowledge from countries such as the UK and US, and experience of qualified personnel and companies; religion; accounting education and the publications and participation of practitioners and academics in the field. Mashat (2005) asserts that banks and other financial establishments have also had an impact on accounting practice. According to their credit and loan policy, they require financial data about the business institutions that seek funds from them. It is the applicants' role to provide authentic and satisfactory information to encourage banks and financial establishments about their financial backgrounds and status.

According to Article 3 of the Accounting Profession Law No.116 that was issued in 1973 (previously known as the Accounting and Auditing Profession Law which is managed by the Libyan Union of Accountants and Auditors), the Libyan Union of Accountants and Auditors was founded to improve the professional and educational effectiveness of accountants and auditors and to organise and contribute to national and international seminars and conferences to stay up-to-date with international advances in the practice. The Libyan Charter Accountants and Auditors Union is criticised, because it has done little work for issuing or adopting accounting standards in Libya. As a result, the accounting standards and principles applied by Libyan companies differed from company to company, which depend on attributed the differences to differences in the accountants' professional and educational backgrounds. Therefore, the accounting environment in Libya is still not developed and there are many steps and studies that need to be taken over a period of time to facilitate its development.

In the case of Libya, prior to 2007, there were no national standard governance mechanisms amongst corporations. After the Libyan stock market was founded in 2007, Libyan corporate governance was formally announced. The government realized that there was a necessity to systematize and standardize corporate governance procedures in Libya due to the application of the 'Privatization' policy and foreign investments becoming part of the domestic economy. It has subsequently delegated this mission to the Libyan stock market which named these procedures 'rules of corporate governance'. Nevertheless, the standardization process is still immature and in order to develop these rules, further studies and stages are required to enable its progress of improvement.

Education and regional characteristics have a vital impact on accounting practice. Education is also considered a vital component in the socioeconomic and political development. Accounting education, in particular, in Libya functions in two stages;

commercial preparatory and secondary schools and the university. Students are granted the so-called 'Intermediate Diploma' on completion of their education at commercial schools just as their peers in UK colleges. Intermediate Diploma holders are capable to work either in the public and/or private sector as clerks or bookkeepers. Universities in Libya have had a chief impact on accounting practices in that they assisted in the development and construction of these practices alongside the publications and contributions of academics in the accounting field.

1.9 Structure of the Thesis

This thesis is organised into seven chapters and Figure 1.1 outlines the contents of the thesis in its entirety.

Chapter One presented the background for this study, the motivations for carrying out the study, the study's objectives and questions, outlines the methodology used, Libyan background, and the structure of the thesis.

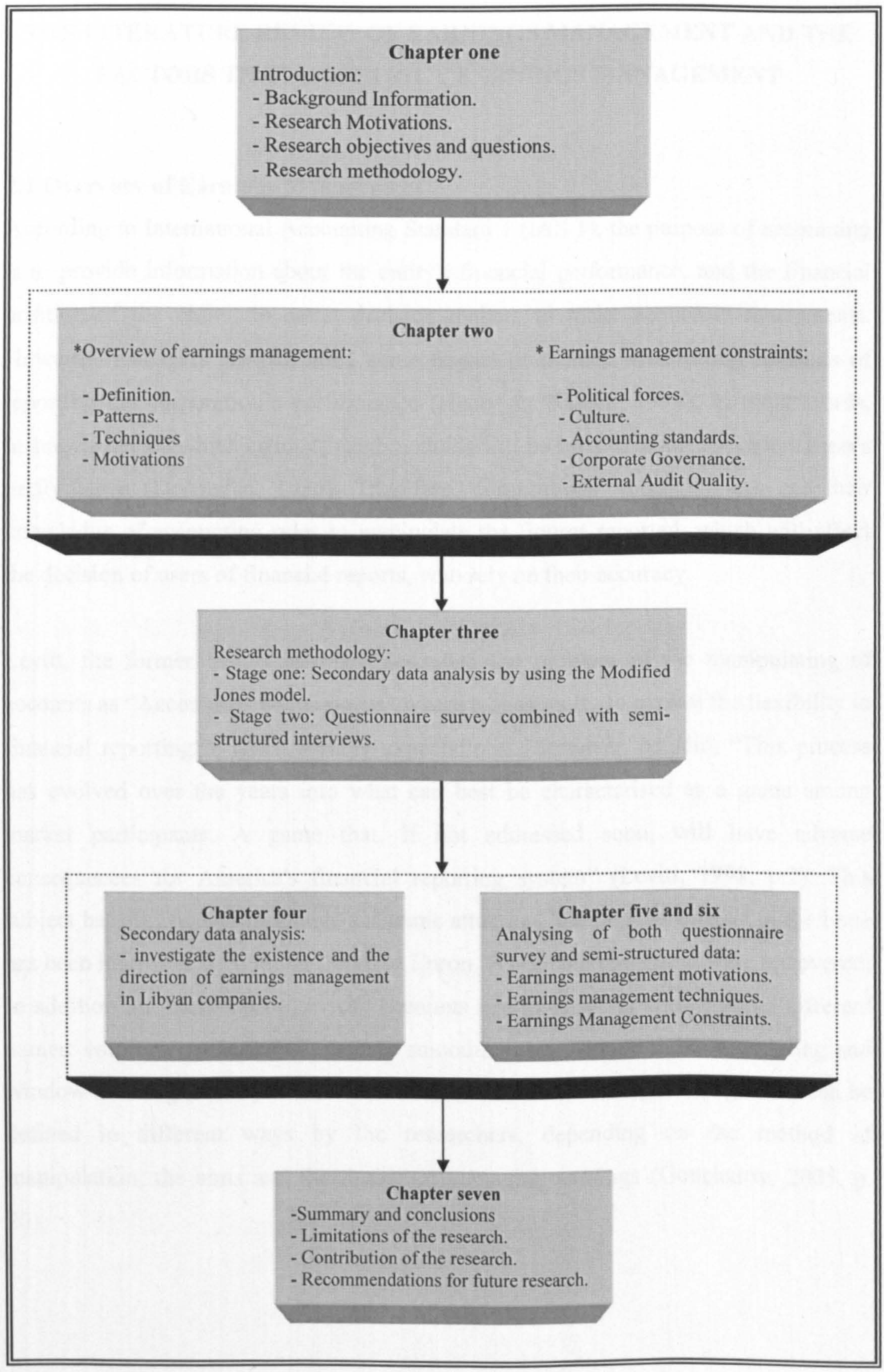
Chapter Two presents a review and discussion of the definition of earnings management, perspectives of earnings management discussed in the earnings management literature, the accrual process and patterns of earnings management. Chapter Two moreover critically discusses earnings management techniques, the motivations behind the practicing of earnings management and the factors affecting motivation preferences. In addition, this chapter provides a review and discussion of the literature relevant to earnings management constraints and the factors that affect earnings management in practice. These factors include political forces, culture, accounting standards, internal corporate governance mechanisms and the impact of ownership structure on corporate governance, and external audit quality.

Chapter Three presents details and justifications of the research methodology that was adopted in order to achieve the objectives of this research. This stage was adopted to collect data concerning the practice of earnings management in Libyan companies.

Chapter Four describes the adoption of an accruals-based approach to investigate the existence and the direction of earnings management in Libyan companies. Statistical techniques, such as descriptive statistics and multiple regressions, were used to analyse the secondary data to achieve the above aims. Four different versions of the Modified Jones Model were used as a proxy to measure earnings management in the Libyan companies.

Chapters Five and Six present the overall findings derived from both the questionnaire and semi-structured interviews. The analysis and discussion of the findings on the earnings management phenomenon in the Libyan environment are presented on a section-by-section basis as appeared in the rationale to the questionnaire.
Chapter Seven concludes with an overview of the study, summarises conclusions drawn from the study findings, and also points out the study's limitations and contributions. The chapter concludes by making some suggestions for future research.

Figure 1.1: Outline of the Thesis



CHAPTER TWO

THE LITERATURE REVIEW OF EARNINGS MANAGEMENT AND THE FACTORS THAT CONSTRICT EARNINGS MANAGEMENT

2.1 Overview of Earnings Management

According to International Accounting Standard 1 (IAS 1), the purpose of accounting is to provide information about the entity's financial performance, and the financial position of the entity, to assist decision makers to make economic assessments. However, managers are permitted some degree of latitude in selecting methods of reporting the corporation's performance (Healy & Wahlen, 1999). In other words, managers decide which estimates and methods will be used to report the corporation's performance (DeAngleo, 1986). Therefore, corporations' managers can use their knowledge of accounting rules to manipulate the figures reported, which will affect the decision of users of financial reports, who rely on their accuracy.

Levitt, the former SEC Chairman, described the problem of the manipulating of accounts as "Accounting hocus-pocus" where managers try to exploit the flexibility in financial reporting to reach earning expectations. Moreover, he said: "This process has evolved over the years into what can best be characterised as a game among market participants. A game that, if not addressed soon, will have adverse consequences for America's financial reporting system" (Levitt, 1998, p.2). This subject has attracted considerable academic attention, and popular interest in the issue has been high after accounting frauds at Enron, Worldcom and Quest were uncovered. In addition, in the literature review, accounts manipulation is known under different names: earnings management, income smoothing, big bath, creative accounting and window-dressing (Stlowy & Breton, 2004). In addition, earnings management can be defined in different ways by the researchers, depending on the method of manipulation, the aims and the timing of managing earnings (Goncharov, 2005, p. 20).

2.1.1 Definition of Earnings Management

A number of definitions have been used to describe earnings management but Schipper (1989) and Healy and Whalen (1999) have proposed definitions that are widely accepted by other researchers. However, both definitions are difficult to operationalise directly using attributes of reported accounting numbers, because they focus on managerial intent, which is behind managing the earnings and cannot be observed (Dechow & Skinner, 2000).

According to Schipper (1989, p. 92), earnings management is a "purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain, as opposed to say, merely facilitating the neutral operation of the process". According to Bissessur (2008, pp. 54-55), this definition shows that earnings management can exist in elements of the external disclosure process, and can take different forms. In addition, earnings management is approached from an informational perspective, which shows earnings as one of many signals that may be used to make certain decisions and judgments. According to Mintz and Morris (2008, p. 228), Schipper's definition emphasises an act by managers with a specific purpose of pursuing their own interests as could be the case when earnings are managed to get the stock price increased before the exercise date of stock.

Healy and Whalen (1999, p. 368) define earnings management as "when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers". This definition gives a negative value to earnings management as a tool to mislead and shows there are many ways to practice judgment (Bissessur, 2008).

According to Mintz and Morris (2008), Healy and Whalen's definition focuses on a manager's intent to mislead the shareholders by using accounting devices to affect earnings reports positively. However, the definition has two weaknesses: first, it does not clearly distinguish between earnings management and normal activities whose output is earnings; second, not all earnings management is misleading (Ronen &

Yaari, 2007). In addition, Healy and Whalen's definition moves away from the informational perspective (Bissessur, 2008).

As noted above, the earnings management literature has different definitions of earnings management that have been employed by researchers, which reflect the researcher's objective.

Ronen and Yaari (2007, p.27) present another definition for earnings management: "Earnings management is a collection of managerial decisions that result in not reporting the true short-term, value-maximising earnings as known to management. Earnings management can be

Beneficial: it signals long-term value;

Pernicious: it conceals short- or long-term value;

Neutral: it reveals the short-term true performance.

The managed earnings result from taking production/investment actions before earnings are realised, or making accounting choices that affect the earnings numbers and their interpretation after the true earnings are realised".

2.1.2 Perspectives of Earnings Management

According to Beneish (2001, p.5), earnings management has two perspectives: the opportunistic perspective, where managers set out to mislead investors about the company's economic performance and to achieve personal gain; and the informative perspective, which "....is a means for managers to reveal to investors their private expectations about the firm's future cash flows" and it is illustrated when managers seek to increase the information value. Moreover, Jiraporn et al. (2008) affirm the view that earnings management can be opportunistic or beneficial. Assessing whether earnings management is opportunistic or beneficial hinges on the nature of the way earnings are managed and the aim of the earnings management. Therefore, views about earnings management range from good to no effect or bad (Parfet, 2000, p. 485).

According to Parfet (2000, p. 485) bad earnings management "....is intervening to hide real operating performance by creating artificial accounting entries or stretching estimates beyond a point of reasonableness". Covering the operating trends of a company by the use of false and other hidden accounting offsets is bad earnings management. These kinds of offsets are illegal and they depict a bad picture of the company. This earning management led to inappropriate revenue recognition, creation of unknown reserves and overly conservative or overly aggressive accounting judgments. All these actions are inappropriate and unproductive as they generate no real value. As a result, they are likely to spoil the company's reputation as they are considered akin to fraud. However, good earnings management constitutes "reasonable and proper practices that are part of operating a well-managed business and delivering value to shareholders". "Good" earnings management, sometimes referred to as "operational" earnings management is a situation where managers take actions that are helpful in creating steady financial performance by the use of acceptable and voluntary business decisions and practices.

2.1.3 The Accrual Process

Generally Accepted Accounting Principles (GAAP) require managers to make judgments and estimates to raise the quality of earnings and to make financial reports more informative about the performance of the corporation by using accounting accrual shift, and/or by adjusting recognition of cash flows over time (Dechow, 1994).

On the other hand, accounting literature discusses whether accruals are actually used to improve the quality of financial reports and make them more informative, or in reality are used for earnings management, which can happen informatively, or are used for earnings management, which can happen from the discretion available to management reporting under GAAP and accrual accounting, a principle which consists of recording all economic transactions at the time they occur instead of the underlying cash basis of accounting which consists of recording all economic transactions when cash is received (Healy, 1985; Jones, 1991; Dechow et al., 1995 Healy & Whalen, 1999; Dechow & Skinner, 2000; Krishnan, 2003; Baralexis, 2004).

The crucial issue is how managers utilise accruals, in order to get earnings that are of high quality. Empirical evidence confirms that the accruals basis provides better results about economic performance to investors than cash flows (Dechow, 1994). However, the discretion can be used as a purposeful intervention in the external financial reporting process (Schipper, 1989).

There are several methods by which managers can practice judgment in their financial reports. For instance, judgment is demanded to estimate a number of future economic events, such as predicted life cycles and the depreciation of values of long-term assets and losses from bad debts and asset impairments. In addition, managers should choose acceptable accounting methods for reporting the same economic transactions, for example, choose methods of inventory valuation (such as LIFO, FIFO, weighted-average or accelerated depreciation methods). Moreover, managers should practice judgment in working capital management that influences cost allocations and net revenues (for example inventory levels, and the timing of inventory shipments or purchases). Managers should also decide how to set up firms' transactions. For instance, lease contracts can be designed which can be included or not included in the balance sheet, and equity investments can be structured to avoid or require consolidation (Healy & Wahlen, 1999).

Accounting judgment can be utilised by management to make financial reports more informative, which can arise if some accounting choices or estimates are recognised to be credible signals of a corporation's financial performance (Healy & Whalen, 1999). With this situation, management communicates its private information related to the corporation's performance by means of financial reporting (Beaver & Ryan, 2005; Guay, 2006).

On the other hand, management can also utilise its judgment in financial reporting and in setting transactions to change financial reports, either to mislead stakeholders related to the corporation's economic performance, or to influence contractual outcome that depends on reported accounting numbers (Healy & Whalen, 1999; Dechow & Skinner, 2000). With this situation, management uses its private information to distort signals related to the corporation's performance through financial reporting. In addition, earnings management can be practiced with or without violating or exploiting GAAP. In other words, there are two types of earnings management: legitimate and illegitimate (Healy & Wahlen, 1999; Baralexis, 2004).

According to The Financial Accounting Standards Board (FASB) (1978), the objective of financial reports is to communicate accounting information to outside users. Earnings or net income is the principal result in financial reports that reflects the corporation's performance, which is produced under the accrual basis of accounting. Accruals allow earnings to provide more meaningful information related to a corporation's economic performance, and they are better to predict the corporation's future performance than cash flows, but what is important is the extent to which managers can use accruals to improve the quality of financial reports and when this action becomes earnings management (Bissessur, 2008, p.9).

Accrual accounting has been used for reporting the corporation performance to avoid problems with measuring the performance when operations are continuous. In other words, accrual accounting matches appropriately and allocates revenues and expenses, gains and losses, within the period in which they are incurred or earned. Furthermore, accrual accounting becomes important since it has been used as a summary measure of corporation performance by a wide range of users, for example reflect cash flow forecasts and have a higher correlation with value than current cash flow (Dechow et al., 2004). According to The FASB, Accrual accounting is an:

"attempt to record the financial effects on an entity of transactions and other events and circumstances that have cash consequences for the entity in the periods in which those transactions, events, and circumstances occur rather than only in the periods in which cash is received or paid by the entity" [FASB, 1985, SFAC No. 6. 139].

In addition, "accrual accounting uses accrual, deferral, and allocation procedures whose goal is to relate revenues, expenses, gains, and losses to periods to reflect an entity's performance during a period instead of merely listing its cash receipts and outlays. Thus, recognition of revenues, expenses, gains, and losses and the related increments or decrements in assets and liabilities - including matching of cost and revenues, allocation, and amortisation is the essence of using accrual accounting to measure performance of entities" [FASB, 1985, SFAC No. 6. 145].

By utilising accruals to change the timing of cash flows recognised in earnings, GAAP was developed to reinforce performance measurement. Two important accounting principles which are derived from the production of earnings are the revenue recognition principle and the matching principle. Through having those principles, the accrual process is suggested to alleviate timing and matching problems related to cash flows, so that earnings reflect more closely a corporation's performance (Dechow, 1994).

Although accrual accounting presents information which is useful for financial reports users, it may decrease the credibility of accounting information because of the judgment and accounting choices used by managers to manipulate the accounting numbers. Accruals-based measures are widely accepted as indicators of earnings management activity (Healy, 1985; Jones, 1991; Dechow et al., 1995; Krishnan, 2003). Total accrual can be classified into two parts; the first is discretionary accruals, which reflect manipulated accounting for accrual items and are caused by conservative or aggressive accounting policy choices, and the second is non-discretionary accruals, which reflect non-manipulated accounting accrual items, and are the normal element of earnings, which result from the neutral application of accounting rules (Xie, 2001; Dechow and Dichev, 2002; Goncharov, 2005, p10; Aljifri, 2007).

The researchers on earnings management literature endeavour to differentiate between accruals resulting from normal accruals: "Non-discretionary accruals are accruals that arise from transactions made in the current period that are normal for the firm given its performance level and business strategy, industry conventions, macro-economic events, and other economic factors" and managed earnings: "Discretionary accruals are accruals that arise from transactions made or accounting treatments chosen in order to manage earnings" (Ronen & Yaari, 2007, p. 372).

The accounting literature focuses on discretionary accruals to examine earnings quality, and earnings management by using the accruals models (Peasnell et al., 2000; Goncharov, 2005, p.10). However, it is difficult to differentiate between discretionary accruals and non-discretionary accruals because the latter are linked with the level of corporation activity (Schipper, 1989; Dechow, 1994; Scott, 2003; Aljifri, 2007). As a result, researchers have used methods to estimate the discretionary accruals from total accruals (Aljifri, 2007) due to the fact that discretionary accruals are determined by managers, and it could be either harmful or beneficial to financial reports users depending on the managers' motivation.

2.1.4 Patterns of Earnings Management

According to Stlowy and Breton (2004, p.3), accounts manipulation is "the use of management's discretion to make accounting choices or to design transactions so as to affect the possibilities of wealth transfer between the company and society (political costs), fund providers (cost of capital) or managers (compensation plans)". Moreover, the authors presented a framework of accounts manipulation, which is represented in various types: earnings management, income smoothing, big bath accounting, creative accounting and window dressing.

Furthermore, Stlowy and Breton classify accounts manipulation in two ways: firstly, accounts manipulation is related to earnings per share (EPS), which can be manipulated in two ways, either by removing or by adding certain expenses or revenues, or by exhibiting items before or after utilising the net income to calculate the earnings per share. Secondly, accounts manipulation is related to the debt/equity ratio, which can be manipulated by artificially overstating net income or by concealing certain financing through off-balance sheet-financing items. Figure 2.1 shows the different types of accounts manipulation.

Furthermore, Scott (2003) classifies the patterns of earnings management into four categories which are interpreted in the following subsections.

2.1.4.1 Big bath

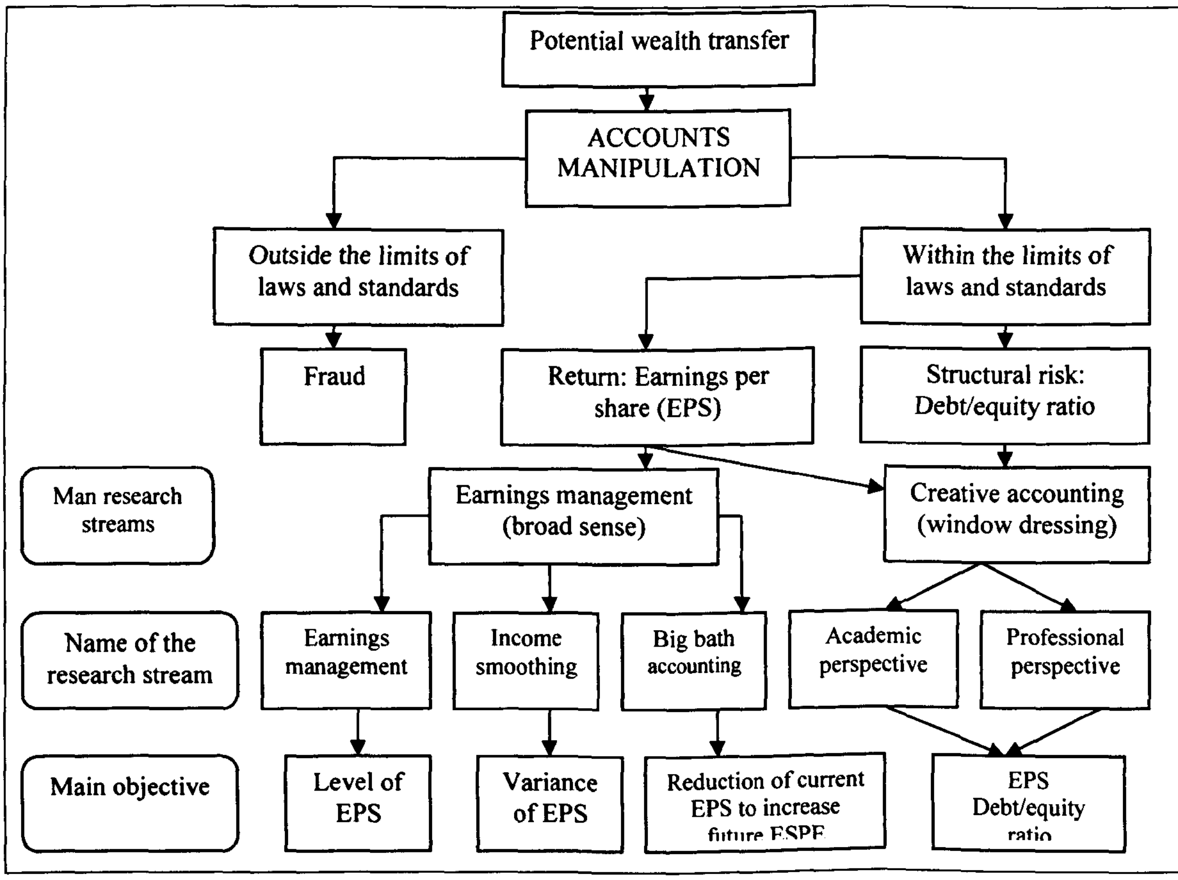
'Take a bath' can take place when a corporation is going through a bad period of earnings, and is unable to recover profitability. The management may decide to exaggerate losses in an effort to purify the financial report and create a buffer that can be used to improve the earnings in the following year.

Big bath accounting is manifested in income decreasing discretionary accruals and sizeable asset write-offs. In other words, managers decide to select accounting methods to report large losses in a period when they have a loss or low earnings in order to report high earnings in the period after (Jordan & Clark, 2004).

According to Healy (1985) and Scott (2003), managers use discretion within accounting choices to take a bath to increase the probability of future reported profits.

Healy (1985) points out that managers whose bonuses will decrease because of losses or low net income or annual earnings already reaching the bonus level may plan to take a bath; such action will not affect the bonus in the current year but will enhance the probability of future bonuses. McNichols and Wilson (1988) also found that when profit is too low, firms' managers will choose to record future expenses (take a big bath) to decrease their profit in the current year.

Figure (2.1) the different types of accounts manipulation (Stlowy and Breton, 2004)



2.1.4.2 Income Minimisation

According to Scott (2003), income minimisation is comparable to taking a bath but less extreme, and it may be chosen by managers during periods of high profitability. Mangers practice income minimisation by using policies which include rapid write-offs of capital assets and intangibles, recording advertising, research and development expenditures, oil and gas expenditure. Income taxation provides another set of motivations for this pattern, as does enhancement of arguments for relief from foreign competition. Holthausen et al. (1995) and Gaver et al. (1995) provide evidence that managers decrease current reported earnings to increase their future compensation.

2.1.4.3 Income Maximisation

Income maximisation happens when managers practice earnings management techniques to increase a corporation's earnings. According to Carslaw (1988) and Thomas (1989), managers practice discretion to raise earnings when the level of earnings or earnings per share is a little lower than the target number.

In addition, Healy (1985) mentions that managers may engage in a pattern of earnings maximisation to increase their compensation. Moreover, there is also evidence that managers try to keep positive earnings, in order to keep 'consistent profitability', usual in annual reports. In other words, managers try to avoid reporting losses and earnings decreases (Hayn, 1995; DeAngelo et al., 1996). Burgstahler and Dichev (1997) provide evidence that managers managed their earnings to avoid earning decreases and losses by using cash flow from operations and changes in working capital, and to avoid reporting earnings that are lower than analysts' consensus forecasts.

Degeorge et al. (1999) and Roychowdhury (2006) developed empirical methods to detect real activities manipulation in large samples, and point out that managers manipulate real activities to avoid reporting losses in the annual reports. In addition, they achieve that by offering price discounts to temporarily increase sales, overproduction to lower the cost of goods sold, and reduce discretionary expenditures to improve reported margins. Jacob and Jorgensen (2007) confirmed the findings of Burgstahler and Dichev (1997) that earnings management is used to avoid earnings decreases and losses. In addition, Teoh et al. (1998) and Yoon and Miller (2002) found that managers increase earnings before equity offers.

2.1.4.4 Income Smoothing

Income smoothing happens when managers increase low earnings or decrease high earnings to avoid the deviation of reporting from analysts' expected earnings by using accounting discretion. According to Copeland (1968), smoothing moderates year-to-year fluctuations in income by shifting earnings from peak years to less successful periods. Moreover, the objective of income smoothing is to decrease the variation in periodic earnings with the passage of time by using accounting discretion (Ronen and Sadan, 1981). In other words, when companies report stable earnings that makes the financial reports users feel more confident.

In addition, Tucker and Zarowin (2006) depict income smoothing as having dual roles in determining the quality of earnings, which can lead to garbling or efficient communication of private information. Managers can use the flexibility of accounting policies to adjust the financial reports to produce income smooth stream. According to Barnea et al. (1976, p.111), "the deliberate damping of fluctuations about some level of earnings is considered to be normal for the firm".

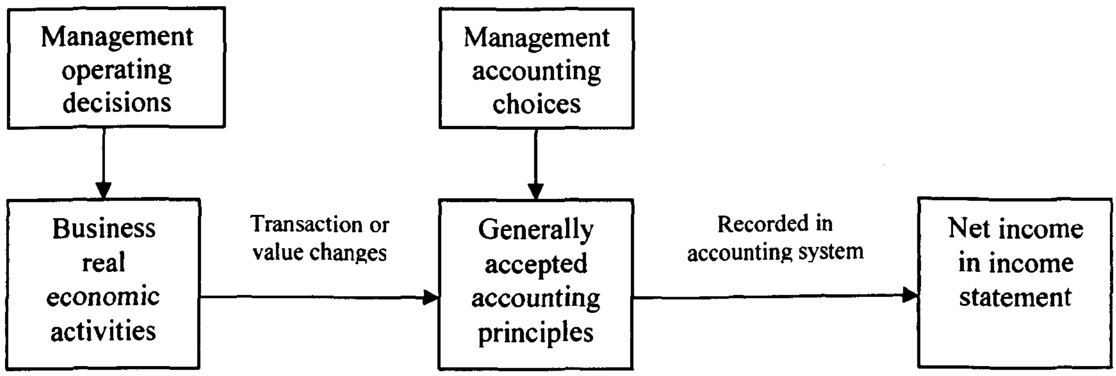
Many studies have proved that there is significant evidence of income smoothing and managers' motivations to smooth earnings (Ronen & Sadan, 1981; Hand, 1989; Tseng & Lai, 2007). According to Ronen and Yaari (2007, pp.317-318), Soothing is the dampening of fluctuation in the series of reported earnings. They point out types of smoothing: real and artificial smoothing. "Real smoothing involves making production and investment decisions that reduce the variability of earnings. Artificial or cosmetic smoothing is achieved through accounting choices". The difference between real smoothing and artificial smoothing is the former includes decisions that decrease the volatility of economic earnings, and the later includes both understatements (low earnings) and overstatements (high earnings).

2.1.5 Earnings Management Techniques

The methods that managers use to manage earnings have been detailed in the earnings management literature. Managers can manage earnings by two main techniques: accounting choices and operating decisions. According to McKee (2005, p.4), "earnings management is primarily achieved by management actions that make it easier to achieve desired earnings levels through accounting choices from among GAAP, and operating decisions".

McKee (2005, p.4) gives examples about using operating decisions to manage earnings, which would be whether or not to implement special discounts or incentive programmes to increase sales toward the end of the accounting period when revenue targets are not being met. Another example he pointed out is that operating decisions would be whether to invest in new equipment, which may reduce the number of employees, or hire additional workers. These types of decisions have to be made continuously to promote positive earning management. Earnings management through operating decisions is also called economic earnings management, because it tries to manage the cash inflow and outflow as well, thus the revenues and expenses associated with the day to day operations. Figure 2.2 shows the effects of operating versus accounting choices.

Figure (2.2) Effects of Operating versus Accounting Choices (McKee, 2005, p. 5)

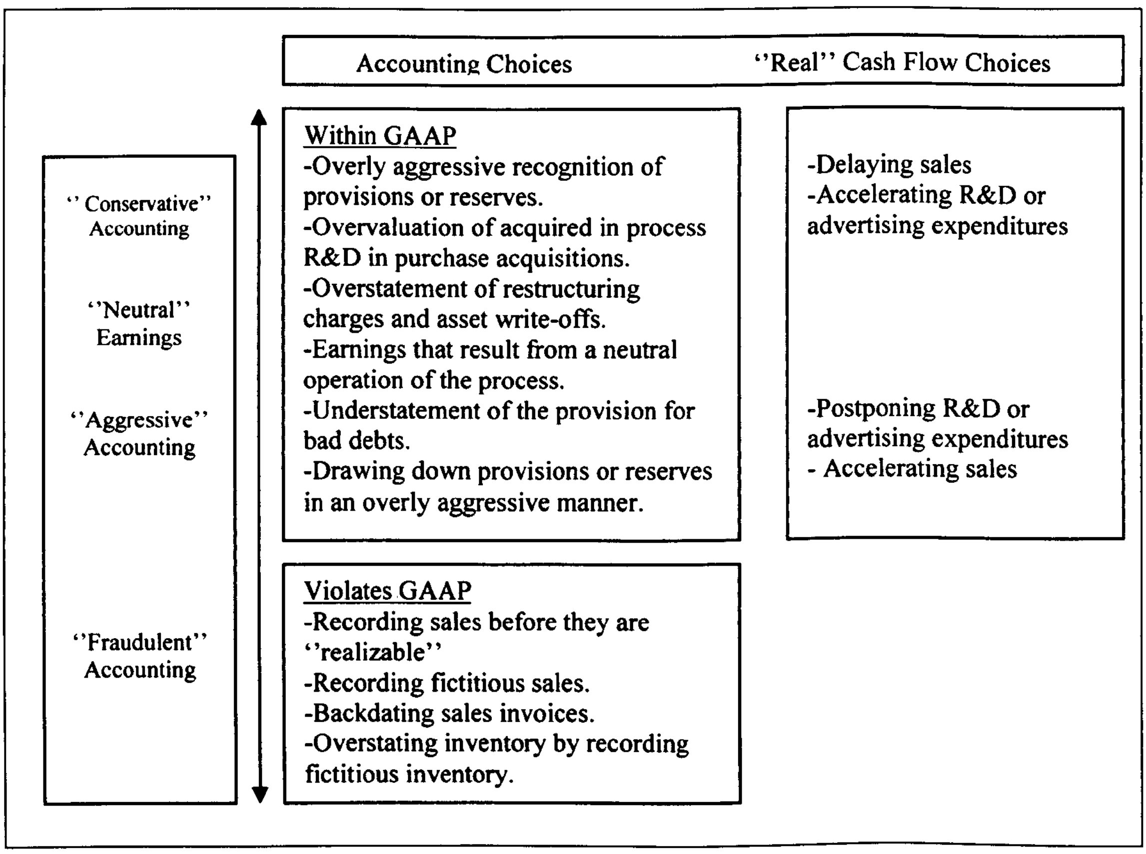


The most common class of earnings management technique involves simply using the flexibility that exists in GAAP (Pliancy in GAAP) (Mulford & Comiskey, 2002, P.62). Furthermore, Scott (1997) explains that because managers can have a choice of choosing accounting policies from a set of GAAP, it is normal to expect that they will choose policies which aim at maximising their own utility and/or the market value of the firm. Moreover, managers may have incentives and rewards to skew the interpretation of GAAP to achieve target earnings. However, academics and regulators seem to agree on the view that when earnings management can be exercised within the limits of GAAP accounting, fraudulent reporting represents an act of overt violation of GAAP.

Dechow and Skinner (2000, p.239) show many ways managers can make judgments over financial reports. Moreover, the authors try to distinguish between earnings management and financial fraud by the presented figure (2-3), which presents obvious differences between judgments that fall within the GAAP which include managing earnings depending on the managerial intent. Nevertheless, the authors point out that still in the case of aggressive accounting choices, it is difficult to distinguish between the legitimate practice of accounting discretion without determining the managers aims of managing earnings.

According to Mulford and Comiskey (2002, p.62) there are no authoritative listings of actions that could be considered in earnings management. Rather, those suggested are usually identified simply by considering areas of flexibility within GAAP and anecdotes based on experience. No presumption is made at this point that the employment of any of these techniques or activities would be outside the bounds of the flexibility inherent in GAAP.

Figure (2-3) Management discretion over accounting choices Dechow and Skinner, (2000)



Moreover, Mulford and Comiskey (2002, p.65) suggested a sample of possible techniques or accounting activities that might be used for managing earnings purposes, and stated that no presumption was made that the employment of any of these techniques or activities would be outside the limits of the flexibility inherent in GAAP. Table 2-2 presents earnings management techniques and activities.

Table (2-2) Potential Earnings Management Techniques and Activities (Mulford and Comiskey, 2002, P65)

Potential Earnings Management Techniques and Activities
1. Changing depreciation methods, (accelerated to straight-line).
2. Changing the useful lives used for depreciation purposes.
3. Changing estimates of salvage value used for depreciation purposes.
4. Determining the allowance required for uncollectible accounts or loans receivable.
5. Determining the allowance required for warranty obligations.
6. Deciding on the valuation allowance required for deferred tax assets.
7. Determining the presence of impaired assets and any necessary loss accrual.
8. Estimating the stage of completion of percentage-of completion contracts.
9. Estimating the likelihood of realization of contract claims.
10. Estimating write-downs required for certain investments.
11. Estimating the amount of a restructuring accrual.
12. Judging the need for and amount of inventory write-downs.
13. Estimating environmental obligation accruals.
14. Making or changing pension actuarial assumptions.
15. Determining the portion of the price of purchase transaction to be assigned to acquired in-process research and development.
16. Determining or changing the amortization periods for intangibles.
17. Deciding the extent to which various cost such as landfill development, direct-response advertising, and software development should be capitalized.
18. Deciding on the proper hedge-classification of a financial derivative.
19. Determining whether an investment permits the exercise of significant influence over the investor company.
20. Deciding whether a decline in the market value of an investment is other than temporary.

Nelson et al. (2002) studied the factors that affect how managers try to practice earnings management, the actions of auditors to discover that, and the characteristics of accounting standards which promote management to practice earnings management, by using a questionnaire that was distributed to audit partners and managers to obtain the data. The authors found that it is more likely for managers to attempt earnings management whereas auditors were less likely to adjust these attempts, which are either structured to comply with precise standards or unstructured with respect to imprecise standards.

Moreover, their results indicate that earnings management attempts occur in several accounting areas such as business combinations, revenue recognition, fixed assets, intangible assets, accounting changes and prior period adjustments, transfers of receivables, consolidations and equity/cost method, and investments and leases. Auditors adjusted 44 percent of the attempts, and 66 percent were not adjusted for the following reasons: in 21 percent of the cases, auditors believed the client demonstrated compliance with GAAP. On the other hand, the auditors had no opinion about 17 percent of the respondents, because they did not have convincing evidence whether the client's position was incorrect, and the remaining 18 percent because of some other reason (usually, immateriality).

Schitlit (2002) presented the most common techniques to practice earnings management, which are as follows:

1- Recording revenue too soon or that is of questionable quality. There are many opportunities that occur to achieve the aim, including recording revenue before the earnings process has completed or before an unconditional exchange has occurred, such as: recording revenue when future services remain to be provided, recording revenue before shipment or before the customers' unconditional acceptance, and recording revenue even though the customer is not obligated to pay.
2- Recording bogus revenue. Managers use this technique to increase revenue. These technique examples include recording sales that lack economic substance, recording as revenue supplier rebates tied to future required purchases, and releasing revenue that was improperly held back before a merger.
3- Boosting income with one-time gains. Such as: boosting profits by selling undervalued assets, including investment income or gains as part of revenue, and including investment income or gains as a reduction in operating expenses.

4- Shifting current expenses to a later or earlier period. This case happens by capitalising a cost in the current period and expensing it over a period of time, such as changing accounting policies and shifting current expenses to an earlier period, failing to write-off impaired assets, and reducing asset reserves.
5- Failing to record or improperly reducing liabilities. There are some examples: failing to record expenses and related liabilities when future obligations remain, releasing questionable reserves into income, and recording revenue when cash is received even though future obligations remain.
6- Shifting current revenue to a later period. Managers practice this technique by delaying recording revenue when it is relatively high in a given year. There are some common examples: deliberately overstating the allowance for uncollectibles and adjusting it downward in future years, and deliberately overstating the estimated sales returns account and adjusting it downward in future years.
7- Shifting future expenses to the current period as a special charge. Managers could practice this technique by accelerating discretionary expenses into the current period if the current year's revenue is relatively high in relation to expected future revenue or future expenses are expected to be relatively high. For example: inflating a special charge amount, writing off R&D costs from an acquisition, and accelerating discretionary expenses.

Nelson et al. (2003) provide evidence about the approaches managers use to attempt earnings management by categorising managers' attempts to manage earnings into four primary approaches: expense recognition, revenue recognition, issues unique to business combinations, and other issues. Then, within each of those broad categories, Nelson et al. sub-classify them into different approaches based on the methods used in an attempt to manage earnings. Moreover, the authors identify the particularly important approaches managers used to practice earnings management from an auditor's point of view, and describe every approach individually (expenses and other losses, revenue and other gains, business combinations, and other approaches).

Ortega and Grant (2003) have classified earnings management techniques that have been used by managers in America into four categories:

1- Revenue recognition.

2- Operating expense timing.
3- Unrealistic assumptions to estimate liabilities for example using aggressive assumptions when accruing liabilities.
4- Real or operating actions such as making voluntary business decisions in the ordinary course of running a business.

Ronen and Yaari (2007, p.31) mention the techniques that can be used to manage earnings, which are as follows:

- choosing from a menu of treatments that are accepted under GAAP, such as from the methods to assess the inventory.
- making a decision on the timing of the adoption of a new standard.
- making a judgment call when GAAP requires estimates, for example depreciation, the allowance for bad debt, assets valuation and asset write-off.
- classifying of items as above or below the line of operating earnings or earnings from continuing operations, in order to separate persistent earnings from transitory earnings.
- Structuring transactions to achieve desired accounting outcomes, such as conducting transactions with related parties, and designing mergers to qualify for the pooling method.
- Timing the recognition of revenues and expenses through, as examples, timing the sales of assets in order to smooth earnings, and deciding to capitalise expenses.
- Making real production and investment decisions, such as reducing research and development expenditures, and affecting selling and administrative expenses.
- Managing the transparency of the presentation, for example: choice between presenting special items in a separate line in the income statement and presenting them in a footnote.
- Managing the informativeness of earnings through various means, such as reporting comprehensive income on the statement of equity rather than on the performance statement.

Noronha et al. (2008) presented a list of techniques that may be employed in Chinese companies:

1- Adjusting accounts receivables or bad debt allowance (e.g. increase or decrease allowance expense).

2- Gains or losses from disposals (e.g. extend or shorten the disposal period).

3- Construction in progress (postponing or advancing the time of completion).

4- Changing the depreciation method (e.g. straight-line to declining-balance).

5- Adjust other revenues and gains (e.g. rental, sale of property).

6- Adjusting investment operations (e.g. expense method to equity method).

7- Related party transactions (e.g. purchase and sales, transference).

8- Operating revenue (e.g. buy back, postponing or advancing the time of recognition).

9- Revenue from government subsidies.

10- Adjusting administrative expenses (entertainment expense, officers' salaries).

11- Adjust promotional expenses and advertising expenses.

2.1.6 Earnings Management Motivations

Significant empirical studies examined motivations that are behind earnings management in the accounting literature (Healy & Wahlen, 1999; Barth et al., 1999; Revsine et al., 2002; Baralexis, 2004; and Noronha et al., 2008), their results showed that managers managed earnings for several motivations, which depend on aims that need to be reached. The main motivations behind earnings management are:

2.1.6.1 Capital Market Motivations

Financial reports provide important information about a corporation's performance, which is used as input for valuation decisions by market participants such as investors and analysts. Therefore, managers try to influence the short term stock price performance via managed earnings numbers to achieve their own benefit (Healy & Wahlen, 1999). Barth et al. (1999) found evidence that firms with patterns of increasing earnings have significantly larger earnings multiples than other firms, and that the incremental earnings multiple is reduced significantly when a pattern of increasing earnings is broken. The capital market may influence managers to manage earnings to increase corporations' share prices (Schipper, 1989; Revsine et al., 2002). The rising importance of capital market motivations in earnings management is associated with the growth of managers-share price movements' sensitivity.

Recently, empirical study documents support the argument that stock prices are sensitive to earnings benchmarks (Goncharov, 2005, p.78). Barth et al. (1999)

documented that a corporation's shares which report resulting earnings increases are priced with price-earnings multiples. However, price-earnings multiples decline significantly when earnings decrease after a previous pattern of increasing earnings. Skinner and Sloan (2002) show that stock price reactions to negative earnings surprises are disproportionately large for growth stocks. Such stock reactions illustrate the importance of meeting or beating the expectations of stock market participants and provide incentives for earnings management.

Other significant empirical studies have investigated whether or not managers managed earnings because of capital market incentives. Dechow and Skinner (2000) stated that managing earnings to effect short-term stock prices has been recognised as the most important reason for managers to manipulate earnings. Moreover, capital market incentives for earnings management may come from specific events.

Studies show that stock price declines are associated with even small negative earnings surprises. As a result, managers may be motivated to manage earnings to meet stock market participants' expectations. According to Ronen and Sadan (1981), management manage earnings to reach analysts' consensus forecasts. Burgstahler and Dichev (1997) stated that managers manage earnings to avoid earnings decreases and losses, while (Degeorge et al., 1999) give a reason as avoiding report earnings which is lower than analysts consensus forecasts. Kasznik and McNichols (2002) present evidence of positive market responses to meeting or beating analyst earnings forecasts. Payne and Robb (2000) findings suggest that managers increase income to achieve forecasted earnings levels, and their desire to increase income is negatively correlated with analysts' forecast dispersion. In 2006, Burgstahler, in a study with Eames, supported the findings of previous studies that managers manage earnings to avoid reporting earnings lower than analysts' forecasts. Moreover, they provide evidence that to meet or slightly beat analysts' forecasts, earnings are managed upward and forecasts are managed downward.

Furthermore, empirical research shows that managers managed earnings before initial public offerings (IPO). According to DuCharme et al. (2004), abnormal accounting accruals are unusually high around stock offers. In addition, their results support the view that some firms opportunistically manipulate earnings upward before stock issues. Teoh et al. (1998b) provide evidence on income-increasing earnings management during the year of IPOs, and document that discretionary accruals during the IPOs explain poor earnings and stock performance in subsequent years. Friedlan (1994) shows that IPO firms make income-increasing accruals the most current statements included in the prospectus. DuCharme et al. (2001) show that abnormal accruals around IPOs are negatively related to post-offer returns and positively related to initial firm value. Roosenbooma (2003) finds that managers manage their company's earnings in the first year as a public company but not in the years before the IPOs. Ball and Shivakumarb (2008) studied earnings management around the time of IPO in the UK, and they found that managers opportunistically inflate earnings to influence IPO pricing.

Moreover, there is evidence that managers manage earnings prior to a stock merger. Erickson and Wang (1999) found that acquiring firms manage earnings upward in the periods prior to the merger agreement; also, their results indicate that the degree of income increasing earnings management is positively related to the relative size of the merger. DeAngelo (1988) stated that managing earnings is important for valuations in management buyouts and provide little evidence that earnings were managed by buyout corporations from a study of accruals changing.

2.1.6.2 External Contract Motivations

External contracts such as debt contracts can lead managers to practice earnings management to meet the contract requirements. The main aim for debt contracts is to limit managers' ability that benefits a corporation's stockholders at the expense of its creditors, and this affects the choices of accounting policies (Watts & Zimmerman, 1986). Significant studies have investigated whether corporations are close to lending covenants managing their earnings. Duke and Hunt (1990) suggested that managers' motivations influence accounting policy choice to manage earnings by violating debt covenant restrictions. Defond and Jiambalvo (1994) examined earnings management in corporations which reported debt covenant violations in annual financial reports. It has been found that debt covenant restrictions affect accounting choices in the previous year and the year of violation and corporations accelerate earnings in the year before the covenant violation.

Sweeney (1994) examined the association between adoption of income-increasing accounting changes and debt covenant violations, and points out that managers take action by using income-increasing methods when corporations are facing technical default. Jaggi and Lee (2002) provided results that support the expectation that the severity of financial distress affects the choice of income-decreasing or income-increasing discretionary accruals. Their results confirmed that managers of corporations with financial distress used income-decreasing discretionary accruals if debts are renegotiated or restructuring takes place because waivers are denied, and used income-increasing discretionary accruals when they could achieve waivers for debt covenant violations.

2.1.6.3 Regulatory Motivations

Significant studies have observed the potential impact of regulatory motivations requirements on earnings management, and provide evidence that regulatory considerations induce managers to manage earnings.

2.1.6.3.1 Tax Motivation

Tax motivation occurs because corporations can decrease the value of tax payment by timing transactions (Beatty et al., 1995). Baralexis (2004) studied the motives underlying earnings management in Greece, and found that small corporations managed their earnings to decrease income taxes whereas large corporations engaged with earnings management to demand external financing. Noronha et al. (2008) examined the underlying factors that motivate managers to practice earnings management in China, and they showed that private ownership corporations engaged with earnings management for tax expense savings, while public ownership corporations had stronger motivations to manage earnings for management compensation.

2.1.6.3.2 Political Motivation

Many corporations are quite visible politically, such as large corporations, strategic industries and monopolistic or near monopolistic corporations, because their activities touch most people. These corporations may want to manage their earnings to reduce their visibility, for example decreasing the income in periods with high income, otherwise public pressure may occur for the government to step in with increased regulation or other means to lower profitability (Scott, 2003). The earnings management literature provides evidence that corporations take steps to decrease income when they are targeted by political procedures with unfavourable consequences (Cahan et al., 1997). Jones (1991) found that managers used the income-decreasing accruals method to manage earnings during import relief investigations by the United States International Trade Commission (ITC). Cahan (1992) stated that corporations being investigated for monopolistic practices by the Department of Justice and the Federal Trade Commission in the USA during 1970-1983 utilised more income-decreasing accruals during the investigation time compared to other time in the sample period. Key (1997) tested the political costs theory in the cable television industry during periods of congressional scrutiny and the results of the study are consistent with previous studies about political costs, in which income-decreasing accruals are used to reduce earnings. Han and Wang (1998) examined oil corporations that expect increases in earnings and where affected by sudden product price increases their results confirmed that corporations utilised income-decreasing accruals in their reported quarterly earnings.

2.1.6.4 Management Compensation Contract Motivation

Management compensation contracts evaluate managers' performance through accounting information. Several studies have examined the association between earnings management and managers' compensation. Watts and Zimmerman (1986) argue that managers with bonus plans have motivations to reallocate the earnings from the future years to the current year.

Healy (1985) studied managerial accounting decisions and postulated that managers manage earnings to increase their compensation; whereas Healy hypothesises that managers choose discretionary accruals to increase their short-term bonuses. Healy notes that many firms have bonus plans in which funds are allocated to a bonus pool based on actual performance relative to target performance. No funds are allocated to the bonus pool when actual performance is below some minimum threshold (lower bound). As performance exceeds the minimum, funds are added linearly in relation to performance, up to a ceiling (upper bound), at which point the bonus pool is capped. Healy assumes that each manager observes income before discretionary accruals and makes either income-increasing or decreasing discretionary accruals based on his/her incentives.

The result of this study found that managers utilised accrual policies to affect their bonus contracts, and utilised changes in accounting procedures to influence their bonus plan. In addition, Healy (1985) stated that managers may plan to take a big bath when they have already reached the bonus or their bonus will decrease because of losses or low net income; such actions will not affect the bonus in the current year, but will enhance the probability of future bonuses.

Guidry et al. (1999) examined the bonus-maximisation hypothesis that managers utilise earnings management to increase their short-term bonuses. The results of this study yield strong evidence supporting Healy (1985). Gaver et al. (1995) examined the relationship between bonus plans bounds and discretionary accruals for the period 1980 to 1990 for 102 firms. They found that managers use income-increasing methods when earnings before discretionary accruals fall less than the level of the lower bonus; however, when earnings are more than the level of the upper bonus, managers utilise income-decreasing methods to manage earnings. Holthausen et al. (1995) examined the extent to which managers manage earnings to increase their bonus plan. They provide evidence that managers decrease earnings when the bonuses are at their maximum. However, they found no evidence that managers utilise income-decreasing methods when earnings are less than the minimum level to receive a bonus.

2.1.6.5 Behavioural Motivations

According to Goncharov (2005), earnings management literature addresses two kinds of behavioural motivations: firstly, to show a better performance than a former Chief Executive Officer (CEO); secondly, through job anxiety.

2.1.6.5.1 Motivation during CEO Changes

Several studies examined earnings management during CEO changes. The results on earnings management surrounding CEO changes give evidence that earnings were managed downwards. Strong and Meyer (1987) mention that corporations utilised an asset write-off policy during changes in senior management, especially when the new chief executive officer came from outside the corporation. Elliott and Shaw (1988) studied the management behaviour of corporations that reported discretionary write-offs during the years 1982-1985. The results of this study are consistent with Strong and Meyer (1987), that corporations changed the CEO, president and/or chief financial officer during the year of the write-off. The purpose of this step is new management seeking to blame prior management for problems. By consciously overstating losses attributable to their predecessors, management improves expectations about the future and lowers the benchmark against which its performance will be measured.

Furthermore, Pourciau (1993) examined the relationship between earnings management and non-routine executive changes. The author found evidence consistent with the hypothesis that a new CEO decreases earnings in the period of executive change to increase earnings in the following period. Wells (2002) investigated the extent of managing earnings in the years surrounding CEO changes by Australian corporations. The author provided evidence that earnings have been managed to decrease income in the period of CEO change through abnormal and extraordinary items. This result is consistent with the view that management is engaging in earnings management particularly for non-routine CEO changes, where the opportunities to manage earnings are greatest.

2.1.6.5.2 Job Anxiety

Fudenberg and Tirol (1995) argued that concerns about job security (keeping position or avoiding interference) drove managers to practice earnings management during a bad or good period. During a good period, managers may hoard income for future periods to lengthen their tenure. However, during a bad period, managers are expected to increase earnings to reduce the likelihood of dismissal. Moreover, Defond and Park (1997) provide evidence supporting Fudenberg and Tirol that shows that concerns about job security create motivations for managers to manage earnings in both the current and future relative period. Their evidence suggested that when earnings in the current year are good and the expectation of future earnings are poor, management saves current earnings for possible utilisation in the future; however, when earnings in the current year are poor and the expectation of future earnings are good, management use earnings from the future for the current period.

2.1.6.6 Communicating Information Motivations

Evaluating whether earnings management is harmful or beneficial depends on the nature of the approach to manage earnings and the goal behind earnings management. There are studies that argue that earnings management can be utilised to communicate information to the users and increases the value of the information that will be useful to them (Subramanyam, 1996; Arya et al., 2003; Scott, 2003). According to Beneish (2001. p.5), the informative perspective of earnings management is illustrated when managers seek to increase the information value. Form this perspective, earnings management may be utilised to make certain judgment and decisions. Scott (2003) mentions that the outside information users are looking through the corporation's accounting policy choices when they are evaluating and comparing earnings performance. The market deficiency is defined relative to publicly available information. Therefore, when earnings management can reveal inside information to outside users, this can improve the informativeness of financial reporting.

2.1.7 Factors affecting motivations preferences

Motivations presented above can be considered the main causes for exercising earnings management. The extent of earnings management is affected by the environment where and in which a corporation operates. The environment may create conditions for practicing earnings management. However, the environment may positively affect the motivations to provide high quality financial information and thus constrain income manipulation (Goncharov, 2005).

According to Noronha et al. (2008), the issue which should be considered is how managers consider the importance of the motivations. Corporations are working in different environments with different variables. As a result, managers will have different priorities or motivations. There are two factors that influence motivation preference, which are corporation size and the corporation ownership structure.

With reference to corporation size, Moses (1987) provided evidence that earnings management is associated with a corporation's size. Baralexis (2004), in his study of Greek corporations, found that large corporations in Greece have different motivations to small corporations. Reducing income tax considerations are very important for small corporations. However, large corporations managed earnings to demand external financing. Zhu and Su (2002) found that Chinese medium and small corporations have motivations to practice earnings management for tax expense and managers compensation.

The corporation ownership structure has an important influence on the reported earnings and information value. The monitoring mechanism that a corporation uses is influenced by ownership structure, including the monitoring earnings management activity (Siregar & Utama, 2008). Hao (1999) mentioned that the non-tradable characteristic of state-owned enterprise shares is the basic reason for the low quality of earnings data. Noronha et al. (2008) state that because managers in state-owned corporations are government officials, corporate earnings attainment is one of their promotion criteria. Therefore, managers may have the motivation to increase earnings. However, Siregar and Utama (2008) examined the relationship between earnings management and ownership structure and firm size, and they provided evidence that family ownership has effect on selection of a particular kind of earnings management.

The previous studies in the earnings management literature investigated earnings management techniques and motivations in the listed companies. This study investigates the earnings management techniques and motivations in the Libyan environment, which is different from the previous studies because the ownership structures of corporations in Libya are largely determined by unlisted companies due to the fact that Libyan capital market was established in 2007. Hence, the majority of Libyan companies are unlisted, which are state- and family-owned companies. Therefore, the objective of this study is examining the earnings management in the unlisted companies of state-owned and private companies, where, to the best of the researcher's knowledge this study is the first of its kind that investigates earnings management techniques and motivations in the unlisted companies.

2.2 The Factors that Affect In Earnings Management Practicing

Financial reports of low quality provide information that leads to problems in the allocation of resources (Schipper & Vincent, 2003). According to Leuz et al. (2003), financial reports with extensive earnings management inaccurately reflect corporation performance, and thus weaken users' ability to assess the corporation's performance. Furthermore, financial reporting quality is not only determined by accounting standards (Ball et al., 2000), it is also affected by the environment, such as where the corporation is working. Baralexis (2004) illustrates the difference between the developing and developed environment, and presents factors that influence the practising of earnings management and the quality of financial reports, such as poor management performance, weak corporate governance structure, weak accounting profession, limited extent of external auditing and unsophisticated users. Goncharov (2005) argues that accounting practices are a function of the interaction between the corporations' political, legal, social, cultural and economic environment. These factors shape reporting practices and determine greatly the extent of earnings management. Therefore, the corporation's environment is important as an earnings management constraint, and may positively influence earnings management motivations to provide high quality financial reports through requiring high quality information. On the other hand, the environment may create conditions for practicing earnings management, such as with weak corporate governance and weak audit quality. In other words, earnings management has a negative relationship with the quality of financial reports, when managers use earnings management opportunistically. Therefore, constraining earnings management will positively influence the quality of financial reports.

The literature of earnings management presents factors that influence earnings management practice and improve the quality of financial reports. Levitt (1998) called for an action plan to improve the quality of financial reports by constraining earnings management. The action plan includes improving the accounting framework, enhancing outside auditing in the financial reporting process, strengthening the audit committee process and pursuing cultural change on the part of corporate management. Goncharov (2005) presents additional factors that constrict earnings management, which are as follows: political forces, culture, corporate governance, auditing and accounting standards.

2.2.1 Political Forces

Financial reports receive attention by politicians to create or resolve crises. The political process theories suggest hypotheses about the use of accounting numbers in the political process. Politicians and bureaucrats seek to propose solutions to financial problems, thereby improving their political position. Moreover, they are alleged to have motivations to seek wealth transfers via the political process, because it provides opportunities for politicians and bureaucrats to generate laws and regulations that transfer control of resources to the government and wealth to themselves (Watts & Zimmerman, 1986). Empirical studies argue the influence of political forces on financial reporting practice. Watts and Zimmerman (1986) mention that the political process commonly is averse to corporations reporting big losses. Ball et al. (2003) argue that the incentives of those preparing financial reports depend on the extent of politics relative to market influences on their practices. Goncharov (2005) argues that political forces influence reporting practices either directly through the laws on accounting, taxes, investor protection and their enforcement, or indirectly through the interplay with market forces. Watts and Zimmerman (1986) suggest that financial reports affect and are affected by the actions of political processes.

2.2.2 Culture

Theoretical frameworks have shown and several empirical studies have discussed the influence of culture on accounting. Previous studies have shown different patterns of accounting structure and practice in different parts of the world, and the influence of cultural factors on the development of national accounting systems (Salter and Niswander, 1995). Gray (1988) argues that culture affects accounting practices, and he developed a theory that linked cultural constructs to accounting values and systems (including measurement and disclosure that decide the practices of financial reporting). Salter and Niswander (1995) test the theory developed by Gray on data from 29 countries, and they find that cultural base is useful to explain financial reporting practices, while it is less useful to explain regulatory and professional structures. Chanchani and Willett (2004) test Gray's model on a sample of preparers and users of financial reports in New Zealand and India, and they provide results which give some support to it.

According to Goncharov (2005), cultural values play an important role in explaining cross-country variations in the extent of earnings management practices. Secord and Su (1994) examine the relationship between accounting models and culture in Asian countries, and their results show there is much similarity in the accounting practices between Asian countries that have similar common cultural origins, but also provide evidence that the diversity of the Asian culture may contribute to differences in accounting practices. Kinnunen and Koskela (2003) examine earnings management in 18 countries in the period 1995-1999. Their results suggest that there are systematic differences in the type of earnings management across countries. The differences exist because of discretion-allowed principles, the role of auditing and other factors beyond the regulator's control, such as cultural values and management's incentive structures.

2.2.3 Accounting Standards

Academics and practitioners often perceive earnings management as a result of latitude in accounting standards. Accounting standards give managers different accounting choices, which managers can select from to prepare financial reports. As a result, financial reports may provide earnings with different quality. Earnings management is expected to be more extensive under flexible systems that leave a sufficient gap for making judgments (Goncharov, 2005).

Yu (2005) examined the relationship between earnings management and accounting standards and his results show that international accounting standards, accrual-based accounting standards, separating tax and financial reporting and accounting standards with increased disclosure requirements all constrain earnings management. Also, his results argue that accounting standard policy is an important institutional factor which influences a country's financial reports quality. Ewert and Wagenhofer (2005) examined whether tighter accounting standards decrease earnings management and lead to the provision of financial reports that include more relevant information to the capital market. They provide results that confirm that tighter accounting standards strictly increase earnings quality, as measured by the variability of reported earnings and the association between reported earnings and the market price reaction.

Ball et al. (2003) argue the relationship between the quality of financial reports and accounting standards. The study results show that it is impossible for countries with low quality accounting standards to have high quality financial reports. On the other hand, high quality accounting standards do not guarantee financial reports with high quality. Jeanjean and Stolowy (2008) support this view by citing the importance of other factors that also influence the quality of financial reports, such as management incentives and national institutional factors.

2.2.4 Corporate Governance

Corporate governance is a set of mechanisms designed to mitigate agency problems that arise from the separation of ownership and control in a company, which might protect the interests of owners, improve company performance, and ensure that investors get an adequate return on their investment (Shleifer & Vishny, 1997; La Porta et al., 2002). Moreover, since the mid-1990s there has been considerable interest in the effectiveness of corporate governance mechanisms, based on data from developed market economies such as the UK, the US and Japan (Dnes, 2005). Also, it is now of interest to most developing countries, including Libya.

Corporate governance can be defined as follows:

> "...The relationship among various participants in determining the direction and performance of corporations. The primary participants are 1) the shareholders, 2) the management (led by the chief executive officer), and 3) the board of directors ... Other participants include the employees, customers, suppliers, creditors, and the community". Monks and Minow (2001, p. 1).

Du Plessis et al. (2005, pp. 6-7) refer to corporate governance as:

> "the process of controlling management and of balancing the interests of all internal stakeholders and other parties who can be affected by the corporations conduct in order to ensure responsible behaviour by corporations and to achieve the maximum level of efficiency and profitability for a corporation"

Solomon and Solomon (2003, p. 14) defined corporate governance as:

> " ...the system of checks and balance, both internal and external to companies, which ensure that companies discharge their accountability to all their

stakeholders and act in a socially responsible way in all areas of their business activity''

The four most common important components of these definitions are that corporation governance is, firstly, a process of controlling management; secondly, it takes into consideration the interests of internal stakeholders and other parties who can be affected by the corporation's conduct; thirdly, it aims at ensuring responsible behaviour by corporations; and finally, it has the ultimate goal of achieving the maximum level of efficiency and profitability for a corporation. In other words, the core of corporate governance lies in two related questions: who is controlling the corporation, and for what purposes?

This section discusses the influence of corporate governance on the occurrence of earnings management. Earnings management gives managers opportunities to manage a corporation's performance in a way that depends on their motivations. Corporations with good corporate governance mechanisms may restrict the possibility of managers to manage financial reports (Rezaee, 2002). Academic researchers have found a relationship between weaknesses in corporate governance and poor financial reporting quality, and weaker internal controls, financial statement fraud and earnings manipulation (e.g. Beasley, 1996; Dechow et al., 1996). As a result, there is a negative relationship between the strength of internal corporate governance mechanisms and the practice of earnings management. In other words, good corporate governance structure can prevent a corporation's management from employing procedures that infringe the interests of the corporation's owners and other parties who can be affected by the corporation's conduct, and can constrain such opportunistic earnings management.

Internal corporate governance structure includes an independent and competent board of directors, an effective audit committee, an effective internal audit function, and legal protection. The following section also includes a review of the previous literature on the role of a corporation's internal governance structure in constraining earnings management. It is widely accepted that there are distinct corporate governance differences between countries. The basic differences are orientation, ownership concentration and time horizon of economic relationships (Shleifer &

Vishny, 1997). Also, it should be noted that the Libyan case is different from developed countries because the ownership structures of corporations in Libya are largely determined by unlisted companies, which are state- and family-owned. Therefore, the objective of this section is to introduce some elements of internal corporate governance mechanisms to the Libyan environment that could help to restrict earnings management and improve the quality of financial reporting, and facilitate improvements in corporations' performance.

2.2.4.1 Agency Theory

According to the agency theory perspective, because of the separation of the ownership and control, there exist conflicts of interests between the agent and the principal. Agency theory identifies the agency relationship where one party, the principal, delegates work to another party, the agent (Mallin, 2007). The agency theory argues when there is an agency problem, managers of a corporation (agents) may act against the interests of the corporation's owners (principals). Agency problems arise from the difference of interest between a corporation's management and owners. Therefore, effective control and monitoring mechanisms are needed to reduce agency conflicts in firms.

Agency theory is explains the relationship between principals and agent, in this relationship one party (the principal) delegates work to another (the agent), who performs that work. Agency theory is concerned with resolving two problems that can arise in agency relationships. Firstly, is the agency problem that arises when the desires or goals of the principal and agent conflict, and it is difficult or expensive for the principle to verify what the agent is actually doing. The problem here is that the principal cannot verify that the agent has behaved appropriately. Secondly, is the problem of risk sharing that arises when the principal and agent have different attitudes towards risk. The problem here is that the principle and the agent may prefer different actions because of the different risk preferences (Eisenhardt, 1989).

2.2.4.2 The Impact of Ownership Structure on Corporate Governance

There is evidence that the corporation's ownership structure might significantly influence the corporation's financial performance. This effect might happen via the structure's impact on incentives, decision-making and the monitoring of performance

(Shleifer & Vishny, 1997). In addition, ownership structure affects the monitoring mechanism that the corporation uses, which includes earnings management monitoring activity (Siregar & Utama, 2008). Corporate ownership structures might be divided into two kinds of ownership: concentrated and dispersed (CIPE, 2002). In the concentrated ownership structure, a small number of individuals, families, banks and holding companies hold the highest proportions of the corporations' shares. Zheka (2005) also includes state ownership within this structure. In the dispersed ownership structure, a large number of owners hold a small number of a corporation's shares. Balsam et al. (2002) mention that institutional investors (sophisticated investors) have more access to the corporation's information than non-institutional investors. Therefore, they have more ability to detect earnings management. Moreover, institutional investors have a large monitoring function if the ownership structure of the corporation is widely dispersed.

A widespread ownership structure is mostly extant in countries such as the United Kingdom and the United States, where the agency problem arises from the conflict of interests between a corporation's management and outside shareholders (Ding et al., 2007). On the other hand, in other developed and developing countries, a corporation's ownership structure is controlled by families or one owner who has/have effective control of the corporation, where the agency problems (which arise from the conflicts of interest between controlling shareholders and the minority shareholders) are not as serious as those in corporations with public ownership structure or without controlling shareholders. The type of ownership that is dominant in market-based economies is private ownership. Active and deliberate liberalisation and privatisation policies have led to a considerable decrease in the number of state-owned companies in most countries. Nevertheless, cases of state-owned companies are easy to find in some economies, such as Scandinavian welfare economies, where the presence of state-owned companies in regular markets is particularly strong (Goldeng et al., 2008). In addition, state-ownership companies' structure (where the states represent the principals and the management of the company represents agents) can be found in economies that are not market-based, such as Libya. However, in all of the previous cases, the essential consequence is similar, where inside parties through their control of the corporation want to increase their private benefit at the cost of external parties.

As mentioned above, widespread ownership may be dominant in the United Kingdom and the United States, but corporate ownership in many other countries around the world is controlled by the state and family, and is characterised by concentrated ownership (LaPorta et al., 1999). In the 1990s, researchers started to address the problems of corporate governance that related to concentrated ownership (Morck, 2000). Researchers are starting to realise that concentrated ownership, along with poor institutional protection of outside shareholders, is associated with certain types of corporate governance weakness; these weaknesses include relatively fewer public firms, lower firm valuations, lower payout of firm earnings as dividends, less information contained in stock prices, inefficient strategy and capital allocation decisions, and expropriation of minority shareholders. Moreover, Young et al. (2001) identified the factors in the emerging economies that are associated with principal-agent problems which are: concentrated ownership structures (state and family owned), strategy and competitiveness, and poor legal protection of minority shareholder rights.

There have been a few studies on corporate governance in developing countries. Most developing countries face wide gaps in corporate governance research compared to their industrialised counterparts. Moreover, most developing countries' economic and industrial organisations are characterised by the fact that the majority of businesses and corporations in these countries are family-owned corporations which are small- and medium-sized, and state-owned corporations, which dominate production, consumption and labour markets in many economies.

In relation to family-owned corporations, Schulze et al. (2001) argued that the relationship between principals (family owners) and agents (family-member managers) are probably based on emotions, sentiments and informalities, which result in less effective monitoring of family managers. This means that family owners and family-member managers not only reduce the effectiveness of internal and external control mechanisms, but also expose firms to a self-control problem which harms themselves as well as those around them. As for state-owned corporations, Chen (2004) pointed out that the agency problems with Chinese state-owned corporations are more serious because of several factors, such as soft budget constraints, personal connections, seniority, political loyalty, insiders' control, managerial inefficiency and lack of competent managers. Factors other than management ability were often the criteria used for the promotion of state-owned corporate managers. Chen also describes three factors that may motivate managers , workers, and public officials to take more from the corporation than they gave: contends that, lack of owners and of managers with authority, lack of incentives to monitor the input of key factors of production, and a lack of adequate reward systems. Ng (2005) stated that corporations with high ownership concentration should pay even more attention to improving corporate governance practices in order to enhance their performance. This attention should be paid in such areas as improving the effectiveness and quality of the board and the audit committee. If the effectiveness of these corporate governance variables can be improved, it is envisaged that firm performance can be further enhanced, even in high ownership concentration companies.

Significant studies have attempted to link earnings management and the ownership structure of corporations. These studies' results provide evidence that the extent and direction of earnings management are associated with ownership structure (Dempsey et al., 1993; Wang, 2006; Al-Fayoumi et al., 2010). Siregar and Utama (2008) investigated whether Indonesian public corporations that are listed on the Jakarta Stock Exchange conduct efficient or opportunistic earnings management, and examined the effect of ownership structure on the type of earnings management selected (efficient earnings management and opportunistic earnings management). The study results suggest that family ownership has a significant effect on the type of earnings management which is practiced by Indonesian listed corporations. Corporations with non-business groups and a high proportion of family ownership are more likely to practice efficient earnings management than other types of corporations.

2.2.4.3 The Impact of an Effective Board of Directors on the Restraint of Earnings Management

A corporate governance mechanism should control management and balance the interests of owners' rights and all other parties who can be affected by the corporation's conduct in order to ensure responsible behaviour by corporations and to reach the maximum level of efficiency and profitability for a corporation. The board of directors is an important element of the internal corporate governance mechanism and is charged with monitoring the corporation's management to protect its owners' interests and restraint earnings management. Fama and Jensen (1983) pointed out that the board of directors is the most important mechanism in internal corporate governance because it forms the summit of the internal corporate government structure in the corporation. Even though most decisions by the board of directors are related to management issues including top management, the board also has to ensure the validity of the accounting choices made by top management and the financial implications of such decisions (NYSE, 2002). In an attempt to improve the effectiveness of the board of directors, a number of recent empirical studies and various recommendations made by the international bodies of corporate governance suggest that some characteristics of the board of directors should be achieved, and these characteristics are expected to have a great influence on the quality of financial reporting as measured by the level of earnings management. This section discusses prior literature on types of board, independent directors and other characteristics.

2.2.4.3.1 Board Independence

Fama and Jensen (1983) stated that the composition of a board of directors is an important factor in establishing a board that is an effective monitor of management actions. The board of directors usually includes two kinds of directors, which are inside directors who are employed by corporations in an executive or operational capacity, and outside directors who should be independent and have no relationship with the corporation other than being board directors.

According to Fama and Jensen (1983), effective boards separate the problems of decision management from decision control, and outside directors are widely believed to play a larger role in monitoring management than inside board members. Also, the effectiveness of a board is enhanced by including independent directors because they have incentives to increase their reputations as experts in decision control. Monks and Minow (2001) claim that non-executive directors generally face a lower conflict of interest since their future career success does not depend on chief executive officers. It is argued that a larger outside directors' presence will bring stronger supervision of managerial actions. Consistent with this argument, Kaplan and Reishus (1990) find that directors of poorly performing firms, who therefore may be perceived to have done a poor job overseeing management, are less likely to become directors at other firms. Hermalin and Weisbach (1998) also argue that outside directors are important because a director's willingness to monitor the chief executive officer increases with his or her independence from the chief executive officer. In contrast, in situation associated directors where there are outside directors and they have some relationship with non-board members such as being consultants to the corporation, being relatives of management, retirees of the corporation, being lawyers receiving a fee income, and being involved in other related party transactions, this relationship might influence the independence of the outside board directors (Vicknair et al., 1993; Beasley, 1996; Carcello & Neal, 2000).

The international bodies of corporate governance, such as the Cadbury Committee Report (CCR) in the UK (1992) and the Blue Ribbon Committee Report and Recommendations (BRC) in the US (1999), provided various recommendations that a majority of outside or independent directors can make a positive contribution to the board's monitoring responsibilities. Moreover, significant empirical studies have investigated the impact of independent board directors on the effectiveness of the board. Beasley (1996) indicated that a larger proportion of independent members on the board significantly decreases the probability of a company practicing earnings management, because they are properly independent from the corporation's management, which makes them able to monitor the management effectively. Peasnell et al. (2005) investigated the effect of board composition on the occurrence of earnings management utilising a sample of UK corporations. The authors stated that corporations with a lower proportion of independent board directors are more likely to practice earnings management upward than corporations with a higher proportion of independent board directors. In other words, there is a negative relationship between the proportion of independent directors in the board and abnormal income increasing.

Furthermore, Klein (2002) examines whether audit committee and board characteristics are related to earnings management by the corporation. A negative relation was found between abnormal accruals and board directors' independence. Consistent with this, Xie et al. (2003) examined the role of the relation between earnings management and the structure, background and composition of a company's board of directors. Their study is particularly interested in the role played by outside directors; their background in corporations, finance, or law; and their membership on two key board committees, the audit and executive committees. The results of their study were consistent with the Blue Ribbon Panel recommendation, and indicated that a lower level of earnings management is associated with greater independent outside representation on the board, the monitoring that outside directors provide may improve when they are financially sophisticated. Board and audit committee members with corporate or financial backgrounds are associated with companies that have smaller discretionary current accruals. Board and audit committee meeting frequency is also associated with reduced levels of discretionary current accruals. It can be concluded that board and audit committee activity and their members' financial sophistication may be important factors in constraining the propensity of managers to engage in earnings management.

Moreover, Davidson et al. (2005) investigated the role of a corporation's internal governance mechanisms (which include the board of directors [separation of the chief executive and board chair roles], the audit committee, the internal audit function and the choice of external auditor) in constraining earnings management utilising a sample of Australian corporations. The results of the study indicated that a lower level of earnings management is associated with the presence of non-executive directors on the board. On the other hand, Park and Shin (2004) investigated the effect of board composition on the practice of earnings management in Canada. The results of the study indicated that outside directors, as a whole, do not reduce abnormal accruals earnings management. Also, Hennalin and Weisbach (1991) found no relation between corporation performance and a small number of outside directors on the board.

2.2.4.3.2 Other Board Characteristics

There are other related characteristics that may improve the effectiveness of the board. Xie et al. (2003) examined the role of the relation between earnings management and the structure, background and composition of a company's board of directors. The study provides empirical evidence that the monitoring that outside directors provide may improve when they are financially sophisticated. A member of the board of directors with a corporate or financial background might be more familiar with earnings management issues and might better understand the implications of earnings manipulation. Furthermore, Park and Shin (2004) explained why outside directors were not effective in curbing earnings management in Canada. The authors stated that outside directors, as a whole, may lack financial sophistication. In addition, another important characteristic that may influence the effectiveness of the board of directors is the separation between the role of chairman and the chief executive officer. The chairman's position and the chief executive officer should be separated for an effective monitoring system, since the chairman is the head of the board of directors which monitors management, while the chief executive officer is mainly responsible for corporate management.

Recent literature (Fama and Jensen, 1983; Strickland et al., 1996; and Dechow et al., 1996) and corporate governance guidelines (e.g. CCR, 1992; Australian Stock Exchange (ASX) 2003) discourages the dual position of chief executive officers because this concentrated power may lead to possible conflicts of interest, resulting in a reduction in the level of monitoring, and executive directors, who in most cases involve a majority of the board, are monitors of their own performance. The CCR produced two major recommendations, which are that boards of directors should include at least three non-executive directors, two of whom should be independent of management, and the positions of the chairman and the chief executive officer should not be held by the same individual. In addition, the chief executive officer should have limited power to appoint new directors and set board agendas, and rigorous chief executive officer performance reviews should take place regularly.

2.2.4.4 Impact of an Effective Audit Committee on the Restraint of Earnings Management

The importance of the audit committee has been highlighted in the recommendations of corporate governance guidelines. Therefore, audit committees have been widely established following these recommendations. According to Spira (2002, p. 5), "An audit committee is a committee of directors who are charged not with the running of the business but with overseeing how the business is controlled, reported on and conducted". The existence of the audit committee should increase the board of directors' ability to act as a management control by presenting more detailed knowledge of financial statements and other financial information issued by the corporation (Pincus et al., 1989). The audit committee is expected to encourage external auditors' independence because it is responsible for monitoring management and auditors for the benefit of all owners. Also, an audit committee with independent directors is expected to enhance the quality of monitoring because it is not related with the management of the corporation, either as officers or employees (Braiotta, 1999; Walker, 2004). Moreover, an audit committee that is composed of independent and qualified directors is better able to increase auditors' independence (DeZoort & Salterio, 2001; and Raghunandan et al., 2001). The CCR (1992) stressed that establishing audit committees is an important action to increase corporate governance standards. An active audit committee would indicate the level of effort that has been made to ensure good financial reporting. The external auditor should discuss the quality of financial reporting with the audit committee.

Five key recommendations were made regarding the establishment of audit committees by the BRC (1999) in the USA. Firstly, audit committees should have a written charter setting out their duties and responsibilities; secondly, the members of an audit committee should be independent non-executive directors; thirdly, at least three members of the audit committee should be financially literate; fourthly, the committee has the ultimate authority and responsibility to appoint, evaluate and, when necessary, replace the external auditor. Finally, the audit committee should discuss with external auditors how they have maintained their independence. The following sections present the previous literature on the audit committee related to functions, qualifications and communications with external auditors.

2.2.4.4.1 Responsibilities of Audit Committee

Audit committees are established to provide an oversight of good financial reporting and auditing practices. According to CCR (1992), Verschoor (1993), BRC (1999) and Spira (2002), responsibilities of the audit committee include assisting the board of directors in oversight responsibilities and being charged with matters relating to financial reporting and auditing. Delegating part of the responsibilities to the audit committee has two advantages for the board, which are improving the independence of the oversight body and improving board efficiency in monitoring corporate managers from earnings management.

The audit committee's responsibilities can be classified into four main areas. Firstly, there is oversight of the financial statement, which includes considering both significant accounting policies and any changes to them, and any significant estimates and judgments, assisting directors in discharging their statutory responsibilities as regards financial reporting, reviewing financial statements with management and the external auditors, and disclosure of financial and non-financial transactions and related information presented with the financial statements. Secondly, the audit committee should evaluate and review the corporation's internal control procedures, and monitor and review the effectiveness of the internal audit function to prevent or detect fraudulent activities or irregularities, and improve communication between the board and external auditors. Thirdly, it should review the qualifications, independence and performance of the external auditor, review and discuss with management and the external auditor the annual audited financial statements and other financial information, to develop and implement policy on the engagement of the external auditor to supply non-audit services, and coordinate the work of internal and external auditors, and improve communication between the board and external auditors. Finally, the audit committee should report findings to the board of directors, and strengthen the role and effectiveness of non-executive directors.

3.2.4.4.2 Independence and Qualifications of Audit Committee

According to CCR (1992), the members of an audit committee should be independent non-executive directors and at least three members of the audit committee financially literate. In support, the BRC (1999) reported that there is a positive relation between an audit committee and greater oversight and lower engaging in earnings management. McMullen and Raghunandan (1996) examine the relation between audit committee characteristics and financial misconducts by comparing corporations without financial reporting problems and other corporations with financial reporting problems. The authors find a negative relation between audit committee independence and financial misconducts.

Carcello and Neal (2000) examine the relation between the composition of financially distressed corporations' audit committees and the likelihood of receiving going-concern reports. The results of the study reported a negative relation between the percentage of affiliated directors on the audit committee and the likelihood of receiving a going-concern report. Also, it showed that more independent and expert audit committees are more effective in protecting auditors from dismissal, with the result that external auditors are able to issue a going-concern report without any pressure from the corporation management.

In support, Klein (2002) examines whether audit committee and board characteristics are related to earnings management by the corporation. A negative relation was found between earnings management and board directors' and audit committees' independence. Also, the relation was more pronounced for corporations with audit committees comprised of less than a majority of independent directors. Agrawal and Chadha (2005) could not find a significant relation between several key corporate governance characteristics and financial reporting problems. These include the independence of boards and audit committees and the provision of non-audit services by outside auditors.

A significant amount of literature suggests that audit committee members should be financially literate (DeZoort, 1997; McDaniel et al., 2002; and DeZoort et al., 2002). The international bodies of corporate government, such as the BRC Report and Recommendations in the US (1999) and National Association of Corporate Directors NACD (2000) provided various recommendations that members of audit committee should have primary types of knowledge, which are an understanding of how business activities are presented in financial statements and the ability to analyse these statements, and an understanding of the nature and purposes of the financial statement audit. They also stressed that at least one member should have accounting or related financial management expertise. McDaniel et al. (2002) suggested that including a financial expert in the audit committee would change the focus of the committee and therefore affect financial reporting quality. Moreover, Bedard et al. (2004) provide empirical evidence that a financial audit committee with expertise members is positively associated with reducing income-decreasing earnings management.

2.2.4.5 Impact of an Effective Internal Auditor on the Restraint of Earnings Management

The internal auditors' function evolves from a traditional oversight function to a wider function that includes a wider spectrum of activities that add value to their organisations (Ahlawat & Lowe, 2004). The internal auditors' function is also expected to identify and monitor a corporation's risks, to evaluate whether internal controls are efficient and effective, and to improve corporate governance. Gramling et al. (2004) believe that there is growing importance placed on expanded roles for the internal auditors in ensuring quality corporate governance. Institute of Internal Auditors Research Foundation (IIARF) (1999) defined internal auditing as:

> ... an independent, objective assurance and consulting activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic disciplined approach to evaluate and improve the effectiveness of the risk management, control, and governance processes (Institute of Internal Auditors, Research Foundation 1999).

This definition highlights the independence and objectivity of internal auditing regarding assurance services and consulting. The functions of internal auditors include: reviewing and evaluating the adequacy and effectiveness of the system of internal control and the quality of performance in carrying out assigned responsibilities, reviewing and evaluating the reliability and effectiveness and how well the responsibilities assigned to managers are being carried out in practice. Spira and Page (2003) argued that internal auditors play an important role in embracing the opportunity to participate in achieving the corporate goals through their contribution to risk management. Internal auditors are an integral part of the corporate governance mechanism. Graham (2004) pointed out that the internal auditor should be perceived as a valuable strategic partner and an integral part of corporate governance. Moreover, Richard and Deborah (2000) mention that internal auditors have the opportunity to be recognised as delivering value at the highest levels of their corporations by enhancing corporate governance.

The importance of internal audit functions has received attention from many researchers. Goodwin and Seow (2002) examine the views of external auditors and directors concerning the impact of certain governance mechanisms on the prevention and detection of control weaknesses, financial statement errors and fraud (earnings management) in Singapore. The study results indicated that auditors and directors perceive that the existence of an internal audit function and strict enforcement of a corporate code of conduct have a significant impact on the company's ability to strengthen controls, prevent and detect earinings management from fraud and/or errors, and enhance audit effectiveness. Walker et al. (2003) stated that the role of the internal auditor is to help their corporations in identifying and evaluating risks.

In addition, Gallegos (2004) stated that, in the effective corporate governance mechanism, internal and external auditors have essential roles to play. Both of them must provide assurance to directors and management regarding the integrity of financial statements and the adequacy of internal controls. Graham (2004) stressed that good corporate governance increasingly requires achieving a balance among all of its components. The board of directors is responsible for setting corporate strategy, whilst the design of the internal systems and control processes to implement that strategy should be the responsibility of the management. Internal auditors are charged with assessing and ensuring that these wide-ranging processes function effectively.

Bishop et al. (2000) pointed out that the interactions between internal auditors and the audit committee are an important element of corporate governance mechanism. Extending and expanding the interaction between audit committee and internal auditors can enhance the quality of corporate governance and strengthen the corporation's infrastructure. An effective audit committee can strengthen the position of the internal auditors' function by acting as an independent forum, while internal auditors provide assistance to the audit committee in its oversight of reporting and risk management and control (Braiotta, 1999; Bishop et al., 2000; and Goodwin & Yeo, 2001). In this connection, DeZoort et al. (2000) point out that internal auditor directors believed that structured communications programmes between an audit committee and internal auditors could enhance the corporate governance quality.

The relationship between internal and external auditors is one that influences the work of both, and communication difficulties between both parties can have a significant influence on the efficiency of an audit (Brody et al., 1998). Therefore, significant studies increasingly advocate that coordination of the internal and external auditors could provide total audit coverage more effectively and efficiently. Edge and Farley

(1991) mention two major benefits to the external auditor of utilising the work of the internal auditor, which are (1) reducing the time taken for the audit and the cost of the external audit, and (2) improving the quality of the external audit function because the internal auditor examines in more depth the internal control system and has a better knowledge of the client accounting system. Braiotta and Marsh (1992) explained that internal auditors are responsible for reviewing, assessing and monitoring the internal control structure, policies and procedures. An effective internal auditing function will provide the external auditor with the necessary information about the design and the effectiveness of the entity's internal control policies and procedures and help them to assess the control risk and the extent of their substantive procedures.

In addition, the BRC on Improving the Effectiveness of Corporate Audit Committees (1999) pointed out that the internal auditor plays a significant role in working with management, the audit committee and the external auditor in ensuring the effectiveness of internal controls and in bringing any weaknesses to the attention of the appropriate parties. Krislmamoorthy (2002) indicated that external auditors usually check and evaluate the internal control structure and the internal audit function. Therefore, good communication and coordination of the internal and external auditors could improve the effectiveness and efficiency of the auditing process.

Significant empirical studies show that internal auditing plays an important role in external financial reporting and restricting earnings management, and it is part of the solution to the perceived control, reporting and ethical problems in the corporate sector (Coram et al., 2008). Eighme and Cashell (2002) mention that internal auditors can assist in decreasing earnings management via performing two functions, which are (1) evaluating the effectiveness of relevant internal controls and risk management processes, and (2) supporting the audit committee and management in evaluating earnings management risks.

In addition, Douglas et al. (2009) examined whether a high-quality internal auditor's function is associated with lower levels of earnings management. Their study's results find a significant negative relation between overall internal auditors' function quality and absolute abnormal accruals. Coram et al. (2008) examined the association between both the existence and the type of internal audit function and the propensity to detect and self-report fraud. The authors find that corporations with an internal audit function are more likely than others without such a function to detect and self-report fraud. The findings of their study suggested that internal audit adds value through improving the control and monitoring the environment within organisations to detect and self-report fraud. Moreover, the study suggested that keeping the internal audit function within the corporation was more effective than completely outsourcing that function.

On the other hand, Davidson et al. (2005) investigated the role of a firm's corporate governance structure, including the board of directors, the audit committee, the internal audit function and the choice of external auditor, in constraining earnings management in Australia (to discover if the practice of earnings management is systematically related to the strength of internal corporate governance mechanisms). The results of the study find a significant association between non-executive directors on the board and on the audit committee and a lower likelihood of earnings management. However, the results show that the voluntary establishment of an internal audit function and the choice of auditor were not significantly related to a reduction in the level of discretionary accruals.

2.2.5 External Audit Quality

External audit plays an important role in the monitoring of financial statements because it reports any observed breaches of restrictive covenants to the users of financial statements (DeAngelo, 1981a). Auditing is the accumulation and evaluation of evidence about information to determine and report on the degree of correspondence between the information and established criteria. Also, auditing should be done by a competent, independent person (Arens et al., 2008). The objective of an external audit is the expression of an opinion on the fairness of financial statements regarding all material respects, financial position, results of operations and cash flows in conformity with an applicable financial reporting framework (International Auditing and Assurance Standards Board (IAASB), 2004a). External auditors need to obtain sufficient evidence that makes them able to provide that opinion about the fairness of financial statements and to issue an appropriate audit report. In other words, a financial statement audit is conducted to determine whether the financial statements are stated in accordance with specified criteria and to gather evidence to determine whether the statements contain material errors or other misstatements. According to the IAASB:

> - An auditor conducting an audit obtains reasonable assurance that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or error (2004b, p.9).
> -Misstatements in the financial statements can occur from error or fraud. The distinguishing factor between error and fraud is whether the underlying action that results in the misstatement of the financial statements is intentional or unintentional (2004b).
> -The term error refers to an unintentional misstatement in financial statements, including the omission of an amount or a disclosure (2004b, p.4).
> -The term fraud refers to an intentional act by one or more individuals among management, those charged with governance, employees, or third parties, involving the use of deception to obtain an unjust or illegal advantage (2004b p.5).

The fraudulence of financial statements might be due to the attempts of management to manage earnings so as to mislead the users of financial statement by influencing their perceptions about the performance and profitability of the corporation. Practicing of earnings management might start with small actions or inappropriate adjustment of assumptions and changes in judgments by management. Motivations and pressures might lead these actions to increase to the extent that they result in fraudulent financial reporting. Many users of financial statements are particularly concerned about an actual or potential conflict of interest between themselves and the management of the corporation. This apprehension extends to the fear that the financial statements and accompanying data being provided by management may be intentionally biased in management's favour. Conflicts of interest may exist also among the different classes of users of financial statements. Thus, users seek assurance from independent auditors that the information is both free from management bias and neutral with respect to the various user groups. In other words, they seek an assurance that the information is not presented in a way that favours one group over another (Cosserat & Rodda, 2009).

As mentioned before, an external audit plays an important role in the monitoring of financial statements. Therefore, external auditors are expected to detect opportunistic earnings management and, in that case, they are considered high-quality auditors. The quality of an audit is a function of both auditor competence (which is the auditor's ability to detect material omissions or misstatements in the financial statements) and auditor independence (which is the auditor's propensity to correct and reveal material errors) (DeAngelo, 1981a). In other words, audit quality is the probability that the external auditor detects earnings management in financial statements and then reports that to the external users. According to Hayes et al. (2005), external auditors are evaluated based on technical audit quality and functional audit quality elements. Technical audit quality is related to the detection and reporting of errors and the detecting of fraud in financial statements. Functional audit quality is related to the process of carrying out the audit and communication with interested parties, and represents the audit process itself, not the outcome of it. Several studies have investigated the influence of audit quality on earnings management (Dechow et al., 1996; Petroni & Beasley, 1996; Francis et al., 1999; Gaver & Paterson, 2001; Krishnan, 2003; and Chen et al., 2005). These studies argued that high quality audits serve as a constraint on earnings management. Consequently, they enhance the credibility of corporate financial statements and assist financial statement users to make rational decisions. George (2009) argues that an audit's effectiveness to increase the quality of financial reporting depends partly on the auditor's ability to detect material misstatements and partly on the auditor's behaviour subsequent to the detection of such misstatements. However, the utility of the auditing function depends on the quality of audits, which is determined by several factors. The following section includes a review of the previous literature on the influence of a number of factors, such as length of tenure, non-auditing services and lawsuits on audit quality.

2.2.5.1 Length of Tenure and Audit Quality

The length of tenure is a key factor that may affect audit quality. Hayes el at. (2005) believe that mostly the first year of auditing is perceived as less thorough, since it takes some time to identify all potential audit risks for a new client. Moreover, since the better identification and understanding of a client's business and risk is useful in detecting material misstatements in the financial statements, the auditor learning argument suggests that audit quality and the integrity of the accounting reports is lower during the early years of tenure, and improves as audit tenure increases. On the other hand, Johnson et al. (2002) and Boon et al. (2008) believe that the auditor might lose his professional scepticism if the length of tenure is for a long period, where after long length of tenure the auditor may become less sceptical of the client's accounting practices and judgments based on a "learned confidence" in the client. In other words, the audit quality could be enhanced with long length of tenure because it provides better identification of client's risk, better understanding of client's business and industry and knowledge about the corporation's operations, which are essential for an adequate audit to assess the risk of misstatement of the financial statements whether due to error or fraud, and to design the nature and extent of further audit procedures. However, it may decrease the auditor independence and objectivity due to the cosiness of the auditor-client relationship developed over an extended period.

Johnson et al. (2002) examined whether the length of the relationship between a corporation and an audit firm is associated with financial reporting quality. The study found that relative to short audit-firm tenures of two to three years, medium audit-firm tenures of four to eight years were associated with lower quality financial reports. However, there was no evidence that longer audit-firm tenures of nine or more years were associated with reduced financial reporting quality.

With particular reference to earnings management, several researchers have studied the relationship between length of tenure and audit quality, and they have produced different results. On the one hand, researchers have shown that there is a positive relationship. Myers et al. (2003) pointed out that the longer auditor tenure improves the quality of reported earnings (as proxied by earnings management) and concluded that with long length of tenure, auditors are better able to impose reporting discipline on their clients. Carcello and Nagy (2004) also examine the relationship between audit firm tenure and fraudulent financial reporting. The authors find that fraudulent financial reporting is more likely to happen in the first three years of the auditor-client relationship. The authors could not find any evidence that fraudulent financial reporting is more likely given long auditor tenure and their results were consistent with the argument that mandatory audit firm rotation could have adverse effects on audit quality.

Furthermore, Chen et al. (2008) argue that although a limit on the number of years that an audit firm may audit the same company may improve auditor independence and audit quality, auditors gain more experience and better knowledge from longer tenure to determine the quality of a client's financial reporting. The authors investigated the relationship between audit firm tenure and earnings quality using a sample of Taiwanese companies, and the results of the study find that absolute discretionary accruals decrease significantly with audit firm tenure. Also, Jackson et al. (2008) find that audit quality increases with length of audit firm tenure. George (2009) examines the relationship between the probability of financial statement fraud and audit firm tenure (expressed in terms of number of years' continuous audit engagement for a client). The result suggests that with an increase in the length of auditor client relationship, the probability of financial statement fraud reduces.

On the other hand, Fairchild (2008) examines the effect of auditor tenure on the level of managerial fraud and the extent of auditor qualification of reports. The author pointed out that although the auditor's ability to detect fraud enhances with tenure. Later in the tenure, the auditor becomes sympathetic towards the management, and may 'turn a blind eye' to fraudulent behaviour. As a result, this leads to a decrease in fraud-detecting efforts, decrease in audit qualification, and an increase in managerial fraud. Davis et al. (2005) examine the association between audit tenure and practicing earnings management to meet earnings forecasts. The results of the study suggested that, by the use of discretionary accruals to meet earnings forecasts, management was able to take advantage of the auditor's inexperience in the early years of the relationship, and the auditor's ability to constrain management's reporting choices declines over time. Dao et al. (2008) investigate the relationship between length of tenure and audit quality by using shareholder votes on auditor ratification as a proxy for investor perceptions about audit quality. The results of the study indicated that shareholders were more likely to vote against, or abstain from, auditor ratification when the auditor has long tenure with the client. In other words, shareholders view long auditor tenure as adversely affecting audit quality.

Other researchers have found no relationship between length of tenure and audit quality, Kealey et al. (2007) did not find evidence of a negative association between financial reporting quality and length of tenure. In addition, Knechel and Vanstraelen

(2007) examined the effect of auditor tenure on audit quality for private companies in Belgium. The study indicated that audit tenure did not affect either the independent of the auditors over time nor provide them with a better ability to predict bankruptcy.

2.2.5.2 Non-Audit Services and Audit Quality

Previous studies have focused on whether there is a relationship between audit quality and non-audit fees paid to audit firms. The joint supply of audit and non-audit services to the same client could be an incentive that makes auditors compromise their independence due to the fact that audit firms might not be willing to criticise the work carried out by their consultancy division, and it might not wish to lose lucrative consultancy services (Lennox, 1999). Several studies document that the joint provision of both services can cause a reduction of qualified audit reports and might compromise the independence of auditors (Frankel et al., 2002; Gul et al., 2006; Basioudis et al., 2008; Quick & Warming-Rasmussen, 2009). Frankel et al. examined the association between earnings management and a proxy for economic bonding (the purchase of non-audit services) by using a sample of US companies.

The study's results find a significant positive association between earnings management and the purchase of non-audit services, which means that the independence of auditors might be compromised by increasing the acquisition of non-audit services. In their study Basioudis et al. (2008) examined the association between the audit firm's final decision regarding the type of opinion provided to a financially stressed client and audit service fees and non-audit service fees in the UK. The authors find that financially stressed corporations with high audit fees were more likely to receive a going-concern modified audit opinion, while corporations with high non-audit fees were less likely to receive a going-concern modified audit opinion. Consistent with this, Quick and Warming-Rasmussen investigated the impact of non-audit services on investors' perceptions of auditor independence in Germany. The authors find that shareholders generally perceive a negative effect on auditor's independence if non-audit services were provided and for most of them a negative effect was found, even if these services are not explicitly prohibited in Germany.

On the other hand, other studies conclude that non-audit services might help auditors to get more experience and a better understanding of a client's business (Antle et al., 2006; Lim & Tan, 2008; Patel et al., 2009). Antle et al. found that non-audit services fees decrease abnormal accruals. Consistent with this, Lim provided evidence that non-audit services positively affect audit quality. Patel et al. investigated the reasons for providing non-audit services by the incumbent external auditors in New Zealand listed companies. The results of the study indicated that the simultaneous provision of audit and non-audit services were for efficiency motivations rather than increasing the revenue for auditors. Therefore, the regulations in place to restrict the number of non-audit services that an auditor can provide the client might result in inefficiencies or incurrence of unnecessary costs for the client and auditor.

Finally, other studies document that there is no relationship between non-audit services and audit quality. DeFond et al. (2002) found no significant relationship between non-audit service fees and impaired auditor independence. Antle et al. (2006) did not find any support for the assertion that fees for non-audit services increase abnormal accruals. In the same context, Cahan et al. (2008) examined whether earnings management is related to the amount that a client spends on non-audit services, and the growth and length of the non-audit services relationship between the client and its auditor. Their results did not provide any support for a relationship between non-audit fee growth rates or the length of time of the non-audit fee and earnings management. DeFuentes and Pucheta-Martinez (2009) examined the joint provision of audit and non-audit services by the same audit firm and the fact that it may risk the independence of the auditor when issuing the audit report. The authors found that even in countries of low audit litigation risk where auditors are hardly ever charged for misconduct and negligence, auditors are likely to give a qualified audit report when providing audit and non-audit services. Consequently, the study's results are supportive of the reputation theory, where the economic losses associated with the reputation damage and the loss of clients are external deterrents for an auditor's misapplication of the audit standards.

2.2.5.3 Audit Firm Size and Audit Quality

The size of an audit a firm is considered as one of factors that affect audit quality and it has been used as a proxy to measure it. Prior studies examine whether larger auditing firms provide higher quality audits than smaller auditing firms. These studies assumed that large audit firms due to their greater resources are more likely to provide more precise information and higher quality audit services than small audit firms (Davidson & Neu, 1993). Moreover, large audit firms have a greater motivation to protect their reputation (Lys & Watts, 1994; DeFond et al., 2002). Also, Pearson (1980) argues that large firms are less likely to be economically dependent on a few clients. Therefore, it could enhance auditors' independence because large firms do not rely on revenue from a single client. However, large audit firms might have more resources to pay for lawsuits by creditors or investors.

Several studies have suggested that audit firm is size positively related to audit quality. DeAngelo (1981b) suggests that larger firms provide higher quality audits due to the fact that larger audit firms have fewer motivations to compromise their standards to ensure retention of clients in comparison with smaller firms. Moore and Scott (1989) also pointed out that audit firm size and the extent of audit work undertaken are positively related. Consistent with previous results, Davidson and Neu (1993) indicated that larger auditing firms are associated with higher-quality audits. Chan et al. (2005) investigated the relationship between audit quality (as measured by auditor size and industry specialisation) and earnings management (as measured by the modified Jones model) for 367 newly listed Taiwanese IPO firms between 1999 and 2002. The study assumed that Taiwanese firms with higher quality auditors engage less in earnings management in the IPO process, and it found that the big five auditors engaged less in earnings management in the IPO year in Taiwan. This shows that high quality auditors constrain earnings management and provide more precise information.

Furthermore, Geiger and Rama (2006) investigated the relation between audit firm size and the quality of audit reporting decisions by examining whether the Big four audit firms exhibit higher quality reporting by having fewer ''audit-reporting errors'' in the context of issuing going-concern modified reports. The results of this study indicate that error rates for the big four audit firms are significantly lower compared to the non-big four firms. Further, Jong-Hag et al. (2010) studied whether and how the size of a local practice office within an audit firm is a significant, engagement-specific factor determining audit quality and audit fees over and beyond audit firm size at the national level, and auditor industry leadership at the city or office level. Their results reveal that in the US audit market, both audit quality and audit fees were positively associated with office size.

On the other hand, there is other evidence to suggest that there is no relationship between audit firm size and quality. Jeong and Rho (2004) investigated the relationship in Korea between earnings management and the big six and non-big six audit firms, and whether results changed when auditors changed. The authors did not find a statistically significant difference between the discretionary accruals of corporations with big six and non-big six auditors, or of firms that change from one to the other. This result is inconsistent with the findings of previous studies. Khurana and Raman (2004) examined whether big four auditors provided higher quality audits relative to non-big four auditors in Asian countries during the period 1990-1996. To neutralise the potential confounding effects of cross-border differences, the authors investigated the relative quality of big four vs. non-big four auditors within each country separately so that each country serves as its own control. The results of the study suggests that the big four were not providing higher quality audits in Asian countries even prior to the 1997 Asian financial crisis. Finally, Krishnan (2005) argues that audit quality can vary within an audit firm, depending on location, and it is unfair to evaluate audit quality based on the size of audit firm.

2.2.5.4 Impact of Audit Fees and Competition on Audit Quality

Corporations evaluate likely audit quality and their willingness to pay additional fees during auditor selection. Hence, the combination of improved information regarding pricing and the ability to evaluate audit quality may justify corporations' paying of higher fees for high-quality services (Jensen & Payne, 2005a). Several empirical studies have addressed the issue of increasing competitiveness in the market for audit services and its impact on audit fees and audit quality. Some pointed out that high audit quality might cost higher audit fees (Zeithaml, 1988; Lichtenstein et al., 1993). Other studies suggest that audit fees should decrease as the level of competitiveness in the audit market increases (Jensen & Payne, 2005b). In addition, Pearson and

Trompeter (1994) argue that lower levels of competition could harm clients through higher fees and lower levels of service. Also, Chaney et al. (2003) argue that greater competition among audit firms results in lower fees and improved service quality. However, it may lead to reduced pricing with possibly detrimental quality effects. Similarly, Behn (2009) mentions that prior research has demonstrated that price competition leads to discounting, which can result in unrealistically low audit fees and poor audit quality.

Jensen and Payne (2005a) also believe that price competition affects audit quality. Therefore, audit firms are likely to re-evaluate their positions in the marketplace. Also, audit firms with relatively high production costs will provide services if the competitive environment allows them to charge fees commensurate with those costs. In other words, strong competition may lead to higher audit quality services. However, it may lead to lower audit fees, which affects audit firms due to the fact that they might accept lower audit fees, or exit the market. Also, some audit firms (possibly audit firms with a lack of experience) may use fees competition as an opportunity to exploit their competitive advantage by using audit fees to gain market share. Jensen and Payne provide evidence that price competition leads to lower audit fees and changes in market share for audit firms and leads to a reduction in the market share of big audit firms.

Copley and Doucet (1993) argue that increased competition and the resulting pressure to minimise audit fees have led to poor quality audits, despite the fact that economic theory generality predicts a positive relationship between competition and quality. The authors examine the impact of this apparent conflict on audit quality. The study finds that increased competition results in increased audit quality.

2.2.5.5 Lawsuit and Audit Quality

Auditing firms suffer indirect costs as a result of increasing lawsuits (Stice, 1991). Lys and Watts (1994) provide information on lawsuits alleging audit failures and examine variables derived from a qualitative analysis of both the legal conditions and the economic incentives to bring a lawsuit. The authors provide three factors that are necessary for a disclosure lawsuit. First, existence of cause, which includes practicing earnings management; the probability that the auditor could not discover the financial statements misleading, or discover it and failed to report that; and the existence of a loss by a plaintiff. Secondly, plaintiffs discover the cause. Finally, plaintiffs may have net benefits from the suit. The authors find that lawsuits naming auditors as defendants are more likely to be filed when client firms experience financial difficulties and poor stock price performance and receive qualified audit reports, when client firms are larger, when the client represents a relatively larger proportion of the auditor's revenues, and when the auditor employs unstructured audit technology.

Palmrose (1988) suggests that increasing frequency of lawsuits against an auditing firm is viewed as a negative signal about the quality of auditing services provided by the firms and impairs its reputation.

2.2.5.6 Other Factors that Affect Audit Quality

The concept of survival in the business world is linked to the achieved performance or organisation goals particularly in the long-term. Sudsomboon and Ussahawanitchakit (2009) argue that the importance of professional audit competencies has been brought to attention due to the fact that the reliability and quality of financial reporting is the first element for survival in an audit market. Also, the competencies help to predict performance outcomes and provide an explanation for discrepancies in performance.

Furthermore, audit knowledge refers to the understanding of the relevance of accounting and auditing standards, the audit process, audit technique and client evaluation, which have an influence on audit achievement. Audit knowledge needs a high level of education and training in audit and related subjects. Auditing is also an essential part of the developing systems of responsibilities and accountability within firms in particular and society worldwide in general. Knowledge content of audit professional is composed of audit of historical financial information, financial accounting and reporting information technology, which have an influence on audit achievement.

Auditors should obtain knowledge about an audit client's business that is sufficient to enable them to identify and understand the events, transactions and practices that may have a significant effect on the financial statements or on the audit report. Auditors could obtain their information about an audit client from their experience with the client, publicly available information, and from the client themselves. In addition, the main reasons for obtaining this understanding are to evaluate the engagement risks associated with accepting the specific engagement and to help the auditors in determining whether all professional and ethical requirements regarding this client can be met (Hayes et al., 2005).

According to Navaratnam (1994), a quality audit depends on who is carrying out the audit and the location of the auditee. Auditing needs knowledge, skills and experience. These should be developed by a formal auditor training course, observations of audits, work experience in audits, and conducing audits. Also, auditors should possess a balanced knowledge of the system and its processes, people, procedures and outcomes. They must be able to understand different perspectives without any personal bias. Moreover, Catanach and Walker (1999) mention that audit quality is deemed to be a function of performance. Specifically, the auditor's ability, which includes knowledge, experience, technical competence, industry specialisation, technological proficiency and professional conduct, affects performance.

Several prior studies focus on auditing standard compliance in many countries. There are many types of auditing standard, such as the International Accounting Standard (IAS), International Standards on Auditing (ISAs) and any applicable international, national or local equivalents. These auditing standards require standards to ensure audit performance. Sudsomboon and Ussahawanitchakit (2009) argue that the credibility and reliability of financial statements are important. Therefore, independent external auditors are expected by the users to enhance the credibility and reliability of financial statements. Also, independent auditors are required to have competence about accounting standard compliance, which is established from knowledge, learning and experience. Prior studies suggest that audit quality is positively affected by the ability of external auditors. Moreover, the performance of external auditors influences their reputation and image. In conclusion, the ability of external auditors in accounting standard compliance has an effect on audit image or reputation.

In the early 1990s, the business environment went through a series of substantial changes, such as electronic data interchanging, electronic file transferring, electronic money transferring and e-business. These factors led to shifts, such as paperless accounting systems, all of which affected the traditional audit trail. Several studies have investigated the impact of these changes in the technology (which might include various tools and techniques that can be used by auditors, such as software packages or auditor-designed routines) on audit performance (Bierstaker et al., 2001; Rezaee et al., 2001; Flowerday et. al., 2006; Robson et al., 2007; Sudsomboon & Ussahawanitchakit, 2009). To meet the requirements of an audit, it is necessary to verify the accuracy of transactions to reveal fraud or error, which requires auditors to have the necessary technology knowledge.

Sudsomboon and Ussahawanitchakit (2009) investigated the influenced five dimensions of professional audit competencies (audit standard compliance, expertise judgment commitment, ethical and value awareness, client linkage efficiency and audit technique implementation effectiveness) on audit success, audit quality and audit reputation. Their study assumed that audit knowledge, self-experience and individual learning have an influence on professional audit competencies; moreover, that professional regulation, stakeholder force and professional competition are the moderators of the relationship. The study results indicated that professional audit competencies have a positive impact on audit quality and audit reputation, which affects audit success. Moreover, attributes of auditors, such as audit knowledge, self-experience and individual learning have positive associations with professional audit competencies.

It may be difficult to evaluate auditors attributes thus the researchers can apply alternative surrogates to evaluate audit quality, for example length of tenure, non-auditing services, firm size and competition to study the ability of auditors to detect earnings management. This research will study the influence of these alternative surrogates and attributes of auditors on audit quality.

2.3 Summary

This chapter has presented an introduction and general background on earnings management phenomenon. It began by broadly examining the theme of earnings management phenomenon, included earnings management definition, perspectives of earnings management, the accrual process and patterns of earnings management. The chapter also reviewed literature on the techniques of earnings management that may be used to practice earnings management. In addition, it reviews and discussions of the literature on earnings management motivations, which might be behind the practice of earnings management. These motivations include capital market motivations, external contract motivations, regulatory motivations, management compensation contract motivation, behavioural motivations, and communicating information motivations. Also, this chapter has reviewed the factors that affect motivation preferences. Finally, Low quality financial statements provide information that leads to problems in the allocation of resources. Furthermore, financial statements with extensive opportunistic earnings management inaccurately reflect corporation performance, and thus weaken users' ability to assess the corporation performance. Opportunistic earnings management has a negative relationship with the quality of financial reports. Therefore, constraining earnings management will positively influence the quality of financial reports. The literature of earnings management presents factors which influence earnings management practice and improve the quality of financial reports. Therefore, chapter discussed factors that constrict the practice of earnings management and the quality of financial reports. These factors are political forces, culture, accounting standards, internal corporate governance mechanisms and audit quality.

The majority of previous studies in the earnings management literature investigated earnings management phenomenon in developed countries. However, research is still lacking in developing countries generally and in Libya specifically, where more studies need to be done. This is due to the fact that companies located in developing countries have received little attention in the literature and have a different environment to companies located in developed countries such as poor management performance, not many listed companies, weak corporate governance structure, unsophisticated users, weak accounting profession and family-controlled firms.

Moreover, the previous studies in the earnings management literature investigated earnings management techniques and motivations in the listed companies.

This study investigates the earnings management techniques and motivations in the Libyan environment, which is different from the previous studies because of several reasons, such as the different economic system, cultural and legal environment from that in developed countries, corporate governance is in an early stage in Libya, and the ownership structures of corporations in Libya are largely determined by unlisted companies due to the fact that Libyan capital market was established in 2007. Hence, the majority of Libyan companies are unlisted, which are state- and family-owned companies. Therefore, the objective of this study is examining the earnings management in the unlisted companies of state-owned and private companies, where, to the best of the researcher's knowledge this study is the first of its kind that investigates earnings management techniques and motivations in the unlisted companies. Furthermore, this study is a comprehensive study of earnings management phenomenon in Libya because it investigates the existence of earnings management, why earnings management take place, how it is achieved, and how it can be constrained. The next chapter details the research methodology to achieve the research aims.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

The previous chapter provided a summary of the literature of the earnings management phenomenon; its definition and perspectives, examples of motivations and techniques that might lead to managing earnings and the actions that might constrict earnings management. The aim of this chapter is to explain the research methodology that was employed in undertaking the empirical study and the statistical methods used to analyse the data in order to achieve the objectives of this research. This study adopted a two-stage approach; the first stage, to investigate whether Libyan companies are practicing earnings management and to overview the direction of earnings management in Libyan companies. A secondary data analysis was used to achieve the above aims. Different versions of the Modified Jones model were used as a proxy to measure earnings management in Libyan companies. The sample size was 87 companies over three years.

The second stage of this study was to distribute a questionnaire to a number of external auditors, financial managers and senior accountants, internal auditors, lenders, tax officers and accounting academics. Moreover, the questionnaire survey was combined with semi-structured interviews with 18 interviewees, all of whom also answered the questionnaire. There were three main aims for this. The first aim was to supplement and amplify the data obtained from the questionnaire survey. The second objective was to gain a better understanding and to compare the different aspects of the responses that were received from the questionnaire about the earnings management phenomenon in Libya. Finally, the third aim was to investigate how the quality of the financial reports in Libya can be improved and mitigates the potential adverse consequences of manipulating the reported earnings. This complementary approach, which employed quantitative and qualitative techniques, was adopted to reduce the potential for errors and provide more insights into the different aspects of earnings management in Libya.

The chapter is organised as follows: Section Two provides the research objectives. Section Three presents the research questions. Section Four provides the theoretical approach underlying the research methodology, beginning with identifying the meaning of ontology, epistemology and methodology and the assumptions and paradigms under them. Section Five describes data collection methods which include the secondary data analysis, discusses the questionnaire survey used and the semi-structured interview conducted in the study. Section Six presents a summary of the chapter's contents. Figure 3.1 presents contents of this chapter.

3.2 Research Objectives

The objectives of this research are as follows:

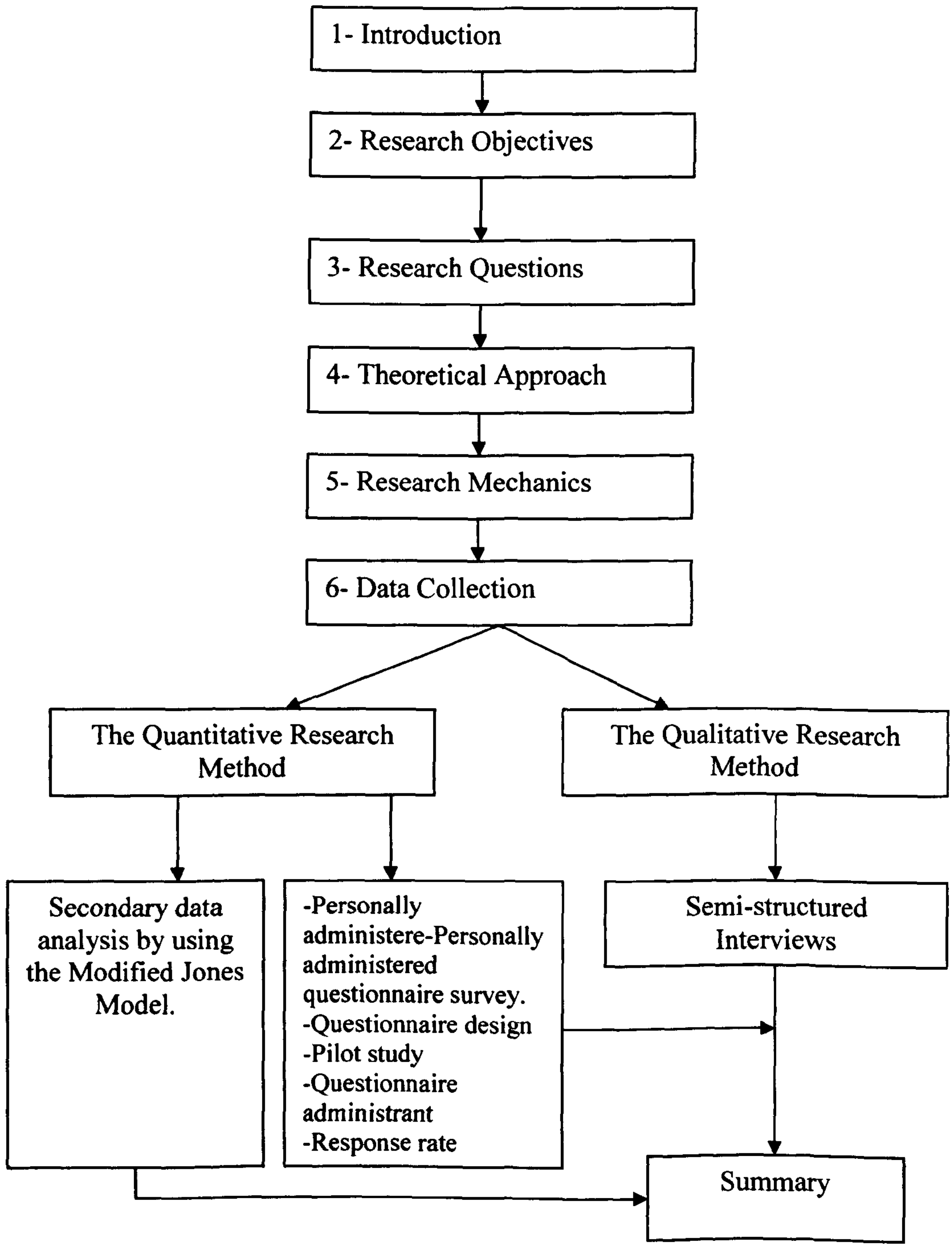
5- To examine the existence and direction of earnings management in the Libyan context.
6- To identify the motivations behind the practice of earnings management in Libyan corporations.
7- To found out the techniques used to practice of earnings management in Libyan corporations.
8- To determine the procedures that should be taken to constrain earnings management and improve the quality of financial reporting in Libyan corporations.

3.3 Research Questions

Taking into account the findings of the literature review and research objectives, the research questions investigated in this study are as follows:

5- To what extent is earnings management practiced in Libyan corporations?
6- What are the motives that encourage the practice of earnings management in Libyan corporations?
7- What are the most frequent techniques used to practice earnings management in Libyan corporations?
8- What are the procedures that should be taken to constrain earnings management and improve the quality of financial reporting in Libyan corporations?

The figure (3.1) contents of this chapter



Before going further into a description of the methods employed in this study, the study objective and questions are presented again to illustrate the relationship between the methods chosen and the study questions (Table 3.1). For each study question, the most appropriate method was chosen as the main method. In addition, other methods were used to complement and supplement the main method.

Table (3.1) the relationship between research questions, objectives, and methods.

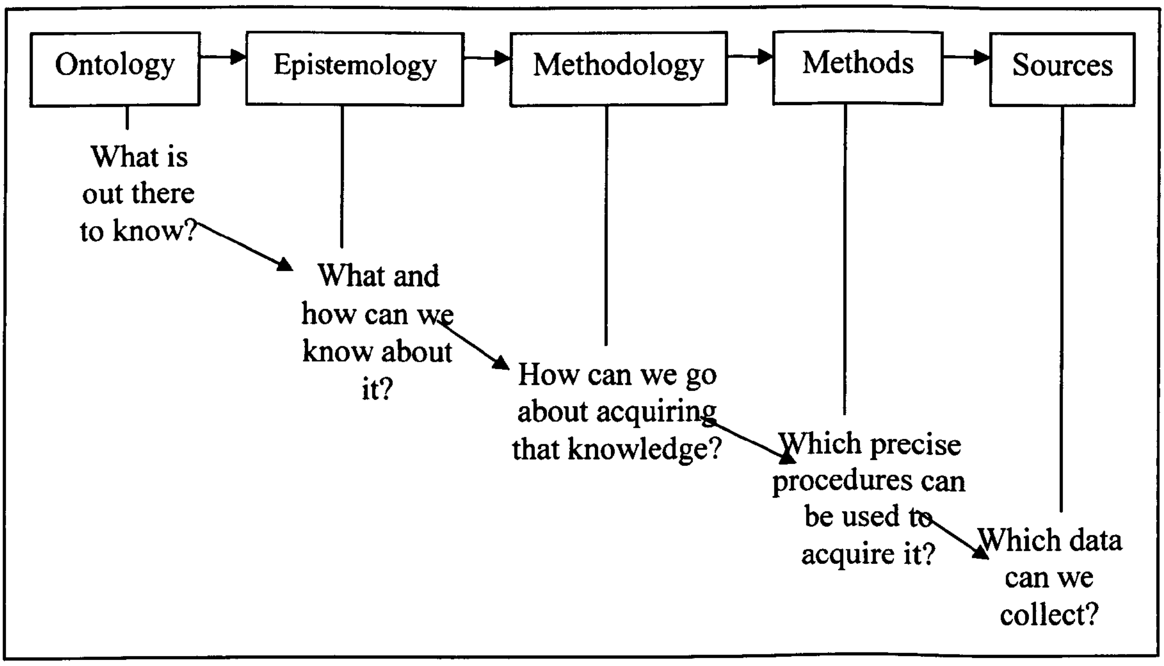
Study Question	Objectives	Methods
To what extent is earnings management practiced in Libyan corporations?	To examine the existence and the direction of earnings management in the Libyan context.	- Main method: Secondary data analysis by using the Modified Jones model.
What are the motives that encourage the practice of earnings management in Libyan corporations?	To identify the motivations behind the practice of earnings management in Libyan corporations.	- Main method: Questionnaire survey -Support method: Interview survey
What are the most frequent techniques that used to practice earnings manag-ement in Libyan corporations?	To found out the techniques used to practice earnings management in Libyan corporations.	- Main method: Questionnaire survey - Support method: Interview survey
What are the procedures that should be taken to constrain earnings manag-ement and improve the quality of financial reporting in Libyan corporations?	To determine the actions that should be taken to improve the quality of financial reporting in Libyan corporations.	- Main method: Questionnaire survey - Support method: Interview survey

3.4 Theoretical Approach

At the beginning of this section, it is useful to identify the meaning of ontology, epistemology and methodology. Ontology is concerned with the theory of social entities and with what exists to be investigated (Walliman, 2006, p.15). Ontology deals with questions about the nature of being and reality: what do we know and how can we know this? Epistemologies deal with questions about truth: what do we accept as a truth and how has this been constructed? (Grbich, 2007, P.6). In simple terms, it is the philosophy of knowledge or how we come to know. Epistemology is intimately related to ontology and methodology; as ontology involves the philosophy of reality, epistemology addresses how we come to know that reality, whereas methodology identifies the particular practices used to get knowledge of it (Krauss, 2005). Figure

3.2 introduces the relationship between ontology, epistemology and methodology, and also presents the interrelationship between the building blocks of research.

Figure 3.2: The interrelationship between the building blocks of research. (Grix, 2004, p.66)



In social science research, any research relies on three philosophical assumptions (Guba & Lincoln, 1994; Wass & Wells, 1994; Collis & Hussey, 2003; Maylor & Blackmon, 2005), which are as follows:

(i) The ontological assumption attempts to answer the question, what is the nature of knowable? Or what is the nature of reality? In other words, what is considered to exist and, just as importantly, what does not exist in the environment we are studying. The quantitative methods under this assumption assume that reality is objective and external to the researcher, while qualitative methods see reality as subjective and believe the researcher can understand it by examining the perceptions of human actors.

(ii) The epistemological assumption attempts to answer the question what is the nature of the relationship between the knower (the researcher) and what is being researched (or knowable)? The quantitative methods under this assumption assume that the researcher is completely independent from the thing that is being researched, whereas qualitative methods try to minimise the distance between the researcher and that which is being researched by involving different forms of participative enquiry.

(iii) The methodological assumption attempts to answer the question, how should the researcher (inquirer) go about finding out knowledge? In other words, it is concerned with the process of research and determining which paradigm will be used.

Many researchers worry about whether to use a quantitative or a qualitative method. Some use only one type of method, whereas others suggest that both types might occasionally be appropriate (Hyde, 2000; Sobh & Perry, 2006). However, choosing the research methodology is only one of the three components (ontology, epistemology and methodology) of a paradigm that would be used in the research. As mentioned before, any academic research relies on three assumptions: the nature of reality that is related to the ontological assumption, the relationship between the researcher and reality that is related to the epistemological assumption, the techniques used by the researcher to discover that reality which is related to the methodological assumption (Healy & Perry, 2000). The researcher's position in relation to these assumptions permeates the research and will determine the research philosophy, design and methods employed in data collection and interpretation of results.

The term "paradigm" "refers to the progress of scientific practice based on people's philosophies and assumptions about the world and the nature of knowledge" (Collis & Hussey, 2003, P.47). According to Guba and Lincoln (1994, p. 105), a paradigm is a "basic belief system or worldview that guides the investigator". In this sense, beliefs about the nature of reality and seeking knowledge have different philosophical foundations for different researches according to designing the research questions and how they answer these questions (Morgan, 2007). There are two main extreme paradigms of science which are the positivist paradigm (quantitative) and the phenomenological paradigm (qualitative) (Collis & Hussey, 2003). Each paradigm has fundamentally different assumptions concerning the nature of reality, and the relationship between the researcher and what is being researched.

This section focuses on the positivist paradigm. The term positivist was created by Auguste Comte in the 19th century (Cohen et al., 2000, p.22). This paradigm is an "application of the natural sciences to the study of social reality, an objective approach that can test theories and establish scientific laws. It aims to establish causes and effects" (Walliman, 2006, p.15). Also, Cassell and Symon (1994, p.2) stated that "the assumption behind the positivist paradigm is that there is an objective truth existing in the world which can be revealed through the scientific method where the focus is on measuring relationships between variables systematically and statistically". It is derived from the philosophy of science, which believes that reality is objective or independent of observers (Maylor & Blackmon, 2005), and founded on the belief that the study of human behaviour should be conducted in the same way as studies conducted in the natural sciences (Collis & Hussey, 2003). Therefore, this paradigm is characterised by the use of qualitative methods, such as a questionnaire and analytical statistical analysis (Stiles, 2003). In addition, it applies a deductive research strategy and observes theory as a tool to order, explain, predict and analyse testable hypotheses relating to relationships between measurable variables (Grix, 2004), these relationships being dependent on defining these variables (Remenyi, 1998; Collis & Hussey, 2003). Therefore, the assumptions of the positivist paradigm are appropriate for the natural sciences. However, it might be inappropriate for social science phenomenon, when it involves reflective human beings (Sobh & Perry, 2006), because it is difficult to separate the variables from their social environments and understand them without testing the perceptions they have of their own activities.

This section focuses on the phenomenological paradigm. The phenomenological paradigm is concerned with understanding human behaviour from the participant's own frame of reference. Also, it stresses the subjective aspects of human activity by focusing on the meaning, rather than measurement, of social phenomena (Collis & Hussey, 2003). Under this paradigm, the reality is subjective (Healy & Perry, 2000) or dependent on researchers since they are part of what is being researched, which means it allows them to be part of the setting and to get more in-depth data and knowledge on the subject (Easterby-Smith et al., 1991; Collis & Hussey, 2003). The methods under this paradigm are interpretative techniques that describe, translate and look for the meaning (VanMaanen, 1983). Therefore, this paradigm is characterised by the use of qualitative methods, such as interviews and observation (Stiles, 2003). Sobh and

Perry (2006) argue that constructivists believe that without human interaction in the processes, an enquiry into the social world becomes too abstract to understand. Also, they insist that measurement by quantitative data is essentially fallible because human beings' views or ideas are subjective and highly individual-based. However, there are some difficulties in using phenomenology due to the great deal of time and the resources needed to collect data, the difficulty to analyse and interpret data, and the difficulties of controlling the qualitative research or its progress and even its end-point (Sarantakos, 1998).

The two previous paradigms employ only a single method, which is quantitative for the positivist paradigm and qualitative for the phenomenological paradigm (Collis & Hussey, 2003). Alternatively, to obtain a better understanding of the phenomenon the researcher might use more than one method (both quantitative and qualitative). Mixed method research is an attempt to bridge the separation between both approaches which is considered to be a valuable research strategy, providing richer data and a greater understanding of the research problem (Onwuegbuzie et al., 2005; Johnson et al., 2007; Creswell, 2009). Healy and Perry (2000) and Stiles (2003) argue that the realist paradigm might reflect the middle ground between the positivist and phenomenological paradigms and can provide an element of unification by offering a philosophical bridge between them. Sobh and Perry (2006) state that mixed methods are appropriate within the realist paradigm.

Under the realist paradigm the real world is out there to discover (Guba & Lincoln, 1994; Healy & Perry, 2000; Sobh & Perry, 2006). In addition, reality is independent of human thought, but knowledge is always associated with the experiences of the researcher and human construction (Sobh & Perry, 2006), because the realists believe that reality varies from their particular view of it. Realists attempt to build various views of reality and seek to comprehend phenomena regarding to which ones are relative in place and time (Riege, 2003). The desire of realist research is to develop a "family of answers" that covers several contingent contexts and different reflective participants (Pawson & Tilley, 1997). The researcher seeks to adopt a contemporary scientific perspective, and this paradigm is characterised by the use of mixed methods (using quantitative methods such as structural equation modelling and qualitative method) (Healy & Perry, 2000; Stiles, 2003).

This study was greatly motivated to investigate the earnings management phenomenon because of the growing body of research that examines earnings management in developed countries. However, research is still lacking in developing countries generally and in Libya specifically. Therefore, the aim of this research is to understand the earnings management phenomenon in the Libyan environment. Hence, the research used mixed methods which are a combination of quantitative and qualitative approaches. According to Creswell and Clark (2007), it is advantageous to use both quantitative and qualitative methods for collecting data. Mixing the two methods can be done sequentially or simultaneously. Priorities of one method can be emphasised more than other method (fully mixed against partially mixed) and the timing of mixing may taken place at different stages (Creswell 2009; Leech et al., 2009). In the first stage of this research, the quantitative approach tests the existence of earnings management in the Libyan context by utilising secondary data analysis. Whereas, in the second stage, the quantitative approach (questionnaire) was combined with qualitative approach (semi-structured interviews) to collect primary data in order to achieve a better understanding of the earnings management phenomenon in Libya and to confirm the questionnaire findings.

3.5 Research Mechanics

This research, as mentioned above, used a combination of quantitative and qualitative approaches and secondary data and primary data, which is called mixed methods or a triangulation approach. According to Creswell and Clark (2007, p. 6), "Mixed methods research involves both collecting and analysing quantitative and qualitative data". Denzin, (1978, p.310) stated that triangulation means using more than one method or source of data in the same study of a social phenomenon". Collis and Hussey (2003) agree that applying different approaches, methods and techniques in the same research is called triangulation, which can overcome the potential bias and sterility of a single-method approach. Moreover, a triangulation approach draws from multiple theoretical perspectives and research methods and it assists the researcher to capture a comprehensive, holistic and contextual portrayal of events or the social phenomenon under research (Hoque, 2006). There are four types of triangulation (Collis and Hussey, 2003):

- **Data triangulation:** using a variety of data sources within a single study, where data is collected at different times or from different sources in the study of a phenomenon.
- **Investigator triangulation:** where different researchers independently collect data on the same phenomenon and compare the results.
- **Methodological triangulation:** where both quantitative and qualitative methods of data collection are used.
- **Theories triangulation:** where a theory is taken from one discipline and applied to explain a phenomenon in another discipline.

In light of the above and to achieve the aims of this study, it was decided to apply both data triangulation and methodological triangulation to cancel out the method effect and to enhance confidence in the obtained results. Firstly, regarding data triangulation, the researcher collected both secondary data and primary data about the earnings management phenomenon in Libya. Secondly, regarding methodological triangulation, both quantitative and qualitative methods were used in different stages of the study. Moreover, this research was achieved in two stages: firstly, secondary data analyses, which include analysing financial information of Libyan corporations; secondly, distributing a questionnaire and also semi-structured interviews to supplement and clarify findings derived from the questionnaire.

3.6 Data Collection and Analysis Methods

As mentioned earlier, this study collected data about the earnings management phenomenon in Libya. This included secondary data from the financial reports of Libyan corporations, and primary data using a questionnaire and semi-structured interviews. This section will discuss these data collection methods:

3.6.1 Secondary Data Analysis

The aim of this stage is to determine the extent of earnings management in the Libyan context. This section contains an estimation model that is used to achieve the aim of this stage, and a description of the sample selection of Libyan companies.

3.6.1.1 Estimating Earnings Management Approaches

According to McNichols (2000), measuring the management's discretion over earnings is the essential element of any test for earnings management. The accounting literature has provided a number of approaches that have varying characteristics. McNichols provides three common approaches that are typically employed to test earnings management, which as following:

(1) The aggregate accruals approach: This approach utilises the change in total accruals as a measure of discretionary accruals. Accruals-based approach is commonly utilised as signals for earnings management activity (Healy, 1985; Jones, 1991; Dechow et al., 1995). The divisions of total accruals into two components by using regression analysis, which means not all accruals, reflect earnings management activities because accruals may also be utilised to increase the informativeness of financial reports. Total accruals separate into discretionary accruals, which represent those accruals where managers have some degree to exercise judgment, and non-discretionary accruals, which represents those accruals that are largely determined exogenously, and which therefore play no part in the manipulation of earnings. According to Beaver (2002), the major issue of this approach is the ability to exhibit conditioning variables that reflect the components of the total accruals. Therefore, researchers have tried to estimate non-discretionary and discretionary components.

According to McNichols and Wilson (1988), there are several issues that influence the models of aggregate accruals approach. They stated that the models in this approach require a proxy for managers' discretion over accruals. The authors started with dividing total accruals (TA) into discretionary accruals (DA) and non-discretionary accruals (NDA) components:

$$TA = DA + NDA$$

The accounting literature provides several total accruals models based on detecting earnings management, such as Healy Model, DeAngelo Model, Industry Model, Jones Model, Modified Jones Model, Margin Model, D&D Model.

(2) The specific accrual approach: Instead of measuring earnings management by using aggregate accruals, the specific accruals approach focuses on a set of specific accrual or the influence of managers' discretion on specific accrual to test earnings management (McNichols, 2000; Marquardt and Wiedman, 2004). In other words, the Specific Accrual Approach studies the behaviour of each specific accrual to recognise its non-discretionary and discretionary components.

Using the specific accrual rather than aggregate accruals can be effective because the researcher can recognise the accounting model and what the unmanaged expense ought to be. The specific accrual approach have advantages and disadvantages (McNichols, 2000). The advantages of the specific accrual approach are firstly, according to McNichols (2000, p.333), "the researcher can develop intuition for the key factors that influence the behaviour of the accrual, exploiting his or her knowledge of generally accepted accounting principles". Secondly, a specific accrual approach is able to be useful in industries where the work of the business generates the accrual in question to be a material and becomes the aim of judgment and discretion. A specific industry set is also able to present insight into variables to control and to better recognise the discretionary components of a specific accrual. Thirdly, researchers can estimate the relationship between explanatory factors and the single accruals directly, while in the aggregate approach, different components may relate differently to explanatory variables, which might result in estimation errors for parameter estimates.

On the other hand, the disadvantages of using the specific accrual approach are: firstly, this approach can detect earnings management when it is clear which accruals management is used to manipulate earnings. However, the power of this approach will reduce when it is not clear which accrual is used by management to manipulate earnings. Moreover, when the objective of the test is to examine the existence of earnings management rather than examine whether a specific accrual is used to manage earnings, then each specific accrual requires a test to find out whether it is used to manage earnings. Secondly, the specific accrual approach needs more knowledge about the business and more data than the aggregate accruals approach. This factor increases the cost of using the specific accrual approach. Thirdly, the number of corporations that manage a specific accrual may be smaller than corporations with aggregate accruals. This may result in a limitation for generalisation of the results of the specific accrual test. Also, it may preclude identification of earnings management behaviour if specific accruals are not sufficiently sensitive.

Furthermore, Ronen and Yaari (2007) argue that if the discretionary component is smaller than non-discretionary accruals component of a given single account, the latter may drown the former, which results in a type (Π) error. Moreover, they state that it is difficult to detect earnings management by utilising a portfolio of accruals, and if the result of the test shows there is no earnings management in one account that does not imply that there is no earnings management in another.

The previous studies that attempt to measure earnings management by utilising a specific accrual in the literature can be classified into two categories: firstly, single accrual studies, such as McNichols and Wilson (1988) studied the debts provisions; Petroni (1992) and Beaver et al. (2003) Studied the claim loss reserves of property casualty insurers; and Wahlen (1994) studied the provision and allowance for loan losses. Secondly, set of accruals studies, such as Beneish (1997) and Marquardt and Wiedman (2004).

(3) The distributional approach: in an attempt to detect earnings management, studies such as Burgstahler and Dichev (1997), DeGeorge et al. (1999) and Holland and Ramsay (2003) investigated the statistical properties of earnings, determining behaviour that affects it. These attempts are based on the distribution of earnings after its management. This approach is different to the previous approaches, which attempt to detect earnings management activities through using discretionary accruals. This approach uses tests of expected frequencies of earnings and assumes that management has motivations to meet certain earnings benchmarks, such as sustaining recent profit performance or reporting positive profits. The distributional approach focuses on the statistical properties of earnings to determine behaviour that affects earnings, and is based on the distribution of earnings after management (McNichols, 2000). According to Goncharov (2005), the distribution approach tests the existence of earnings management by using a distribution of scaled performance measures (i.e. earnings and changes in earnings).

Healy and Wahlen (1999) state that the differences between the distributional approach and other approaches are: firstly, the researcher does not have to estimate abnormal accruals (potentially noisy). Instead, the researcher checks reported earnings distribution for abnormal discontinuities at certain thresholds. The researcher indicates the attributes of the earnings distribution for a large sample of corporations, before asserting that these characteristics are related to earnings management. Secondly, the researcher is able to estimate the earnings management pervasiveness at thresholds. However, the weaknesses of the distribution approach are: firstly, the approach does not measure the magnitude of earnings management. Secondly, the approach does not identify the specific methods that are used to manage earnings.

Moreover, according to Goncharov (2005), the distribution approach has several distinct features which are: firstly, the approach traces earnings management with both accruals and cash flows because it examines for irregularities in the reporting of aggregate earnings numbers. Secondly, the users of this approach need to use a hypothesis about a discontinuity (irregularity) in a certain region of the empirical distribution in the presence of income manipulations. Finally, the statistical significance of this discontinuity is evaluated by comparing the distributional frequencies of managed (empirical) and unmanaged (theoretical or expected) numbers.

Furthermore, McNichols (2000) states that the distribution approach does not explain the methods that are used to manage earnings. This approach is also silent on the motivations that are behind practicing earnings management to reach specific benchmarks. Moreover, Durtschi and Easton (2005) present evidence that the shapes of the frequency distributions of earnings, which are used to measure the existence of earnings management, are influenced by, firstly, deflation (using, for example, market capitalisation or price). Secondly, it is influenced by the sample selection criteria which lead to differential inclusion/exclusion of observations to the left of zero versus observations to the right of zero. Thirdly, it is influenced by differences between the characteristics of observations to the left of zero and observations to the right of zero (such as market pricing and analyst optimism/pessimism). Finally, it is influenced by the combination of previous factors. The authors conclude that the shapes of the frequency distributions of earnings cannot be used as a measurement of earnings management.

Several studies apply the distribution approach to examine the existence of earnings management, such as Burgstaher and Dichev (1997), DeGeorge et al. (1999), Beatty et al. (1999) and Holland and Ramsay (2003). These studies focus on the earnings behaviour around a specific benchmark or thresholds, and see whether the occurrence of earnings below and above the benchmark are distributed smoothly or reflect discontinuities because of the practice of earnings management. In other words, they focus on the density of the earnings after management.

As discussed above regarding approaches that have been used to examining earnings management. This study follows aggregate approach because it is the most common approach used to detect earnings management and the data required for using this model are available in the Libyan environment. In addition, using specific accrual approach will not give the required result when the objective of the test is to examine the existence of earnings management because it is examining whether a specific accrual is used to manage earnings. Moreover, the distributional approach does not measure the magnitude of earnings management and it is required data that is not available to this study.

3.6.1.2 The Aggregate Accrual Approach Models

3.6.1.2.1 The Healy Model (1985)

By developing an empirical approach, Healy (1985) examines earnings management by comparing the mean of total accruals across the sample corporations separated into three groups, conditional on the earnings management direction. In addition, Healy (1985) predicted that systematic earnings management takes place in every period. The author expects that in the first group, the earnings reports will be managed to increase earnings. However, in the other two groups he expects that earnings reports will be managed downward. Deductions are then made through two comparisons of the mean total accruals in the first group, where earnings are forecasted to be managed upwards, with the mean total accruals in the other two groups, where earnings are predicted to decrease. The model treats in an equal way the set of observations for which earnings are forecasted to increase as the estimation period and the set of observations for which earnings are forecasted to decrease as the event period. The mean total accruals from the group in which earnings are predicted to be managed upwards represent the proxy for non-discretionary accruals. This assumes the following discretionary accruals model:

$$NDA_{\tau} = \frac{\sum_{t} TA_{t}}{T}$$

Where:

NDA= estimated non-discretionary accruals,

TA = total accruals scaled by lagged total assets,

T= 1, 2, ...T is a year subscript for years included in the estimation period, and

t= a year subscript indicating a year in the event period.

3.6.1.2.2 The DeAngelo Model (1986)

The DeAngelo model has seldom been used in the previous empirical studies on earnings management (Dechow et al., 1985; Ronen & Yaari, 2007). DeAnglo specifies total accruals as the aggregate of discretionary and non-discretionary accruals. Total accruals are calculated by subtracting cash flow from operations, which is obtained via treating working capital for all shifts in all recent operating accounts, from net income. Also the author hypothesises that discretionary accruals follow a random walk process. Thus, the lagged total accrual as a proxy to estimate non-discretionary accruals of the current year:

$$NDA_{t} = TA / A_{t-1}$$

where:

NDA= estimated non-discretionary accruals,

$TA / A_{\tau-1}$ = total accruals scaled by lagged total assets, and

t= a year subscript indicating a year in the event period.

According to Dechow et al. (1985, p 198), "the DeAngelo model can be viewed as a special case of the Healy model, in which the estimation period for non-discretionary accruals is restricted to the previous year's observation. A common characteristic of the Healy and DeAngelo models is that they both use total accruals from the estimation period to proxy for expected non-discretionary accruals". The discretionary accruals component of total accruals is calculated then as the first difference between the year's t total accruals and the total accruals of the year t-1. Working under the assumption of no earnings management, DeAngelo hypothesises that the first difference will be equal to zero. If there is earnings management in the current year then the model displays a difference which is higher or less than zero, and it is as a proxy for discretionary accruals. As a result, the model will detect earnings management only if both of the assumptions are accurate; the first assumption is non-discretionary accruals are equal over periods "constant", and the second assumption is discretionary accruals have value equal to zero in the estimation period. Therefore, if both assumptions are not accurate, this means the model will calculate non-discretionary accruals with error. Moreover, Dechow (1994) gives evidence that the random walk model is unsuitable for total accruals. However, the practical advantage of the model is the short estimation period.

Friedlan (1994) stated that the random walk approach is not suitable for corporations that tend to be growing. The growth will influence the corporation's operations, including accruals. Thus, when growth is disregarded, that will lead to incorrect results, because the change in the total accrual in the analysis period, which is attributed to preparer discretion, may in fact be due to changes in non-discretionary accruals caused by growth. As a result, Friedlan (1994) presents the following modified model of the DeAngelo model.

$$Discretionary\ accruals_t = \frac{Total\ accruals_t}{Sales_t - Sales_{t-1}} - \frac{Total\ accruals_{t-1}}{Sales_t - Sales_{t-2}}$$

Friedlan (1994) suggests a change in the DeAngelo model by using the change in sales rather than the level of sales. Friedlan (1994) contends that the change in sales is a more appropriate deflator than the level of sales because the change in accruals related to variations in operating activity is proportionate to the change in sales, not to the sales level.

Moreover, Thomas and Zhang (2000) suggest that the Healy and the DeAnglo models present two extremes of non-discretionary accrual behaviour: the random walk and the mean-reverting cases. They suggest that a model that incorporates both approaches with signed predicted weights may perform better. For these purposes, the authors first divide total accruals into two accounts: current and non-current, because the mean reversion process of these two components is likely to be different:

$$TA / A_t = CA + NCA$$

where:

TA / A_t = total accruals scaled by lagged total assets,

CA = current component of total accruals, and

NCA= non-current component of total accruals.

Then they design two models, where weights are predicted cross-sectionally:

$$1\text{-}\quad NDCA_\tau = aCA_{\tau-1} + (1-a)\frac{\sum_{t=\tau-5}^{\tau-1} CA_t}{5}$$

$$2\text{-}\quad NDNCA_t = bNCA_{t-1} + (1-b)\frac{\sum_{t=t-5}^{t-1} NCA_t}{5}$$

where:

a,b = predicted values of current (a) and non-current (b) weights respectively,

$NDCA_t$ = non-discretionary current component of total accruals, and

$NDNCA_t$ = non-discretionary non-current component of total accruals.

Predictions for the current and non-current accruals are then summed to obtain the proxy for the non-discretionary accruals in the period t.

3.6.1.2.3The Industry Model

Dechow and Slona (1991) developed the industry model to detect earnings management. The model does not have the assumption that non-discretionary accruals are constant over time. The model assumes that a corporation's accruals development can be clarified through accruals reported by other corporations that are working in the same industry. Also, the model hypothesises that the difference in the determinants of non-discretionary accruals are largely the same in the same industry.

$$NDA_t = \gamma_1 + \gamma_2 median_I(TA_t)$$

where:

NDA= estimated non-discretionary accruals,

$median_I(TA_t)$ = the median value of total accruals scaled by lagged assets for all non-sample corporations in the same two-digit standard industrial classification (SIC) code,

The corporation specific parameters γ_1 and γ_2 are estimated using Ordinary Least Squares (OLS) on the observation in the estimation period, and

t= a year subscript indicating a year in the event period.

According to Dechow et al. (1995), the industry model has some limitations because it only eliminates the difference in non-discretionary accruals which are general across corporations in the same industry. On the other hand, if changes in non-discretionary accruals basically reflect responses to changes in the corporation's specific circumstances, then the model cannot use the discretionary accruals proxy to extract all non-discretionary accruals. Moreover, Goncharov (2005) states that the industry model hypothesises that discretionary accruals are not correlated across corporations in the same industry. This hypothesis is incorrect when several corporations attempt to manage earnings in the same direction (increase or decrease) over a significant period of time in the estimation and test years. According to Ronen and Yaari (2007), the test considers instead the difference in TA between a corporation with incentives to manage earnings and its colleagues that lack these incentives. Moreover, the model has several disadvantages; firstly, the model applies only to event studies in which not all corporations experience the same event. Secondly, even if not all corporations in the industry have the same incentives to manage earnings, if other corporations in the industry also manage earnings in the same direction, the test is biased against finding earnings management, and if other corporations manage earnings in the opposite direction, the test might indicate non-existent earnings management.

3.6.1.2.4 The Jones Model

Jones (1991) studied earnings management in U.S corporations during import relief investigations by the U.S International Trade Commission (ITC). Import relief is made by the ITC to protect domestic producers against competition by foreign corporations. The Jones Model is more powerful than all of the previous models (Goncharov, 2005) because the model relaxes the hypothesis that non-discretionary accruals are constant over time, where previous models allow the change in non-discretionary accruals, which is related to changes in economic conditions. The model tries to control the corporation's economic circumstances that may lead to changes in non-discretionary accruals. In addition, the model relates total accruals to the change in revenues and the level of gross property, plant and equipment. The model developed a corporation-specific time-series estimation to estimate non-discretionary accruals in the event year, which is as follows:

$$NDA_{it} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it}/A_{it-1}) + \beta_2(PPE_{it}/A_{it-1})$$

where:

NDA = estimated non-discretionary accruals,

ΔREV_{it} = revenues in year t less revenues in year t-1

PPE_{it} = gross property, plant and equipment in year t

A_{t-1} = total assets at t-1, and

$\alpha_1, \beta_1, \beta_2$ firm-specific parameters.

Estimates of the corporation-specific parameters, α_1, β_1, and β_2 are generated utilising the following equation in the estimation period:

$$TA_{it}/A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it}/A_{it-1}) + \beta_2(PPE_{\tau}/A_{it-1}) + \varepsilon_{it}$$

Jones utilises gross property, plant and equipment and revenue change in revenue control for changes in the economic circumstances of the corporation and, therefore, for changes in non-discretionary accruals. Revenue is utilised to control the economic environment of the corporation because it is able to measure the corporations' operations before managing earnings, (revenues influence to some extent accounts receivable, accounts payable and inventory that constitute working capital accruals). Furthermore, gross property, plant and equipment are utilised to control the portion of total accruals that are related to the non-discretionary depreciation expense (gross property, plant and equipment controls for changes in depreciation and amortisation expense that is a part of total accruals) (Goncharov, 2005).

According to Ronen and Yaari (2007), the Jones model employs two stages which are: the estimation stage, wherein the coefficients of the normal accruals are determined, and the event stage, wherein the abnormal accruals are isolated in order to test for earnings management. Also, total accruals are equal to normal accruals and discretionary accruals:

-Total accruals are derived from the financial data of a corporation.

-Normal accruals are estimated from the change in sales and property, plant and equipment, deflated by the beginning-of-the-period assets.

- Discretionary accruals are equal to total accruals minus normal accruals.

The model may not be enough to detect earnings management when the aim of managers practicing earnings management is income-decreasing (Jones, 1991). According to Dechow et al. (1995), a hypothesis of the model is that revenues are non-discretionary accruals. Thus, the model will eliminate part of the managed earnings from the discretionary accruals proxy.

According to Ronen and Yaari (2007), the misspecifications of the Jones model are: firstly, the validity of equating abnormal accruals with discretionary accruals because there is some variation in accruals results from changing business conditions and the consequent change in strategy and operating rather than from practicing earnings management. Secondly, applying the model with a small sample tends to weaken the power of the model because it generates large standard errors. Thirdly, contaminated data causes a problem because if accruals are measured with an error, the measurement of discretionary accruals may also be incorrect. To some extent, this issue is unavoidable, as research relies on public data that is not always complete.

3.6.1.2.5 The Modified Jones Model

The limitation of the Jones model is that when discretion is exercised over revenues, the model measures discretionary accruals with an error (Dechow et al., 1995), and the model is unable to utilise revenues as a proxy for earnings management (Goncharov, 2005). Dechow et al. (1995) criticise the hypothesis of the original Jones model, which assumes all revenues are non-discretionary. Therefore, the authors modified the Jones model to eliminate its weakness. The modified model also detects earnings management by using revenue recognition. The difference between the Jones model and the Modified Jones is the former model hypothesises that discretion is not exercised over revenue in either the estimation period or the event period, whereas the latter model hypothesises that earnings management causes all changes in credit sales in the event period because manipulation of credit sales recognition may be easier than that of cash sales. The Modified Jones model calculates non-discretionary accruals as presented below:

$$NDTA_{it} / A_{it-1} = \alpha_1 (1 / A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2 (PPE_{\tau} / A_{it-1}) + \varepsilon_{it}$$

where:

$NDTA_{it} / A_{it-1}$ = total accruals of corporation (i),

ΔREC_{it} = net receivable in years t less net receivables in year t-1,

ΔREV_{it} = revenues in year t less revenues in year t-1,

PPE_{it} = gross property plant and equipment in year t,

A_{it-1} = total assets at (t-1), and

a_1, β_1, β_2 = firm-specific parameters.

The change in revenues in the Modified Jones model is adjusted for the change in sales on credit (the change in receivables in the event period). The Modified Jones model assumption comes from the fact that it is easier for managers to practice earnings management by exercising discretion over the recognition of the part of revenues from sales on credit than over the part of revenues from cash sales. Thus, they hypothesise that all changes of sales on credit result from earnings management activities of the corporation.

Recent studies have utilised a cross-sectional Modified Jones model, such as: Becker et al. (1998); Guidry et al. (1999) and Peasnell et al. (2005). The cross- sectional Modified Jones is similar to the original model, which uses time-series data to estimate the parameters of the model. However, the cross-sectional Modified Jones uses cross-sectional data to estimate the parameters of the model.
Teoh et al. (1998a and b) decompose total accruals into current and long-term components, and evaluate them separately because management has more discretion over the short term, which includes adjustments of short-term assets and liabilities that support the day-to-day operations, than over long-term accruals, which includes adjustments of long-term net assets that can be increased by adjusting depreciation, decreasing deferred taxes or realising unusual gains.

Furthermore, Dechow et al. (1995) stated that discretionary accruals are likely to be misspecified for corporations with extreme levels of performance. Therefore, Larcker and Richardson (2004) added two independent variables to the Modified Jones model to reduce measurement error, which is correlated with the discretionary accruals. These variables are: firstly, book-to-market ratio, which controls for expected growth in operations; if left uncontrolled, growth will be picked up as discretionary accruals. Secondly, operating cash flows, which controls for current operating performance. The changes of Larcker and Richardson to the Modified Jones model make the model more powerful to detect earnings management.

According to Jones et al. (2008), the changes of Larcker and Richardson to the Modified Jones model make the model more powerful to detect earnings management because firstly, it identifies unexpected accruals that are less persistent than other components of earnings. Secondly, it has far greater explanatory power. Finally, it identifies discretionary accruals that are associated with lower future earnings and lower future stock returns. The Modified Jones model with book-to-market ratio and cash flows can be represented as follows:

$$TA_{it} / A_{it-1} = \alpha_1 (1 / A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2 (PPE_t / A_{it-1}) + \beta_3 (BM_{it}) + \beta_4 (CFO_{it} / A_{it-1}) + \varepsilon_{it}$$

where: BM_{it} = the book value of common equity over the market value of common equity,

CFO_{it} = operating cash flows

Other variables are the same as defined in the Modified Jones model.

Moreover, Kothari et al. (2005) examined whether a performance-matched approach, which is a type of control sample approach, is powerful and specified at testing earnings management. Also, performance matching on return on assets controls for the effect of performance on measured earnings management. The authors adjust the Modified Jones model by adding income before extraordinary items (ROA). The model is designed to present a comparison of the effectiveness of performance matching versus including a performance measure in the accruals regression. The model is presented below:

$$TA_{it} / A_{it-1} = \alpha_1 + \beta_1(1/A_{it-1}) + \beta_2(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_3(PPE_{it} / A_{it-1}) + \beta_4(ROA_{it(orit-1)}) + \varepsilon_{it}$$

where: ROA_t = is income before extraordinary items for year (t) over (A_{t-1}), and other variables are the same as defined in the Modified Jones model.

There are several studies that compare the ability of earnings management models. Dechow et al. (1995) compared the performance of five models to detect earnings management (the Healy, DeAngelo, Jones, Modified Jones, and Industry models). The authors provide evidence that the Modified Jones was the most powerful in detecting earnings management. Likewise, by regressing earnings on non-discretionary earnings and discretionary accruals, Guay et al. (1996) evaluated the earnings management (discretionary accruals) models; these include the Healy, DeAngelo, Industry, Jones and Modified Jones models. They find that the Jones and the Modified Jones are stronger than other models, because they provide discretionary accruals which are compatible with the opportunistic accruals and performance measure assumptions.

In order to detect earnings management, Bartov et al. (2001) compared the capacity of the cross-sectional Jones Model and the cross-sectional Modified Jones Model, with their time series counterparts. The authors found that the time-series versions of the models were less powerful than the cross-sectional versions of the models in detecting earnings management. This is because utilising a cross-sectional model in a large sample size should give results that are less subject to a survivorship bias. Also, Subramanyam (1996) preferred to utilise the cross-sectional Jones model than the time-series Jones model for several reasons. Firstly, the cross-sectional model generates a larger sample and a higher number of observations. Secondly, the time-series model requires estimation over a period of up to ten years and therefore introduces misspecification due to non-stationarity. Finally, the time-series approach may lower the effectiveness of tests (i. e. Type II error) due to overlapping estimation and treatment periods.

Further, there are two different methods to calculate accruals. These methods are:

- The balance-sheet approach: under this approach total accruals are the change in non-cash current assets minus the change in current liabilities, excluding the current portion of long-term debt less depreciated.
- The statement-of-cash flows approach: under this approach total accruals are the difference between income before extraordinary items and discontinued operations and cash flow from operations.

3.6.1.2.6 The Kang and Sivaramakrishnan Model (KS model)

Kang and Sivaramakrishnan (1995) point out that the original Jones-type models, which try to estimate the managed component (discretionary accruals), face statistical difficulties, which are associated with the violations of the Ordinary Least Squares (OLS) assumptions. These difficulties that face the aggregate models are: firstly, errors in the variables problem; these errors might be due to some of the independent variables not being observed by researchers. Also the proxies for independent variables are likely to be affected by earnings management. This error issue causes a measurement error which is correlated with the regressors, and results in inconsistent parameter estimates, and biasing the managed accrual proxy.

Secondly, omitted variables problem; this is a result of ignoring the cost of goods sold and other expenses in the model. Liabilities (a part of aggregated accruals) are more likely to be driven by expenses than by revenues. The original Jones model includes only revenues as a control for the normal portion of total accruals.

Thirdly, a simultaneity problem; as Kang and Sivaramakrishnan (1995, p.355) mention, "a simultaneity problem arises because both the regressors and the regressand are jointly determined by the constraints required by (GAAP) and double-entry bookkeeping" that may lead to inconsistent coefficient estimates with incorrect standard errors.

The above problems can lead to a decrease in the power of the statistical test and erroneous inferences regarding earnings management. Kang and Sivaramakrishnan (1995) mitigate the simultaneity problem and errors in variable problems through utilising an instrumental variable method, lagged values of regressors and other lagged income components are used as instruments because they are correlated with the regressors and are presumed to be not correlated with regression error. Also, the Kang and Sivaramakrishnan model mitigates the omitted variables problem by including more variables, cost of goods sold and other expenses in the model.

Apart from the estimation procedure, the Kang and Sivaramakrishnan model has several key components that distinguish it from the other aggregate accrual models. The Kang and Sivaramakrishnan model estimates discretionary accruals with the help of the level (versus the change) of current assets and liabilities, as Kang (1999, p.11) mentioned: "When earnings management is isolated in one period, both levels and changes of current assets and liabilities contain an equal amount of managed accruals". Also, the model excludes tax related expenses and accruals.

Kang and Sivaramakrishnan (1995) propose the following model for the estimation of the accounting accruals balance:

$$AB_t = \phi_0 + \phi_1\left(\frac{AR_{t-1}}{REV_{t-1}} REV_t\right) + \phi_2\left(\frac{APB_{t-1}}{EXP_{t-1}} EXP_t\right) + \phi_3\left(\frac{DEP_{t-1}}{GPPE_{t-1}} PPE_t\right) + \beta PART_t + \upsilon_t$$

where:

AB_t = balance of non-cash current assets (net of tax receivables) less current liabilities (net tax payables) and depreciation and amortisation expense scaled by total assets in year t-1,

AR = accounting receivable,

REV = net sales revenues,

EXP = operating expenses include: cost of goods sold, selling and administrative expenses before depreciation,

APB = accounts balance related to expenses, (e.g. inventory, prepaid expenses and accounts payable,

DEP = depreciation and amortisation,

$GPPE$ = gross property, plant and equipment, and

$PART$ = partitioning variable that captures factors that allegedly motivate earnings management.

Regression parameters are estimated using a generalised method of moment procedure.

3.6.1.2.7The Margin Model

Peasnell et al. (2000) suggest a different procedure for modelling the non-discretionary component of current accruals. The authors argue that their model illustrates the normal accrual process and all variables have a clear economic substance. Depreciation is excluded from the model, as managers are not expected to use depreciation charges as an efficient instrument for earnings management. The authors' model only looks at working capital accruals, which they calculate in the following way:

$$CCA_t = (\Delta INV_t + \Delta REC_t) - \Delta PAY_t + UNIDEN_t$$

$$\Delta INV_t = PUR_t - COGS_t$$

$$\Delta REC_t = REV_t - CR_t - BDE_t$$

$$\Delta PAY_t = PUR_t - CP_t$$

$$CCA_t = (REV_t - COGS_t - BDE_t) + (CP_t - CR_t) + UNIDEN_t$$

$$= smREV_t - cmCR_t + UNIDEN$$

where:

CCA = working capital accruals,

ΔINV = purchase of materials (PUR) - cost of finished goods sold ($COGS$),

ΔREC = revenue from credit sales (REV) - cash received from customers (CR) - bad debt expense (BDE),

ΔPAY = purchase of materials (PUR) – cash paid to suppliers (CP),

$UNIDEN$ = all non-cash current assets other than stocks and trade debtors and all current liabilities other than credit sales,

sm = the gross margin on sales, and

cm = the gross cash contribution.

The above equation can be used to determine accruals recognition before it is managed. Working capital accruals, which are not a product from cash collections and sales in the year, are classified as discretionary accruals. Working capital accruals are presented as a linear function of two drivers, and the authors develop an empirical model that should predict the normal level of working capital accruals:

$$NDCA_t = a_0 + a_1 \Delta REV_t + a_2 CR_t + \varepsilon_t$$

where:

REV = total sales,

CR = total sales – change in trade debtors,

a_0, a_1, a_2 = regression coefficients, and

ε_t = regression residual.

In this equation a_1 represents the mean value of the sales margin and a_2 represents the mean value of cash margin. This sign of a_1 is predicted to be positive and the sign of a_2 negative. The prediction error in the event period is a proxy for earnings management (Goncharov, 2005).

Peasnell et al. (2000) stated that the Margin model is a suitable method to detect earnings management through expenses, except bad debt expense. The model is better than the original Jones and Modified Jones models for identifying discretionary accruals when cash flow performance is extremely low or high. However, the standard Jones and the Modified Jones models are more suitable if the corporation's management manage earnings by manipulating bad debt accounts or revenue.

3.6.1.2.8 The Dechow and Dichev Model (measures of accruals quality)

Dechow and Dichev (2002) present a model that facades on the quality of working capital accruals and earnings. The model is related to firstly, the results of previous studies that earnings are better than underlying cash flows as a measure of a corporation's performance (e.g. Dechow, 1994; Liu et al., 2002). Secondly, several studies applied models of discretionary accruals to detect earnings management, where they focus on the opportunistic use of accruals to practice earnings management. These studies suggest that management's intent influences the incidence and magnitude of accrual estimation errors.

The accrual process based on the timing of the economic achievements and sacrifices often are different with the timing of the related cash flows. Therefore, one role of the accruals is the accruals shift and adjusts the recognition of cash flows over time that results in adjusted numbers (earnings), which is better for measuring the performance of firms. On the other hand, the above role requires shifting the accruals and adjusts the recognition of cash flows over time, which means accruals roles require estimates of the future cash flows. Moreover, if there are any estimation errors they must be corrected in future accruals and earnings. Dechow and Dichev argued that:

> *"....estimation errors and their subsequent corrections are noise that reduces the beneficial role of accruals. Therefore, the quality of accruals and earnings is decreasing in the magnitude of accrual estimation errors. Our empirical measure of accrual quality is the extent to which working capital accruals map into operating cash flow realisations, where a poor match signifies low accrual quality"(Dechow and Dichev, 2002, p.36).*

That means the magnitude of estimation error in accruals is affecting the accuracy of estimation and reducing the quality of accruals and earnings. In addition, the Dechow and Dichev model is measuring accrual quality by focusing on working capital accruals. The measurement of estimation errors is the residuals from firm-specific regressions of changes in working capital on past, present and future operating cash flows (on previous year, present and one-year ahead cash flows from operations). These residuals are unrelated to cash flow realisations, and include the estimation errors and their reversals. The standard deviation of these residuals is the firm-specific measure of quality of accruals and earnings, where a higher standard deviation signifies lower quality. However, this model does not try to separate between unintentional errors and intentional estimation errors because both are low-quality accruals and earnings.

The model focuses on the observation of adjusting the recognition of cash flows over time or accruals shift, on the basis of working capital accruals because cash flow realisation is related to working capital generally occur within one year. In other words, the model is based on the relationship between accruals and cash flows. The model estimates working capital accrual quality by using firm-level time-series regression as follows:

$$\Delta WC_i = \beta_0 + \beta_1 CFO_{t-1} + \beta_2 CFO_t + \beta_3 CFO_{t+1} + \varepsilon_t$$

where:

ΔWC_t = the change in working capital in year (t) (*i.e.* Δ accounts receivable + Δ Inventory – Δ accounts payable – Δ taxes payable + Δ other assets (net)),

CFO_{t-1} = Cash flows from operations in year $t - 1$,

CFO_t = Cash flows from operations in year t,

CFO_{t+1} = Cash flows from operations in year $t + 1$, and

ε_t = an error term that is used to measure the quality of earnings.

All variables are scaled by average assets.

The proxies in this model for cash flows related to accruals are cash flow from operations. The residuals from the regression reflect the accruals that are unrelated to cash flow realisations, and the standard deviation of these residuals is a firm-level measure of accrual quality, where higher standard deviation denotes lower quality.

McNichols (2002) argues three issues raised by the empirical implementation of the Dechow and Dichev model, which are: firstly, the standard deviation of the residual as a proxy for earnings quality. Secondly, the difference between reported cash from operations and the cash flows related to period (t). Finally, the implications of common corporation transactions for the residual term. Moreover, the author provides evidence that the power of the model can be enhanced by including the specification of the Jones model (incorporate a corporation's changes in revenues and a corporation's property, plant and equipment). Therefore, McNichols adapts the model by adding the above variables as in the next equation. The author states that the model presents estimates of discretionary accruals, which is significantly associated with cash flows.

$$\Delta WC_t = \beta_0 + b_1 CFO_{t-1} + \beta_2 CFO_t + \beta_3 CFO_{t+1} + \beta_4 \Delta Sales_t + \beta_5 PPE_t + \varepsilon_t$$

where:

$\Delta Sales_t$ = Change in sales deflated by beginning total assets, and

PPE_t = Gross property, plant, and equipment deflated by beginning total assets.

Furthermore, Jones (2008) follows McNichols' (2002) changes in the Dechow and Dichev model to estimate the following cross-sectional model:

$$\Delta WC_{it} = \beta_0 + b_1 CFOi_{t-1} + \beta_2 CFO_{it} + \beta_3 CFO_{it+1} + \beta_4 \Delta REV_{it} + \beta_5 PPE_{it} + \varepsilon_{it}$$

where:

ΔREV_{it} = Change in revenue deflated by beginning total assets.

From the above discussion regarding earnings management approach and models under aggregate accrual approach, this study follows the most common technique that is used to detect accruals manipulation in the earnings management literature, which uses discretionary accruals as a proxy to measure earnings management (Healy, 1985; DeAngelo, 1986; Jones, 1991; Dechow et al., 1995; Becker et al., 1998; Teoh et al. 1998a, b; Guidry et al., 1999; Bartov et al. 2001; Larcker & Richardson, 2004; Peasnell et al., 2005; Kothari et al., 2005). Under this, techniques total accruals (TA) are divided into discretionary accruals (DA) and nondiscretionary accruals (NDA)

components. Discretionary accruals are the difference between actual accruals and expected accruals.

In addition, there are several studies that have compared the ability of earnings management models. Dechow et al. (2005) compared the performance of five models used to detect earnings management (the Healy, DeAngelo, Jones, Modified Jones and Industry models). The authors provide evidence that the Modified Jones model was the most powerful in detecting earnings management. Likewise, by regressing earnings on non-discretionary accruals and discretionary accruals, Guay et al. (1996) evaluated the earnings management (discretionary accruals) models; these include the Healy, DeAngelo, Industry, Jones and Modified Jones models. The authors found that the Jones and Modified Jones are stronger than other models, because the Jones and Modified Jones models provide discretionary accruals which are compatible with the opportunistic accruals and performance measure assumptions. Therefore, this study uses the Modified Jones model to measure earnings management in Libyan companies. This model was chosen because it is the most common technique used to detect earnings management, and the data required for using this model are available in the Libyan environment.

In this study an analysis of secondary data was performed by using the financial statements of 87 unlisted Libyan companies; 45 state-owned and 42 private companies, for the years between 2007 and 2009. Applying this sample leads to a total number of observations of 261 company-years. The data used in this research were gathered from different industries and different parts of the country. Moreover, due to the fact that there is a lack of database for the records of most state-owned and private companies that operated in different industries, the data were collected personally by the researcher. Moreover, in some cases there were difficulties in obtaining full financial statement data for the period from 2006 to 2009, therefore, the data of 23 companies was excluded. In addition, this study used a balance-sheet approach instead of a cash flow approach to compute total and currant accruals, because some of the Libyan companies did not prepare cash flow statements.

3.6.2 Questionnaire Survey

3.6.2.1 Choosing the Research Tool

The aims of this study are to determine the extent of earnings management in the Libyan context, to identify the motivations and techniques behind the practice of earnings management, and to determine the procedures that should be taken to constrain earnings management in Libyan corporations and improve the quality of financial reporting. Using only secondary data analysis would not have achieved the above aims. Therefore, a questionnaire survey was designed to directly elicit the participants' opinions about the earnings management phenomenon in Libya.

Collis and Hussey (2003, p.173) define a questionnaire as "a list of carefully structured questions, chosen after considerable testing, with a view to eliciting reliable responses from a chosen sample". In addition, Sekaran (2003, p.200) defines a questionnaire as "a pre-formulated written set of questions to which respondents record their answers, usually within rather closed alternatives". Moreover, Sekaran stated that the questionnaire is an efficient method of data collection when the researcher knows exactly what information is required and how to measure the variables of interest. According to Blaxter et al. (1998), the questionnaire is one of the most widely used methods of research, which can be administered through a number of formats; for example face-to-face questionnaires, postal questionnaires, internet questionnaires and telephone questionnaires. Applying the questionnaire is a common method for collecting data because it has many advantages (Sarantakos, 1998; Oppenheim, 1992; May, 2001; Collis & Hussey, 2003; Sekaran, 2003; Walliman, 2006; Bryman & Bell, 2007). The decision to apply a questionnaire is for the following reasons:

- A questionnaire is a cheaper method to collect data than conducting interviews.
- The responses can be completely anonymous, allowing potentially embarrassing questions to be asked with a fair chance of getting a true reply.
- A questionnaire can be completed at the respondent's convenience, for example at work or at home.
- It can cover a wide geographical area.

- A questionnaire has less opportunity for bias or errors caused by the presence or attitudes of the interviewer.
- It does not require as much skill to administer the questionnaires as to conduct interviews.
- Administering questionnaires to a large number of people at the same time is less time and money consuming than interviewing.
- A questionnaire is a good method to collect data from large sample and leads to obtaining more different views and a further understanding of the phenomenon under consideration.

Using a questionnaire method is usually the most efficient data collection mechanism to measure the variable of interest, especially with a large sample population. It can be administered personally or by mailing the questionnaire to respondents. In this study the questionnaire was personally administered to the respondents for the following reasons:

- The postal services in Libya are not good enough to send postal questionnaires to all respondents in all Libyan cities.
- To raise the response rate the one disadvantage of the postal questionnaire is the low response rate.
- To allow the researcher to introduce the research topic and the aims of the study, and to provide explanations if necessary when the respondent may not understand the nature of questions.
- There is a possibility of checking on responses if they seem odd or incomplete.
- Personal involvement of the researcher enables more complicated questionnaires to be devised.

Despite the advantages of personally administered questionnaires provided above, this type of questionnaire has some limitations, which are:

- The geographical limitation with regard to the location of the respondents.
- Personally administered questionnaires are costly when the samples are geographically dispersed.
- Personally administered questionnaires may take more time than postal or mail questionnaires.

The personally administered questionnaire limitations were taken into account by the researcher when considering carefully the design and administration of the questionnaire to reduce the effect of limitations. Firstly, to reduce the misunderstandings, the questionnaire was tested by a pilot study. Secondly, to allow the respondents to explain their answers, all parts in the questionnaire ended with an open-ended question and there was one blank page at the end of the questionnaire. Thirdly, the researcher made every effort to distribute the questionnaire in different cities in Libya. Finally, the questionnaire was supported by semi-structured interviews to confirm and supplement the questionnaire's results.

3.6.2.2 Source of Ideas for Questionnaire

The questionnaire was designed after reviewing the earnings management literature and the question ideas were mainly gained from an extensive review and analysis of the existing literature regarding: (a) earnings management motivations and factors affecting motivation preferences; (b) earnings management techniques; (c) earnings management research designs; and (d) earnings management constraints and the factors that affect earnings management practice, which include accounting standards, internal corporate governance structure and audit quality. The main idea of the questionnaire design was indebted to the work of previous researches, such as Nelson el at. (2002); Mulford and Comiskey (2002); Nelson et al., (2003); Baralexis (2004); Pornupatham (2006); Kamel (2006); Noronha and Zeng (2008); and Al-Khabash and Al-Thuneibat (2009).

3.6.2.3 Questionnaire Design

There are a range of factors that affect the structure and content of a questionnaire that a researcher should consider at the time of designing a questionnaire (Oppenheim, 1992; Collis & Hussey, 2003; Sekaran, 2003). These factors are: how questions are worded and the level of complexity of the language that is used to write the questions, the type and the forms of questions, the sequencing of the questions in the questionnaire, and the length of the questionnaire. The following section will discuss these factors in addition to two others.

(a) The language of the questionnaire

Marked attentiveness should be paid to design clear and useful questions. The words and the way of using them to ask questions may influence the answers obtained from the respondents. Janes (1999, p. 322) stated that "people will answer the question you will ask them, not necessarily the question you wanted to ask them". This means that words that have a common meaning for the researcher may have a different meaning for the respondents. Consequently, the researcher should consider what his questions might mean to different respondents.

In addition, Hippler et al. (1987) argue that changes in wording may always be considered "substantive" because they change the sense of the question. Moreover, they stated that many researches showed that minor changes in the exact wording of a question can cause major changes in the achieved responses. Therefore, the researcher took these issues into account during the construction process of the questionnaire. Firstly, serious attempts were made to ensure that the questions were asked by using simple words without making questions sound condescending. As a result, the questions were clear, unambiguous and precise. Secondly, the researcher avoided using double-barrelled questions that ask more than one question at once which may be seen as confusing and ambiguous. Thus, the questionnaire's questions do not ask more than one question at once. Thirdly, short questions are less confusing and ambiguous; therefore, the researcher had a policy of constructing short questions and statements in the questionnaire wherever possible. Finally, questions that utilise `not' were avoided as they may be difficult to understand, particularly when asking respondents to specify whether they agree or disagree.

(b) Type of questions

There are two types of questions that can be used to construct the questionnaire, which are closed-ended and open-ended (Hague, 1993; Ghauri et al., 1995; Ticehurst & Veal, 2000; Collis & Hussey, 2003). Closed-ended questions are where respondents are asked to circle or tick the appropriate boxes from a range of alternative answers. However, open-ended questions give the respondents a line or space to write down the answer in her/his words.

Closed-ended questions were adopted in the questionnaire of this study, which offered predetermined alternatives in the form of a "Likert scale", where the respondent is asked to indicate his level of agreement with the statement by ticking a box or circling the answer. There are three main advantage of this type of question. Firstly, a number of different statements can be presented in a small space. Secondly, it is simple and quick for respondents to complete. Finally, it is simple for the researcher to code and analyse because the possible responses are already categorised (Collis & Hussey, 2003, p184). That means this type of question saves the time of the researcher and respondent (Oppenheim, 1992, p171). As mentioned before, in this study respondents were given five choices in the form of a "Likert-scale" to indicate the level of agreement, the level of frequency or the level of importance. On the other hand, close-ended questions do not permit any flexibility by respondents because of the limited space which does not allow the respondents to explain their answers. Therefore, to overcome these limitations involved in such questions a sufficient space at the end of most questions was provided to give the respondents an opportunity to add any more information. In addition, one page was included at the end of the questionnaire for the respondents to include any additional views and comments they may consider related to the topic of the study.

(c) <u>Sequencing (Order) of questions</u>

There are two ways to sequence the questions in the questionnaire (Kumar, 1999). Firstly, the sequence of the questions could follow a logical progression based on the aims of the research. This way is called the funnel approach (Oppenheim, 1992). Secondly, questions could be asked in a random order. This approach is useful in conditions where a researcher wants respondents to express their agreement or disagreement with different aspects. On the other hand, in the funnel approach, questions could lead the respondents from questions of a general nature to those that are more specific in nature. In other words, the logical approach is better as it gradually guides respondents into the topics of research, beginning with simple topics and progressing to complex ones.

In this study the funnel approach was followed to sequence the questions in the questionnaire, which were sequenced following the progression of the research aims.

The questions started by asking about general information, earnings management motivations, earnings management techniques and earnings management constraints.

(d) Length of the questionnaire

Short questionnaires risk being superficial, while long questionnaires may discourage respondents from completing them. The questionnaire in this study was presented in nine pages (A4 paper) printed on single-sides, classified into five sections, and taking around 28 minutes to complete. Moreover, a cover letter was attached to the questionnaire. This letter includes information about the researcher and the research aims, and emphasised the importance of the survey, assured anonymity of the respondents, asked for support from respondents and confirmed that all information would be treated in the strictest confidence. A copy of the questionnaire is presented in appendices one and two.

(e) Content of the Questionnaire

The questionnaire was designed and categorised into four sections as follows:

1. General (Personal) information;
2. Earnings management motivations;
3. Earnings management techniques;
4. Earnings management constraints.

- ***Section 1: General information***

In this section, respondents were asked about their background by asking questions related to their job position, years of experience in their current position, educational qualifications and educational specialisation. The aim of this section was to obtain information about the respondents who participated in this study and their background. Moreover, these questions were important as they were asked to provide the basic data that may be used for testing and analysing relationships between variables identified in the study. In addition, it was expected that respondents who are highly qualified and experienced in this area would provide reliable and relevant responses.

- ***Section 2: Earnings management motivations***

This section attempted to elicit respondents' perceptions on motivations behind practicing earnings management, which were provided in prior literature. These motivations include capital market motivations, external contract motivations, regulatory motivations, management compensation, contract motivation, behavioural motivations and communicating information motivations. Moreover, the corporation ownership structure, as mentioned in Chapter Three, has an important influence on the reported earnings and information value. Therefore, this section's questions asked about the motivations in the state-owned and private companies.

- ***Section 3: Earnings management techniques***

This section was set to investigate respondents' views about techniques frequently used to practice earnings management in the Libyan corporations. They frequently ranged from 'never' to 'always'.

- ***Section 4: Earnings management constraints***

The objective of this part was to investigate perception on constricting earnings management in Libya.

<u>Part One</u> asked about the influence of adopting more detailed accounting legislation, issuing accounting standards that fit with the Libyan environment, issuing standards aimed at specific problems and increasing the level of disclosure.

<u>Part Two</u> investigated the impact of adopting an internal corporate governance mechanism on earnings management and the quality of financial reports in Libya. The internal corporate governance mechanisms include audit committee, internal audit and independent and competent board of directors.

<u>Part Three</u> elicited respondents' views on the impact of external audit quality on earnings management and the quality of financial reports, and the factors may affect the external audit quality.

- ***Section 5: Other comments***

The objective of this section was to encourage respondents to add any more comments and provide recommendations that may be useful to mitigate earnings management behaviour, and to improve the quality of financial reports in Libya.

(f) Translation of the questionnaire

The questionnaire employed in this study was originally written in English and then translated into Arabic. Serious attention was given to eliminating any difficulties that may appear during the translation process. Attempts have been made to review (as much as possible) the available questionnaires relating to accounting topics, which were originally written in English then translated into Arabic to exploit the relevant translations of some accounting expressions that are employed in the questionnaire. After completing the Arabic version, it was checked by a language specialist in Arabic to check the grammar and meaning.

3.6.2.4 Pilot Study

Oppenheim (1992) stated that a questionnaire has to be constructed, tried out to test and improve it, and then tried out again, often several times over, to ensure its suitability for reaching the research objectives. Moreover, Sekaran (2003) stated that it is important to pre-test the questionnaire to certify that the questions are understood by the respondents. Therefore, it is essential to pilot the questionnaire before distributing it to identify and clarify any weaknesses, which may arise for many reasons, such as the language, unstructured format, ambiguity, and difficulty in answering, and also to increase the response rate. According to Collis and Hussey (2003), it is useful to test the questionnaire with a small sample of respondents to ensure its suitability for reaching the research objectives.

Consequently, a pilot study of the questionnaire was undertaken to ensure that there were no language problems and the questions are understandable by respondents, with no ambiguity in the questions. Moreover, it is helpful to rectify any inadequacies before administering the questionnaire to respondents. The questionnaire in this study went through several developmental stages before distribution of the final version. In the first stage, a first draft of the questionnaire was designed based on the literature review. The first draft was written in English and discussed with the supervision team. After that, the English draft was translated into Arabic with professional help, and then the translated draft was discussed with PhD students at the University of Gloucestershire who are Arabic native-speakers. As a result, some terms and phrases were rephrased and some unimportant and recurrent questions were removed, and also a number of modifications were made on the Arabic draft.

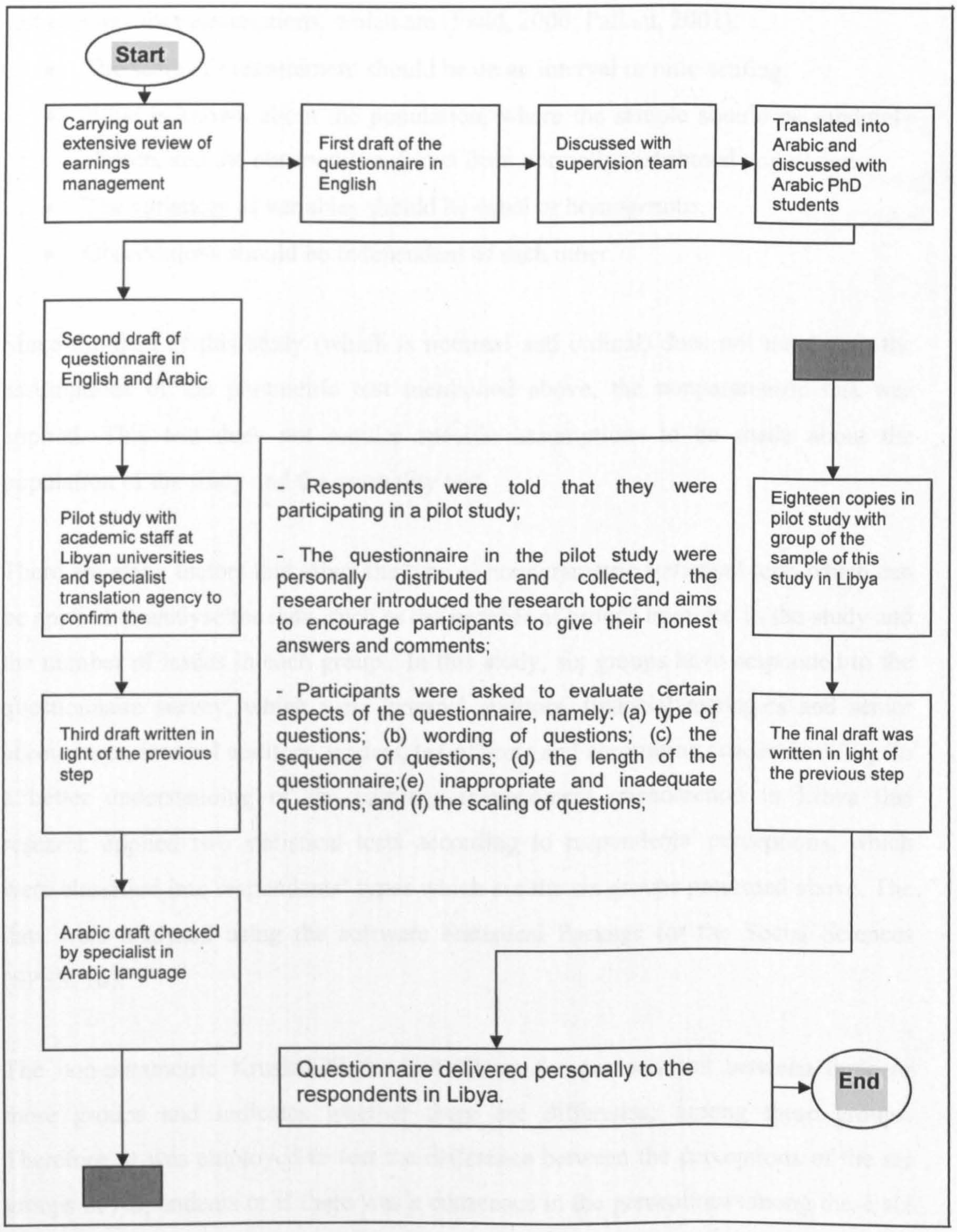
In the second stage of the pilot study, five copies of the second draft in English and Arabic were passed to academic staff in the Accounting departments at several Libyan universities who hold a PhD from the UK to confirm the meaning of the translation. Also, one copy of the English and Arabic draft was sent to a specialist translation agency in Libya for their opinion and advice. The helpful and useful comments suggested by participants in the pilot study were incorporated into the questionnaire. Moreover, the Arabic draft was reviewed by a specialist in the Arabic language to check the grammar and meaning.

In the final stage, 18 copies of the new version were piloted. Participants in this stage were external auditors, financial managers and senior accountants, internal auditors, lenders, tax officers and accounting academics, and every group received three copies. Participants provided useful comments and suggestions were offered related to wording and options in some questions. The pilot study in Libya took place from 15 August to 10 September 2009. After that, the questionnaire was administered directly to the sample of this study.

3.6.2.5 Administration of the Questionnaire Survey

Miles and Huberman (1994, P.27) pointed out that "you cannot study everyone everywhere doing everything". After the pilot study was finished the researcher distributed 500 copies of the questionnaire to different respondent groups who participated in this study, which included external auditors, financial managers and senior accountants, internal auditors, lenders, tax officers, and accounting academics. Moreover, the researcher distributed the questionnaire in different geographical areas in Libya. Most of the copies were distributed and collected personally to increase the return rate. In some cases, a snowball sampling strategy was used, where the initial respondent was requested to distribute the questionnaires to his colleagues. The respondents were under frequent contact (personal follow-ups) by phone or face-to-face asking them if they had any misunderstanding or any other problems. Also, friendly requests were made to return the questionnaire as soon as possible. Figure 3.3 presents the process of questionnaire construction of this study.

Figure (3.3) the process of questionnaire construction.



3.6.2.6 Statistical Methods Employed for Data Analysis

The aim of this section is to explain the type of statistical test that was used to analyse the data, and provide a justification for the application of this test. There are two types of statistical tests, which are parametric and nonparametric. Applying the parametric test requires four assumptions, which are (Field, 2000; Pallant, 2001):

- The scale of measurement should be on an interval or ratio scaling.
- What is known about the population, where the sample should be randomly chosen, and the observations drawn from normally distributed population.
- The variances of variables should be equal or homogenous.
- Observations should be independent of each other.

Since the data of this study (which is nominal and ordinal) does not meet with the assumptions of the parametric test mentioned above, the nonparametric test was applied. This test does not require specific assumptions to be made about the population of the study and the normality test.

There are many factors that affect the type of nonparametric statistical tests which can be applied to analyse the data, such as the number of groups involved in the study and the number of issues in each group. In this study, six groups have responded to the questionnaire survey, which were external auditors, financial managers and senior accountants, internal auditors, lenders, tax officers and accounting academics. To gain a better understanding of the earnings management phenomenon in Libya this research applied two statistical tests according to respondents' perceptions, which were classified into respondents' types which are the six groups presented above. The data were analysed using the software Statistical Package for the Social Sciences (SPSS. 16).

The non-parametric Kruskal-Wallis test allows for comparisons between three or more groups and indicates whether there are differences among these groups. Therefore, it was employed to test the difference between the perceptions of the six groups of respondents or if there was a consensus in the perceptions among these six groups. In addition, Non-parametric Mann-Whitney test converts the scores on continues variable to ranks, across two groups. It then evaluates whether the ranks for the two independent groups differ significantly. Therefore, this test was used to test the difference between two of respondents' perceptions.

3.6.2.7 Reliability and Validity

Significant attention was paid by testing the reliability and validity of the data collected to determine whether the characteristics of questions accurately address the research's intention and to assess their validity assessment.

3.6.2.7.1 Reliability

The reliability analysis is the first step in the quality control of conducting research relying on primary data collected by the questionnaires. Reliability could be defined as "the extent to which a variable yields the same value on repeated measures" (Newman & McNeil, 1998, p.205). The reliability test determines the relations between individual items in the scale and whether the item in the questionnaire are related to each other. Thus, it identifies any items that should be excluded from the scale. Seale (1999) and Collis and Hussey (2003) identify three forms to test the reliability which are:

Test-retest reliability is evaluated by having the same set of participants complete a survey at two different times to determine the stability of the responses by calculating the correlation coefficients to compare the two sets of responses. Correlation coefficients are collectively referred to as the survey instrument's test-retest reliability (Litwin, 1995).

Alternate form method uses different worded items to measure the same point. Questions and responses of the questionnaire are rephrased or change their order to create two questionnaires that are not identical due to the difference in their wording or order. Both of the questionnaires are administered to the same participants at different times. If correlation coefficients are high, the questionnaire survey is considered to have good alternate-form reliability. Alternatively, if the sample is large enough the split-halves method could be used, where the sample can be divided in half and each form of the questionnaire distributed to half the group. Then compare the results from the two halves (Litwin, 1995; Cooper & Emory, 1995).

Internal consistency method is the most popular test for measuring the reliability of the questionnaire survey. Internal consistency is an indicator of how well the different items measure the same issue. Therefore, this method used two groups of items that are thought to measure different aspects of the same issue. The internal consistency among a group of items combined to form a single scale can be measured by using coefficient Cronbach's alpha. This coefficient reflects the homogeneity of the scale and how well different items complement each other in their measurement of different aspects of the same variable. Coefficient cronbach's alpha scores range between zero and one and the higher the coefficient alpha the better internal consistency of responses and the more reliable the research tool. Generally, the coefficient alpha should be at least 0.7 as indicative of good reliability (Litwin, 1995; Cooper & Emory, 1995).

Coefficient cronbach's alpha was applied in this study to measure the reliability of the questionnaire due to difficulty contacting the same participants twice and using the test-retest. Also, it appears to be less biased and more practicable than other methods and produce a more accurate statistical result. The alpha coefficient for all tests was 0.884, indicating that the data is reliable and suitable for further analysis. Table 3.2 presents the results of these tests.

3.6.2.7.2 Validity

Validity is a measure to make it clear that the questions are measuring what is supposed to be measured (Frankfort-Nachmias & Nachmias, 1996; Aaker et al., 1998). Krippendorff (1996) mentioned it as the extent to which people agree that the list of words put in the category have similar meanings or connotations. Validity needs consultations with theoretical and empirical researchers, and also reliable and valid tools for the collection of data. In this study, the validity of the questionnaire was tested through a theoretical review and from different practical professionals and researchers who contributed in the pilot study, which showed that the construct validity is acceptable.

Table (3.2) Reliability analysis Cronbach's Alpa

Measurement	No. of Items	Cronbach's alpha
<u>*Section 2:*</u> earnings management motivations.	22	0.712
<u>*Section 3:*</u> earnings management Techniques.	20	0.850
<u>*Section 4:*</u> Earnings Management Constraints: <u>4.1</u> Accounting Standards.	5	0.753
<u>4.2</u> Greater reliance on internal corporate governance mechanisms: *4.2.1* Corporate governance mechanisms.	3	0.819
4.2.2 Audit Committee.	20	0.722
4.2.3 Internal Audit.	5	0.817
4.2.4 Independent and Competent Board of Director.	5	0.754
<u>4.3</u> External Audit Quality: *4.3.1*The impact of external auditors on earnings management.	4	0.749
4.3.3 Lengthy tenure.	6	0.801
4.3.4 Non-auditing services.	6	0.714
4.3.6 Other components.	7	0.715
All items.	103	0.884

3.6.3 Semi-Structured Interview

In this study, to overcome the limitations of the questionnaire, a number of semi-structured interviews were applied to amplify and supplement the information provided by the questionnaire. Moreover, the researcher hoped to achieve a deeper understanding of the earnings management practice in Libya by applying semi-structured interviews used as an exploratory tool with the questionnaire (mixed methods research). Using both questionnaire and interview methods to collect data helps to answer questions that cannot be answered by one of them alone (Creswell & Clark, 2007).

An interview survey is a method of collecting data by interviewing respondents to obtain information on the issues of interest, which can be structured, semi-structured and unstructured interviews (Saunders et al., 2007). Firstly, structured interviews are conducted when the researcher knows from the begnning what kind of information he/she needs to reach the aims of the study. The researcher has a list of predetermined and standardised questions or identical set of questions. The interviewees have to read out questions and answer them by recording the response on a standardised schedule, usually with pre-coded answers. The questions focus on issues that are relevant to the subject of the study. In addition, this kind of interview is usually used to answer questions with "what", "how often" and "how many" rather than "why" questions. The advantage of this interview is that it allows the researcher to record answers of the questions in a standardised format. On the other hand, structured interviews are less flexible than other forms since they do not enable the researcher to gain more information which may be necessary to achieve research aims.

Secondly, unstructured interviews or in-depth interviews are informal and the researcher does not prepare a planned sequence of questions or predetermined list of questions to work through in this situation. However, the researcher needs to have a clear idea about the issue that is under investigation. The aim of this type of interview is to bring some preliminary issues to the surface so that the researcher can decide what variables need more in-depth investigation (Sekaran, 2003). Unstructured interviews give opportunity to interviewees to talk freely about the issues and any related topic area. This type of interview is useful for exploratory pilot research (Oppenheim, 1993, p.51). Nevertheless, it suffers from an inherent limitation because sometimes the interview leads to a full discussion until the researcher cannot focus on her/his agenda. In other words, there are problems with recording the questions and answers, controlling the range of topics and analysing the data (Collis & Hussey, 2003).

Semi-structured interviews are when the researcher prepares a list of matters and questions to be covered, and asks interviewees the same sequence of questions and gives them considerable latitude in how they answer them. However, additional questions may be raised by the researcher or respondents during the interview in terms of "why" questions. This type of interview has been generally applied in social research since its aim is to achieve explanation and more understanding of a particular phenomenon. In semi-structured interviews, flexibility is important because the researcher asks about specific topics in advance and gives the opportunity to interviewees to talk and provide as much information as they feel necessary, and the researcher to ask about the issues that may be raised during the interview to clarify them.

Semi-structured interviews were conducted in this study because they enable the researcher to have control over time, flexibility and sequence of the interview. The researcher planned and prepared the interview structure and questions. The questions were asked of respondents in a systematic and consistent order. The interview schedule was developed and utilised with all interviewees (see appendices three and four). The interview questions were similar to those applied in the questionnaire survey to clarify and gain a better understanding of the earnings management phenomenon and related issues.

3.6.3.1 Sample Selection and Transcription of Semi-Structured Interviews

In this study, semi-structured interviews were conducted with 18 individuals who belonged to six groups. The steps of the actual interview process were as follows:

- The researcher contacted participants in person or by phone and asked them if they agreed to be interviewed, where in the end of the last page of the questionnaire the participants were asked to give their details if they are agree to participate in the interview stage. Then, the participants were chosen because of their experience and position. Moreover, the researcher confirmed to all interviewees that their identities would be known only to him, to encourage them to give unguarded answers.
- The interviews were conducted on a one-to-one basis where the researcher met the participants face-to-face.
- The interview process started with five minutes asking general questions about the interviewee's background details, such as their position, years of experience and place of work, in order to mitigate any nervousness that interviewees may have felt it; in addition to giving participants time to build up confidence and trust, and put them in a question-answering mode.

- After that, the researcher asked questions related to corporations' financial reports in Libya, the earnings management phenomenon, accounting standards in Libya, internal corporate governance mechanisms and quality of external auditing.
- The last question was asked to give participants an opportunity to add any more information or suggestions.

More information about the actual interview process:

- In order to reach more understanding of research issues, and because this type of interview requires a natural style of conversation, words utilised were specific, short and informal.
- In order to avoid bias which could affect understanding, the researcher utilised the same language, voice tone and body language for every interviewee.
- When addressing well-informed interviewees who were professionals and in executive positions, terminology was regularly utilised through the process of the interview.
- Most interviewees refused to be recorded by tape recorder. Therefore, note taking was utilised to record all the interviews. Notes that were taken during interviews were reviewed with the participants at the end of every interview.
- Interview data were analysed manually and provided with the questionnaire data analysis in Chapter Six.

3.7 Summary

This chapter began by providing the main research aims and questions for this study in an attempt to provide research evidence on the earnings management phenomenon in Libya. After that, the researcher discussed the theoretical approach and the philosophical paradigms that were applied to this study, which were realistic paradigms that combine positivistic and interpretive paradigms. This research used both quantitative and qualitative methods to gain advantage from data triangulation and methodological triangulation, and to enhance confidence in the obtained research findings. Moreover, the mixed method that was used in this study was justified. The chapter also provided a discussion of different approaches that used to examine earnings management, which are aggregate accrual, specific accrual, and distribution approach. In addition this chapter provided discussion of different models of aggregate accrual approach and justification of using the Modified Jones model, which was used to analyse the secondary data that was collected from financial reports of 87 Libyan companies over three years. Information was also given about the questionnaire survey that was distributed to the six groups. Finally, information was given about semi-structured interviews that were conducted with 18 individuals who belong to the previous groups. The semi-structured interviews were conducted to amplify and supplement the information provided by the questionnaire survey, and to achieve more understanding of the earnings management phenomenon. The next chapter provides the research findings derived from the secondary data analysis to investigate whether Libyan companies are practicing earnings management and to overview the direction of earnings management in Libyan companies.

CHAPTER FOUR

ANALYSIS OF SECONDARY DATA

4.1 Introduction

Measuring discretion over earnings is an essential element of any test for earnings management (McNichols, 2000). The accounting literature has provided a number of approaches that are used to detect earnings management. The accruals-based approach is commonly utilised to detect signals of earnings management activity (Healy, 1985; Jones, 1991; Dechow et al., 1995). Total accruals are separated into two components by using regression analysis: discretionary accruals, which represent those accruals where managers have some degree to exercise judgment, and non-discretionary accruals, which represent those accruals that are largely determined exogenously and which therefore play no part in the manipulation of earnings. This chapter in particular describes the adoption of an accruals-based approach to investigate whether Libyan companies are practicing earnings management and to overview the direction of earnings management in Libyan companies. Statistical techniques, such as descriptive statistics and multiple regressions, were used to analyse the secondary data to achieve the above aims. Four different versions of the Modified Jones model were used as an approach to measure earnings management in Libyan companies, which were both state-owned and private companies. The sample size was 87 companies over three years.

The remainder of this chapter is organised as follows. Section Two presents the earnings management proxies. Section Three presents the measuring of discretionary accruals. Section Four presents the existence and direction of earnings management in Libyan companies. Section Five presents a summary drawn from the secondary data analysis.

4.2 Earnings Management Proxies

This study follows the common technique used to detect accruals manipulation as described in the earnings management literature and which uses discretionary accruals as a proxy to measure earnings management (Healy, 1985; De Angelo, 1986; Jones, 1991; Dechow et al., 1995; Becker et al., 1998; Teoh et al., 1998a and b; Guidry et al., 1999; Bartov et al., 2001; Larcker & Richardson, 2004; Peasnell et al., 2005; Kothari et al., 2005). Total accruals (TA) are divided into discretionary accruals (DA) and non-discretionary accruals (NDA) components. Discretionary accruals are the difference between actual accruals and expected accruals.

This study applied four different versions of the Modified Jones model to generate firm specific coefficients. From the results of the four versions, this study used firm specific coefficients that were generated from the version with the highest adjusted R^2 to estimate the expected nondiscretionary accruals. Moreover, this study follows Teoh et al. (1998a and b), who decomposed total accruals (TA) into current and long-term components, and evaluated them separately because companies have more discretion over current accruals (CA), which include adjustments of short-term assets and liabilities that support the day-to-day operations, than over long-term accruals (LTA), which include adjustments of long-term net assets that can be increased by adjusting depreciation, decreasing deferred taxes or realising unusual gains.

In addition, following Subramanyam, (1996), Teoh et al. (1998a), Bartov et al. (2001), Chung et al. (2002), Koh (2003), Balsam et al. (2003), Chen et al. (2005) and Jones et al. (2008) this study used a cross-sectional approach rather than the time-series approach. This was because of three main reasons. Firstly, the cross-sectional model generates a larger sample and a higher number of observations. Secondly, the time-series model requires around ten years of data for each company to estimate the regression coefficients and therefore introduces misspecification due to non-stationarity; also, in this study it is difficult to obtain such data. Finally, the time-series approach may lower the effectiveness of tests (i.e. Type II error) due to overlapping estimation and treatment periods. Therefore, this study used cross-sectional models. Also, this study followed the view of Bartov et al. (2001) and Ronen and Yaari (2007), who consider the standard deviations of the parameters much lower in the cross-sectional regression. Moreover, this study used a balance-sheet approach to compute total and currant accruals because some of the Libyan companies do not prepare cash flow statements.

The first model employed in this study was similar in form to a cross-sectional Modified Jones model; the following cross-sectional regressions were applied:

$$TA_{it} / A_{it-1} = \alpha_1 (1 / A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2 (PPE_{\tau} / A_{it-1}) + \varepsilon_{it}$$

$$CA_{it} / A_{it-1} = \alpha_1 (1 / A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \varepsilon_{it}$$

where:

TA_{it} = total accruals of corporation (i),

CA_{it} = current accruals,

ΔREC_{it} = net receivable in years t less net receivables in year t-1,

ΔREV_{it} = revenues in year t less revenues in year t-1,

PPE_{it} = gross property plant and equipment in year t

A_{it-1} = total assets at (t-1), and

$\alpha_0, \beta_1, \beta_2$ = firm-specific parameters.

Dechow et al., (1995) added ΔREC_{it} to the Jones model, which assumes that discretion is not exercised over revenue in either the estimation period or the event period. However, the Modified Jones model assumes that all changes in credit sales in the event period are due to earnings management.

Furthermore, Dechow et al. (1995) stated that discretionary accruals are likely to be misspecified for companies with extreme levels of performance. Moreover, Dechow (1994) stated that cash flow is helpful in determining the expected accruals and it should be included in future studies. Also, Larcker and Richardson (2004) added operating cash flows to the Modified Jones model to reduce measurement error, which is correlated with the discretionary accruals and to control for current operating performance. Therefore, the second model employed in this study was a cross-sectional Modified Jones model including cash flow from operation. The Modified Jones model with operating cash flows can be represented as follows:

$$TA_{it} / A_{it-1} = \alpha_1 (1 / A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2 (PPE_{\tau} / A_{it-1}) + \beta_3 (CFO_{\tau} / A_{it-1}) + \varepsilon_{it}$$

$$CA_{it} / A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(CFO_\tau / A_{it-1}) + \varepsilon_{it}$$

where *CFO* is operating cash flows. The majority of Libyan companies do not prepare cash flow statements. Therefore, in this study cash flow from operation was calculated by subtracting total accruals from income before extraordinary items, due to the fact that reported earnings consist of operations cash flow and income before extraordinary items (Dechow et al., 1995; Dechow & Dichev, 2002; Dechow et al., 2003).

$$CFO_{it} = \text{Income before extraordinary items-}\ TA_{it}$$

The third version of the Modified Jones model that was employed in this study was motivated by Kothari et al. (2005), who included performance matching on return on assets in the current year or the prior year (ROA $_{it}$ or ROA $_{it-1}$). This motivation is to address the non-linear relationship between normal accruals and performance. Also, the model is designed to present a comparison of the effectiveness of performance matching versus including a performance measure in the accruals regression. The Modified Jones model with performance matched can be represented as follows:

$$TA_{it} / A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(PPE_\tau / A_{it-1}) + \\ \beta_3(ROA_{it}) + \varepsilon_{it}$$

$$CA_{it} / A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \\ \beta_3(ROA_{it}) + \varepsilon_{it}$$

Where ROA_t = is income before extraordinary items for year (t) over (A_{it}).

Furthermore, the researcher applied in this study another version of the cross-sectional Modified Jones model by including the cash flow from operation (CFO) and performance matching on return on assets (ROA) among the regression. The version can be shown as follows:

$$TA_{it} / A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(PPE_\tau / A_{it-1}) + \\ \beta_3(CFO_\tau / A_{it-1}) + \beta_3(ROA_\tau / A_{it-1}) + \varepsilon_{it}$$

$$CA_{it} / A_{it-1} = \alpha_1 (1 / A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2 (CFO_{\tau} / A_{it-1}) + \beta_3 (ROA_{\tau} / A_{it-1}) + \varepsilon_{it}$$

In this study, an effort was made to generate firm specific coefficients by using year-by-year regressions for 87 companies, which included 45 state-owned companies and 42 private companies, using data for the period from 2007 to 2009. Applying this sample leads to a total number of observations of 261 company-years. A positive or negative relationship between total accruals and the change in revenues was expected given that change in revenues can result in income-increasing or income-decreasing. On the other hand, a negative relationship between total accruals and the property, plant and equipment variable was expected, because it is related to income-decreasing accruals. This suggests a positive or negative sign for the $(\Delta REV_{it} - \Delta REC_{it} / A_{it-1})$ coefficient β_1 and a negative sign for the (PPE_{τ} / A_{it-1}) coefficient β_2. The statistical results of generating firm specific coefficients from the four versions models, covering the period 2007-2009 are presented in Tables 4.1, 4.2, 4.3, and 4.4.

From Tables 4.1, 4.2, 4.3 and 4.4, it can be seen that the fourth version of the cross-sectional of the Modified Jones model has the highest mean adjusted R^2. Also, the F-values of this version for total accruals and current accruals models are 26.15 and 18.43, respectively, and were significant at the one percent level, which suggests that the regression model was statistically valid. Therefore, the firm specific coefficients that were generated from the fourth version (with the highest adjusted R^2) were used to estimate the expected nondiscretionary accruals and to compute discretionary accruals.

Table (4-1): firm-specific coefficients of the first versions model during the period 2007-2009

Version 1: Total accruals

$$TA_{it} / A_{it-1} = \alpha_1 (1 / A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2 (PPE_{it} / A_{it-1}) + \varepsilon_{it}$$

Parameter	Mean	Median	Minimum	maximum	Mean *P*-value	Median *P*-value
α_1	-0.0159	-0.0157	-0.0600	0.0282	0.5476	0.4443
β_1	0.1489	0.1556	0.0614	0.2296	0.1096	0.1551
β_2	-0.0383	-0.0172	-0.1156	0.0179	0.6155	0.8931

Mean R^2 = 13.79% Mean adjusted R^2 = 11.74 %

Version 1: Current accruals

$$CA_{it} / A_{it-1} = \alpha_1 (1 / A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \varepsilon_{it}$$

Parameter	Mean	Median	Minimum	maximum	Mean *P*-value	Median *P*-value
α_1	-0.0349	-0.0289	-0.0685	-0.0071	0.4062	0.1418
β_1	0.1518	0.1623	0.0636	0.2295	0.0932	0.1083

Mean R^2 = 11.10% Mean adjusted R^2 =10.05%

- The composition of total accrual (TA_{it}) used in the table is measured as (Δ current assets - Δ cash and short term investments) - (current liabilities - Δ maturities of long term debt - Δ income taxes payable) – depreciation and amortization expense.
- Current accruals (CA_{it}) are measured as (Δ current assets - Δ cash and short term investments) - (current liabilities - Δ maturities of long term debt - Δ income taxes payable).
- ($\Delta REV_{it} - \Delta REC_{it}$) is measured as the change in sales minus the change in account receivables.
- The change (Δ) is computed between time t and time t-1.
- (PPE_{it}) are measured as net property, plant and equipment.
- All variables in the model scaled by total assets for year t-1 (A_{it-1}) to reduce heteroscedasticity.

Table (4-2): firm-specific coefficients of the second versions model during the period 2007-2009

Version 2: Total accruals

$$TA_{it} / A_{it-1} = \alpha_1 (1/A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2 (PPE_{\tau} / A_{it-1}) + \beta_3 (CFO_{\tau} / A_{it-1}) + \varepsilon_{it}$$

Parameter	Mean	Median	Minimum	maximum	Mean P-value	Median P-value
α_1	0.0050	0.0053	-0.0187	0.0283	0.7236	0.8363
β_1	0.2721	0.0995	0.0405	0.6763	0.0422	0.0001
β_2	-0.0774	-0.0682	-0.1236	-0.0405	0.3386	0.1186
β_3	0.9087	0.8942	0.4614	1.3705	0.5580	0.5323

Mean R^2=52.09% Mean adjusted R^2 = 50.36%

Version 2: Current accruals

$$CA_{it} / A_{it-1} = \alpha_1 (1/A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2 (CFO_{it} / A_{it-1}) + \varepsilon_{it}$$

Parameter	Mean	Median	Minimum	maximum	Mean P-value	Median P-value
α_1	0.0353	0.0278	-0.0005	0.0785	0.4852	0.4347
β_1	-0.0034	0.0177	-0.1374	0.1093	0.2115	0.0735
β_2	0.5501	0.5365	0.4195	0.6942	9.8376	8.8903

Mean R^2= 40.84% Mean adjusted R^2 =39.43%

- The composition of total accrual (TA_{it}) used in the table is measured as (Δ current assets - Δ cash and short term investments) - (current liabilities - Δ maturities of long term debt - Δ income taxes payable) – depreciation and amortization expense.
- Current accruals (CA_{it}) are measured as (Δ current assets - Δ cash and short term investments) - (current liabilities - Δ maturities of long term debt - Δ income taxes payable).
- ($\Delta REV_{it} - \Delta REC_{it}$) is measured as the change in sales minus the change in account receivables.
- The change (Δ) is computed between time t and time t-1.
- (PPE_{it}) are measured as net property, plant and equipment.
- (CFO_{it}) are measured as (income before extraordinary items - TA_{it}).
- All variables in the model scaled by total assets for year t-1 (A_{it-1}) to reduce heteroscedasticity

Table (4-3): firm-specific coefficients of the third versions model during the period 2007-2009

Version 3: Total accruals

$$TA_{it} / A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(PPE_{\tau} / A_{it-1}) + \beta_3(ROA_{it}) + \varepsilon_{it}$$

Parameter	Mean	Median	Minimum	maximum	Mean P-value	Median P-value
α_1	-0.0192	-0.0198	-0.0619	0.0241	0.5716	0.4309
β_1	0.1441	0.1558	0.0575	0.21895	0.1267	0.1843
β_2	-0.0569	-0.0379	-0.1142	-0.0185	0.5957	0.8847
β_3	0.3923	0.2957	0.0810	0.8004	0.4442	0.3492

Mean R^2= 14.55% Mean adjusted R^2 =11.46%

Version 3: Current accruals

$$CA_{it} / A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(ROA_{it}) + \varepsilon_{it}$$

Parameter	Mean	Median	Minimum	maximum	Mean P-value	Median P-value
α_1	0.0180	0.0153	0.0145	0.0242	0.5998	0.5812
β_1	-0.0487	0.0191	-0.3284	0.1632	0.2082	2.8500
β_2	0.5760	0.3276	0.1540	1.2464	0.2253	0.2732

Mean R^2=19.18% Mean adjusted R^2 =17.26%

- The composition of total accrual (TA_{it}) used in the table is measured as (Δ current assets - Δ cash and short term investments) - (current liabilities - Δ maturities of long term debt - Δ income taxes payable) – depreciation and amortization expense.
- Current accruals (CA_{it}) are measured as (Δ current assets - Δ cash and short term investments) - (current liabilities - Δ maturities of long term debt - Δ income taxes payable).
- ($\Delta REV_{it} - \Delta REC_{it}$) is measured as the change in sales minus the change in account receivables.
- The change (Δ) is computed between time t and time t-1.
- (PPE_{it}) are measured as net property, plant and equipment.
- Return on assets (ROA_{it}) is measured as net income scaled by lagged total assets for year t.
- All variables in the model scaled by total assets for year t-1 (A_{it-1}) to reduce heteroscedasticity except Return on assets (ROA_{it}).

Table (4-4): firm-specific coefficients of the fourth versions model during the period 2007-2009

Version 4: Total accruals

$$TA_{it} / A_{it-1} = \alpha_1 (1/A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2 (PPE_{\tau} / A_{it-1}) + \beta_3 (CFO_{\tau} / A_{it-1}) + \beta_4 (ROA_{it}) + \varepsilon_{it}$$

Parameter	Mean	Median	Minimum	maximum	Mean *P*-value	Median *P*-value
α_1	0.0030	0.0034	-0.0172	0.0228	0.76270	0.8650
β_1	0.2696	0.0990	0.0353	0.6743	0.0582	0.00016
β_2	-0.1120	-0.1261	-0.1415	-0.0685	0.2300	0.1045
β_3	0.9289	0.9003	0.4639	1.4226	6.3128	2.1588
β_4	0.5877	0.3828	-0.0356	1.4160	0.2981	0.0385

Mean R^2=53.77% Mean adjusted R^2 =51.52%

Version 4: Current accruals

$$CA_{it} / A_{it-1} = \alpha_1 (1/A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2 (CFO_{\tau} / A_{it-1}) + \beta_3 (ROA_{it}) + \varepsilon_{it}$$

Parameter	Mean	Median	Minimum	maximum	Mean *P*-value	Median *P*-value
α_1	0.0150	0.0222	-0.0017	0.0246	0.6504	0.5372
β_1	-0.0057	0.0128	-0.1396	0.1097	0.2379	0.0411
β_2	0.5683	0.5877	0.4171	0.7002	0.0000	5.4625
β_3	0.6340	0.3932	0.0317	1.4770	0.3127	0.0919

Mean R^2=46.19% Mean adjusted R^2 =44.25%

- The composition of total accrual (TA_{it}) used in the table is measured as (Δ current assets - Δ cash and short term investments) - (current liabilities - Δ maturities of long term debt - Δ income taxes payable) – depreciation and amortization expense.
- Current accruals (CA_{it}) are measured as (Δ current assets - Δ cash and short term investments) - (current liabilities - Δ maturities of long term debt - Δ income taxes payable).
- ($\Delta REV_{it} - \Delta REC_{it}$) is measured as the change in sales minus the change in account receivables.
- The change (Δ) is computed between time t and time t-1.
- (PPE_{it}) are measured as net property, plant and equipment.
- (CFO_{it}) are measured as (income before extraordinary items - TA_{it}).
- Return on assets (ROA_{it}) is measured as net income scaled by lagged total assets for year t.
- All variables in the model scaled by total assets for year t-1 (A_{it-1}) to reduce heteroscedasticity except Return on assets (ROA_{it}).

4.3 Measuring Discretionary Accruals

4.3.1 Proxy of Discretionary Accruals

This study used the following regression model for total accruals (1) to generate firm specific coefficients for $\alpha_1, \beta_1, \beta_2, \beta_3, \beta_4$

$$TA_{it} / A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(PPE_\tau / A_{it-1}) + \beta_3(CFO_\tau / A_{it-1}) + \beta_4(ROA_{it}) + \varepsilon_{it} \qquad (1)$$

These coefficients were then used to estimate the level of non-discretionary total accruals for each sample firm using the following model (2):

$$NDTA_{it} / A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(PPE_\tau / A_{it-1}) + \beta_3(CFO_\tau / A_{it-1}) + \beta_4(ROA_{it}) + \varepsilon_{it} \qquad (2)$$

where: $NDTA_{it}$ is nondiscretionary total accruals in year t for firm i. The level of discretionary total accruals was then calculated by using the following model (3), which was used as a proxy for the extent of earnings management:

$$DTA_{it} = TA_{it} / A_{it-1} - NDTA_{it} \qquad (3)$$

where DTA_{it} is discretionary total accruals in year t for firm i.

In addition, this study used the following regression model for current accruals (4) to generate firm specific coefficients for $\alpha_1, \beta_1, \beta_2, \beta_3, \beta_4$

$$CA_{it} / A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(CFO_\tau / A_{it-1}) + \beta_3(ROA_{it}) + \varepsilon_{it} \qquad (4)$$

These coefficients were then used to estimate the level of non-discretionary current accruals for each sample firm using the following model (5):

$$NDCA_{it} / A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(PPE_\tau / A_{it-1}) + \beta_3(CFO_\tau / A_{it-1}) + \beta_4(ROA_{it}) + \varepsilon_{it} \qquad (5)$$

where: $NDCA_{it}$ is nondiscretionary current accruals in year t for firm i. The level of discretionary current accruals was then calculated by using the following model (6):

$$DCA_{it} = CA_{it} / A_{it-1} - NACD_{it} \qquad (6)$$

where DCA_{it} is discretionary total accruals in year t for firm i.

4.3.2 Correlation Analysis

Correlation analysis shows a correlation demonstrating the power of the relationship between two variables. The biggest value of correlation coefficient (r) is (+1), which indicates that the correlation between the two variables is strong and positive. This means that if the value of one variable rises, the value of the other variable also increases by the same degree, whereas the lowest value of correlation coefficient is (-1), which presents a strong negative linkage between the two variables. This means that if the value of one variable rises, the value of the other variable decreases by the same degree. However, when the relation is equal to zero, it means that there is no association between the two variables. The relationship between two variables is weaker as the value of the correlation coefficient becomes near zero (Koutsoyiannis, 1988).

Additionally, the analysis of correlation offers the significance of the correlation. This study applied the bivariate Person correlation for all the firms. The study uses the significant of correlation to ensure that there is no multicollinearity problem between the independent variables. As indicated by Berry and Feldman (1985), this problem occurs at the value of r > 0.80. The correlation test is subjected to a two-tailed test of statistical significance at three different degrees: one percent, five percent and ten percent.

As can be seen from Table 4.5, the results of the correlation analysis show that the problem of multicollinearity is not found in relation to all independent variables. The value of the correlation coefficient runs from the high of (+0.076) between (ROA_{it}) and $(\Delta REV_{it} - \Delta REC / A_{it-1})$ to the low of (-0.358) between $(\Delta REV_{it} - \Delta REC / A_{it-1})$ and $(1 / A_{it-1})$.

Table (4.5) Correlation Analysis

	$(1/A_{it-1})$	$(\Delta REV_{it} - \Delta REC / A_{it-1})$	(PPE_{it-1} / A_{it-1})	(CFO_{it-1} / A_{it-1})	(ROA_{it})
$(1/A_{it-1})$					
Pearson Correlation	1.00				
Sig. (2-tailed	-				
N	261				
$(\Delta REV_{it} - \Delta REC_{it} / A_{it-1})$					
Pearson Correlation	-.358**	1.000			
Sig. (2-tailed	.000	-			
N	261	261			
(PPE_{τ} / A_{it-1})					
Pearson Correlation	.046	-.201**	1.000		
Sig. (2-tailed	.458	.001	-		
N	261	261	261		
(CFO_{τ} / A_{it-1})					
Pearson Correlation	.008	-.029	-.027	1.000	
Sig. (2-tailed	.893	.647	.659	-	
N	261	261	261	261	
(ROA_{it})					
Pearson Correlation	-.055	.076	-.002	-.034	1.000
Sig. (2-tailed	.378	.219	.977	.581	-
N	261	261	261	261	261

4.4 Existence and Direction of Earnings Management in the Libyan Companies

As described in the literature review in Chapter Two (Section 2.1.6), several empirical studies have examined motivations that are behind practicing earnings management. Their results showed that earnings management might be exercised for several motivations, which depend on the aims that want to be reached. These motivations lead to practicing earnings management in two directions, which are income-increasing and income-decreasing. Income-increasing occurs with motivations, such as increasing management compensation (Healy, 1985; Watts & Zimmerman, 1986; Gaver et al., 1995; Holthausen et al., 1995; Guidry et al., 1999), external contract requirements (Watts & Zimmerman, 1986; Duke & Hunk, 1990; Defond, 1994; Sweeney, 1994; Jaggi & Lee, 2002), job anxiety (Fudenberg & Tirol, 1995; DeFond & Park, 1997), capital market motivations (Dechow & Skinner, 2000), reaching analysts' consensus forecasts (Burgstahler & Dichev, 1997; DeGeorge et al., 1999; Payne & Robb, 2000; Burgstahler & Eames, 2006), and initial public offerings (IPOs) (Teoh et al., 1998 b; DuCharme et al., 2004).

On the other hand, income-decreasing occurs with the motivations, such as decreasing the value of tax payment (Baralexis, 2004; Noronha et al., 2008), when the debts are renegotiated or restructuring takes place because waivers are denied (Jaggi & Lee, 2002), when the company is targeted by political procedures with unfavourable consequences (Cahan, 1997), and during import relief, monopolistic practices, sudden product price increases (Jones, 1991; Cahan, 1992; Han & Wang, 1998), bonus contracts (Healy, 1985) and during CEO changes (Strong & Meyer, 1987; Elliott & Shaw,1988; Pourciau, 1993; Wells, 2002)

The motivations presented above can be considered the main causes for exercising earnings management. Corporations are working in different environments with different variables, which may affect the existence and the direction of earnings management. Accordion to Noronha et al. (2008), the issue which should be considered is how managers consider the importance of the motivations. As a result, managers will have different priorities on motivations. The authors also present two factors that influence motivation preference, which are corporation ownership structure and corporation size.

Corporation ownership structure, as stated by Wang (2006), has an important influence on reported earnings and information value. The monitoring mechanism that a corporation uses is influenced by ownership structure, including monitoring earnings management activity (Siregar & Utama, 2008). Hao (1999) mentioned that the non-tradable characteristic of state-owned enterprise shares is the basic reason for the low quality of earnings data. Noronha et al. (2008), moreover, state that, because managers in state-owned corporations are government officials, corporate earnings attainment is one of their promotion criteria. Therefore, managers may have the motivation to increase earnings. However, Siregar and Utama (2008), in their examination of the relationship between earnings management on the one hand and ownership structure and firm size on the other, provided evidence that family ownership has an effect on the selection of a particular kind of earnings management.

With reference to corporation size, Moses (1987) provided evidence that earnings management is associated with a corporation's size. Baralexis (2004) in his study of Greek corporations found that large corporations in Greece have different motivations to small corporations. Reducing income tax considerations is very important for small corporations. However, large corporations managed earnings to demand external financing. Zhu and Su (2002) found that Chinese medium- and small-sized corporations have motivations to practice earnings management for tax expense and managers' compensation.

As a result of the above discussion, this particular study investigated the effect of the nature of company ownership and company size.

4.4.1 Existence of Earnings Management

As mentioned before, the fourth version of the cross-sectional Modified Jones model has the highest mean adjusted R^2. Therefore, this model was applied to investigate the existence and the direction of earnings management in the unlisted companies (state-owned and private companies) in Libya.

Table 4.6 shows descriptive statistics results that were obtained from the fourth version of cross-sectional Modified Jones model. It can be seen that the total discretionary accruals is with negative mean in years one and three and with positive mean in year two. Also, it is with negative median in all years. Moreover, it can be noticed that approximately 47 percent, 47 percent and 46 percent of the sample companies were adopting income-increasing policies in years one, two and three, respectively. However, the result of the discretionary currant accruals shows that the mean of discretionary current accruals is positive in all years. Also, it is with negative median in years one and three and with positive median in year two. Moreover, it can be seen that approximately 42 percent, 56 percent and 47 percent of the sample companies were adopting income-increasing policies in years one, two and three, respectively.

Table (4.6): descriptive statistics results for discretionary total accruals and discretionary current accruals for all the companies of the sample.

Accruals level for all the sample	Year 1	Year2	Year3
Panel A: Discretionary total accruals (DTA): $TA_{it} / A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(PPE_{\tau} / A_{it-1}) + \beta_3(CFO_{\tau} / A_{it-1}) + \beta_4(ROA_{it}) + \varepsilon_{it}$			
Mean	-0.0081	0.0221	-0.0063
Median	-0.0146	-0.0134	-0.0115
Minimum	-1.0842	-1.1032	-0.6554
Maximum	1.5337	4.2003	0.6604
% Positive	47%	47%	46%
Number of observations	87	87	87
Panel B: Discretionary current accruals (DCA): $CA_{it} / A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(CFO_{\tau} / A_{it-1}) + \beta_3(ROA_{it}) + \varepsilon_{it}$			
Mean	0.01776	0.1191	0.0067
Median	-0.0245	0.0281	-0.0148
Minimum	-1.0574	-0.7835	-0.6005
Maximum	1.5073	2.3862	0.6177
% Positive	42%	56%	47%
Number of observations	87	87	87

In order to obtain more explanation of the existence of earnings management in the Libyan companies (state-owned and private companies), the entire sample was divided into two sub-samples, which are income-increasing and income-decreasing samples. Table 4.7 presents descriptive statistics results of total and current accruals that were obtained from the fourth version of the cross-sectional of the Modified Jones model computed for the two groups of companies. It can be seen that the discretionary total accruals in the income-increasing group is with mean 0.206, 0.408, and 0.132 in years one, two and three, respectively. Also, it can be seen that approximately 47 percent, 47 percent, and 46 percent of the sample companies were adopting income-increasing policies accruals in years one, two and three, respectively.

However, discretionary total accruals is with mean -0.199, -0.322, and -0.124 in the income-decreasing group for years one, two and three, respectively. Also, it can be seen that approximately 53 percent, 53 percent and 54 percent from the sample companies were adopting income-decreasing policies accruals in years one, two and three, respectively. In addition, it can be noticed that discretionary current accruals in the income-increasing group is with mean 0.258, 0.362 and 0.136 in years one, two and three, respectively. Also, it can be seen that approximately 42 percent, 56 percent and 47 percent from all samples of companies were adopting income-increasing policies accruals in years one, two and three, respectively. However, it is with mean -0.153, -0.199, and -0.109 in the income-decreasing groups for years one, two and three, respectively. Also, it can be seen that approximately 57 percent, 44 percent and 53 percent from the sample companies were adopting income-increasing policies accruals in years one, two and three, respectively.

Table (4.7): descriptive statistics results for discretionary total accruals and discretionary current accruals for income-increasing group.

Panel A: Accruals level for all income-increasing companies.	Year 1	Year2	Year3
1- Discretionary total accruals (DTA) $TA_{it} / A_{it-1} = \alpha_1 (1 / A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2 (PPE_{\tau} / A_{it-1}) + \beta_3 (CFO_{\tau} / A_{it-1}) + \beta_4 (ROA_{it}) + \varepsilon_{it}$			
Mean	0.2069	0.4089	0.1323
Median	0.1078	0.2180	0.0743
% Positive from all observations	47%	47%	46%
Number of observations	41	41	40
2- Discretionary current accruals (DCA) $CA_{it} / A_{it-1} = \alpha_1 (1 / A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2 (CFO_{\tau} / A_{it-1}) + \beta_3 (ROA_{it}) + \varepsilon_{it}$			
Mean	0.2588	0.3625	0.1368
Median	0.1227	0.1715	0.0863
% Positive from all observations	42%	56%	47%
Number of observations	36	49	41
Panel B: Accruals level for all income-decreasing companies.	Year 1	Year2	Year3
1- Discretionary total accruals (DTA): $TA_{it} / A_{it-1} = \alpha_1 (1 / A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2 (PPE_{\tau} / A_{it-1}) + \beta_3 (CFO_{\tau} / A_{it-1}) + \beta_4 (ROA_{it}) + \varepsilon_{it}$			
Mean	-0.1997	-0.3227	-0.1243
Median	-0.1045	-0.3227	-0.1036
% Positive from all observations	53%	53%	54%
Number of observations	46	46	47
2- Discretionary current accruals (DCA) $CA_{it} / A_{it-1} = \alpha_1 (1 / A_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2 (CFO_{\tau} / A_{it-1}) + \beta_3 (ROA_{it}) + \varepsilon_{it}$			
Mean	-0.1534	-0.1994	-0.1092
Median	-0.0792	-0.1281	-0.0757
% Positive from all observations	57%	44%	53%
Number of observations	51	38	46

4.4.2 Direction of Earnings Management

In an attempt to obtain more explanation of the direction of earnings management in the Libyan companies (state-owned and private companies), the decision was taken to divide the whole sample into two sub-samples regarding the nature of company ownership, which are state-owned companies and private companies. Then, the direction of earnings management was examined by a regression model on the basis of company size.

4.4.1.1 The nature of companies' ownership

Table 4.8 presents the relationship between the direction of earnings management and ownership nature. It can be noticed that 71 percent, 75 percent, and 69 percent of state-owned companies were adopting income-increasing policies accruals in years one, two and three, respectively. Also, it can be seen that 78 percent, 83 percent, and 78 percent of the companies that engaged in earnings management by using income-increasing policies accruals in years one, two and three, respectively, were state-owned companies.

Furthermore, it can be seen from Table 4.8 that 79 percent , 83 percent and 70 percent of private companies were adopting income-decreasing policies accruals in years one, two and three, respectively. Moreover, it can be seen that 72 percent, 76 percent, and 70 percent of the companies that engaged in earnings management by using income-decreasing policies accruals in years one, two and three, respectively, were private companies.

Table (4.8): the relationship between the direction of earnings management and ownership nature

Panel A: Discretionary total accruals (DTA) for state-owned companies						
	Year 1		Year 2		Year 3	
	Income-increasing	Income-decreasing	Income-increasing	Income-decreasing	Income-increasing	Income-decreasing
1- (%) of state-owned companies	71%	29%	75%	25%	69%	31%
Number of observations	45		45		45	
2- (%) of the direction of EM*	78%	28%	83%	24%	78%	30%
Number of observations	32	13	34	11	31	14

Panel B: Discretionary total accruals (DTA) for private companies						
	Year 1		Year 2		Year 3	
	Income-increasing	Income-decreasing	Income-increasing	Income-decreasing	Income-increasing	Income-decreasing
1- (%) of private companies	21%	79%	17%	83%	21%	70%
Number of observations	42		42		42	
2- (%) of the direction of EM*	22%	72%	17%	76%	22%	70%
Number of observations	9	33	7	35	9	33

* The direction of earnings management is income-increasing or income-decreasing.

4.4.1.2 Company size

To investigate whether there is a relationship between the direction of earnings management and company size, two regression models (one for state-owned companies and another for private companies) were applied as follows:

$$DTA_{it} = \alpha + \beta \; Ln(A_{it}) + \varepsilon_i$$

where:

DTA_{it} = company total accruals (i),

A_{it-1} = company total assets at (t-1), and

$Ln(A_{it})$ = company size as measured by natural logarithm of total assets.

Table (4.9): the result from regression model to investigate the relationship between the direction of earnings management and company size

The regression model: $DTA_{it} = \alpha + \beta \; Ln(A_{it}) + \varepsilon_i$		
Panel A: state-owned company		
variable	Coefficient β	*t-value*
α	0.007	0.374
$Ln(A_{it})$	0.007	4.412***
R Square=7%	*F*=19.462	Prop (*F* statistic) = 0.000
Panel B: private company		
variable	Coefficient β	*t-value*
α	0.006	0.198
$Ln(A_{it})$	-0.009	-3.322***
R Square=4%	*F*=11.038	Prop (*F* statistic) = 0.001

As can be seen from Table 4.9 in panel A (state-owned company), F-value (19.462) was significant at the one percent level, which suggests that the regression model was statistically valid. The table also shows that company size was positively and significantly associated with discretionary total accruals (DTA) (β = 0.007, p<1%). This means that as company size increases, the company adopts income-increasing policies accruals.

In addition, Table 4.9 shows in panel B (private company) that F-value (11.038) was significant at the one percent level, which indicates that the regression model was statistically valid. The table also shows that company size was negatively and significantly linked to discretionary total accruals (DTA) (β = -0.009, $p<1\%$). This means that as company size increases, the company adopts income-decreasing policies accruals.

To sum up, from the above discussion, one can recognise that there are linkages between the direction of earnings management and both ownership nature and company size.

4.5 Summary and Conclusions

This chapter has attempted to investigate the existence and the direction of earnings management in the unlisted companies (state-owned and private companies) in Libya by using discretionary accruals as a proxy to measure earnings management. Four different versions of the Modified Jones model were applied to generate firm specific coefficients. From the results of the four versions, this study used firm-specific coefficients that were generated from the version with the highest adjusted R^2 to estimate the expected nondiscretionary accruals. Also, this study used secondary data from 87 unlisted companies, which include 45 state-owned and 42 private companies. Total and current accruals were computed by using the balance-sheet approach because some of the Libyan companies do not prepare cash flow statements, and a year-by-year regression (cross-sectional approach) was adopted to generate firm-specific coefficients.

The results of this study showed that Libyan companies are engaged in earnings management by using both income-increasing and income-decreasing policies accruals. In order to investigate the direction of earnings management, the whole sample was divided into two sub-samples regarding the nature of ownership (state-owned and private companies). The results showed that the majority of the companies that adopted income-increasing policies accruals were state-owned companies. However, the majority of the companies that adopted income-decreasing policies accruals were from the private companies group.

In addition, the results of this chapter indicate that there is a relationship between the direction of earnings management and company size, which was measured by using two regression models (one for state-owned companies and another for private companies). The results of the regression model of state-owned companies showed that company size was positively and significantly associated with discretionary total accruals. This means that as company size increases, the company adopts income-increasing policies accruals. On the other hand, the results of the regression model of private companies showed company size was negatively and significantly linked to discretionary total accruals. This means that as company size increases, the company adopts income-decreasing policies accruals.

As described in the literature review, Chapter Two (Section 2..1.5), there are several methods which can be used to manage earnings. Also, as discussed in Chapter Two (Section 2.1.6) and Chapter Four (Section 4.4), there are different motivations that are behind practicing earnings management, which depend on the aims to be achieved. These motivations lead to practicing earnings management in two directions, which are income-increasing and income-decreasing. The next chapter provides the research findings derived from the questionnaire and interview data analysis to investigate two areas: firstly, it will investigate earnings management motivations in the Libyan corporations. Secondly, the most frequent techniques that have been used to practice earnings management in the Libyan corporations will be examined.

CHAPTER FIVE
ANALYSIS OF QUESTIONNAIRE SURVEY AND SEMI-STRUCTURED INTERVIEW FINDINGS RELATED TO EARNINGS MANAGEMENT MOTIVATIONS AND TECHENQUES

5.1 Introduction

The aim of this chapter is to present the results of both the questionnaire and the semi-structured interview data that related to the background information about respondents, and earnings management motivations and techniques. As mentioned in the methodology chapter, a questionnaire and semi-structured interview were utilised to collect data concerning the practice of earnings management in Libyan companies. For this purpose, six groups were asked to participate in this research through two-stages; firstly, completing a questionnaire; secondly, participating in a semi-structured interview. These six groups consisted of external auditors, financial managers and senior accountants, internal auditors, lenders, tax officers and accounting academics.

The main reason for choosing these groups is that all these groups should have expertise and knowledge from their daily work about earnings management and accounting manipulation issues. More specifically, external auditors are a corporate safeguard as they monitor financial statements and they traditionally have the responsibility of discovering fraud in financial statements. Therefore, their opinions may have important implications for earnings management issues. Financial managers and internal auditors are expected to be conscious of the motivations and techniques behind the practice of earnings management in Libyan companies. Also, lenders and tax officers are expected to be aware of earnings management issues and the techniques that may be used to manipulate financial statements because their main work is dealing with the information of financial statements. Finally, academic respondents, who are specialised in accounting and financial management, are presumed to be familiar with the issues of earnings management because of their research into accounting issues, Also, some of them work as advisors for some Libyan companies and as external auditors.

Additionally, identifying the perceptions of the six different groups could be useful to understand different aspects of earnings management in Libya, and comparisons between these perceptions can be made to highlight any differences between them in order to enhance the understanding of the earnings management phenomenon in Libya, and as a result, it could be useful to improve the quality of financial statements in the Libyan environment.

The aim of this chapter is to provide the overall findings derived from both the questionnaire and semi-structured interviews, which related to the background information about respondents and earnings management motivations and techniques. The analysis and discussion of the findings are presented on a section-by-section basis as appeared in the rationale to the questionnaire. The remainder of this chapter is divided into four sections: Section Two presents the descriptive statistics of the respondent's background information. Section Three provides detailed survey results about motivations behind practicing earnings management in Libyan companies. Section Four presents detailed survey results pertaining to earnings management techniques.

5.2 Descriptive Statistics of Respondents and Background Information

As mentioned above, the questionnaire was distributed to six groups, which included external auditors, financial managers and senior accountants, internal auditors, lenders, tax officers and accounting academics. A total of 500 copies of the questionnaire were distributed to the different respondents groups who participated in this study. Of these 500 questionnaires, 318 were returned and 302 of them were completed fully and could be used for data collection. Therefore, the analysis of data in this study was based on 302 copies, which is a response rate of 60.4 percent as shown in Table 5.1.

Table 5.1 provides the number of distributed questionnaires and final response rate classified into the six groups who participated in this study. It can be seen from this table that the highest rate of response was from accounting academics with a response rate of 70.2 percent, whereas the response rate from the financial managers and senior accountants group and the internal auditors group were lower than other groups at 52.7 percent and 54.16 percent respectively.

Table (5.1): Responses to the questionnaire

Description	Issued		Received and used		Response rate (%)
	No	(%)	No	(%)	
1. External Auditors	102	20.4	65	21.5	63.10
2. Financial Managers/ Senior Accountants	110	22	58	19.2	52.70
3. Internal Auditors	96	19.2	52	17.2	54.16
4. Lenders	58	11.6	38	12.6	65.50
5. Tax Officers	50	10	30	10	60
6. Accounting Academics	84	16.8	59	19.5	70.20
Total	500	100	302	100	60.40

Table 5.2 presents respondents' working experience (in years). According to this table, it can be seen that 1.3 percent of respondents had working experience less than one year, and 98.7 percent of respondents had working experience of at least one year. 17.2 percent of respondents had working experience between one and five years, 34.1 percent had experience in their field between six and ten years, 26.2 percent had working experience between ten to 15 years, and 21.2 percent of respondents had more than 15 years working experience. Consequently, most respondents had working experience of more than six years at a rate of 81.5 percent.

Table (5.2): Respondents' experience

Description	External Auditors		Financial Managers/ Senior Accountants		Internal Auditors		Lenders		Tax Officers		Accountin g Academics		Total	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Less than One year	1	1.5	1	1.7	1	1.9	-	-	1	3.3	-	-	4	1.3
1-5 years	10	15.4	7	12.1	13	25.0	8	21.1	5	16.7	9	15.3	52	17.2
6-10 years	18	27.7	27	46.6	16	30.8	13	34.2	13	43.3	16	27.1	103	34.1
11-15 years	18	27.7	10	17.2	11	21.2	10	26.3	6	20.0	24	40.7	79	26.2
More than 15 years	18	27.7	13	22.4	11	21.2	7	18.4	5	16.7	10	16.9	64	21.2

Table 5.3 shows that 7.6 percent of respondents had a diploma degree, 48.3 percent had gained a Bachelor's degree, 29.1 percent% had a Master's degree, of which 28.4 percent were financial managers and senior accountants. 14.9 percent had gained a doctoral degree, and more than half of them were from the accounting academics group.

Table (5.3): Respondents' educational qualification

Description	External Auditors		Financial Managers/ Senior Accountants		Internal Auditors		Lenders		Tax Officers		Accounting Academics		Total	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Diploma	3	4.6	5	8.6	5	9.6	5	13.2	5	16.7	-	-	23	7.6
Bachelor Degree	39	60.0	28	48.3	34	65.4	20	52.6	18	60.0	7	11.9	146	48.3
Master Degree	18	27.7	25	43.1	13	25.0	13	34.2	5	16.7	14	23.7	88	29.1
Doctoral Degree	5	7.7	-	-	-	-	-	-	2	6.7	38	64.4	45	14.9
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 5.4 shows an analysis of respondents by their educational specialisation. It can be seen from this table that 68.2 percent of the respondents possessed an accounting background. The remainder had backgrounds in finance (16.9 percent), management (12.3 percent), and economics (2.6 percent).

Table (5.4): Respondent's educational specialisation

Description	External Auditors		Financial Managers/ Senior Accountants		Internal Auditors		Lenders		Tax Officers		Accountin g Academics		Total	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Accounting	55	84.6	37	63.8	39	75.0	21	55.3	18	60.0	36	61.0	206	68.2
Finance	7	10.8	12	20.7	8	15.4	7	18.4	5	16.7	12	20.3	51	16.9
Management	3	4.6	9	15.5	3	5.8	9	23.7	5	16.7	8	13.6	37	12.3
Economics	-	-	-	-	2	3.8	1	2.6	2	6.7	3	5.1	8	2.6
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-

5.3 Earnings Management Motivations

It was mentioned in the previous chapters that financial statements are very important to external and internal users to help them make their decisions. According to International Accounting Standard 1 (IAS 1), the purpose of accounting is to provide information about both the entity's financial performance and the financial position of the entity in order to assist decision-makers to make economic assessments. As described in the literature review, Chapter Two (Section 21.6), several empirical studies have examined motivations that are behind earnings management. Their results showed that earnings management might be practiced for several motivations, which depend on aims that want to be reached, such as increasing management compensation (Healy, 1985; Watts & Zimmerman, 1986; Guidry et al., 1999; Gaver et al., 1995; Holthausen et al., 1995), external contract requirements (Watts & Zimmerman, 1986; Duke & Hunk, 1990; DeFond & Jiambalvo, 1994; Sweeney, 1994; Jaggi & Lee, 2002), decreasing the value of tax payment (Baralexis, 2004; Noronha et al., 2008) and job anxiety (Fudenberg & Tirol, 1995; DeFond & Park, 1997). In this section, an attempt is made to discover the reasons underlying earnings management in Libyan unlisted companies (state-owned and private). Part two of the questionnaire investigated 11 motivations behind managing earnings reports which were provided in previous literature. Respondents were asked to indicate their level of agreement with each of motivations in the list on a Likert scale of 1 (strongly disagree), 2 (disagree), 3 (no view), 4 (agree), 5 (strongly agree).

Table 5.5 presents the results of the responses related to respondents' views on earnings management motivations in state-owned companies. It can be seen from the table 'to mitigate the threat of displacement (i.e. safeguard job position) and/or enhance their reputation' has the highest mean (4.28). Also, a total of is 85.1 percent of respondents from all six groups agreed or strongly agreed with this motivation. This result shows support to the studies of Fudenberg and Tirole (1995) and DeFond and Park (1997) that concerns about job security creates motivations for managers to manage earnings.

Moreover, there was a significant difference in the responses of the six groups. by comparing the responses of the six groups a significant difference was appears among the respondent groups at the 5% level, with financial managers/senior accountants and internal auditors showing much higher level of agreement than other groups. This difference may be due to the fact that financial managers/senior accountants and internal auditors would be more anxious than other groups about their job anxiety, where 93.1 percent of financial managers/senior accountants and 94.2 percent of internal auditors (the groups internal to companies) agreed or strongly agreed that companies manage their earnings reports for this reason. However, the percentages of other groups, who are external to companies, were less than 87.8 percent for agreed or strongly agreed with this motivation.

Table (5.5): Overall Analysis of Earnings management Motivations in state-owned companies

Earnings Management Motivations	Level of agreement										Overall Mean Score	Overall Rank	Level of significant
	Strongly Disagree		Disagree		No View		Agree		Strongly Agree				
	No	%	No	%	No	%	No	%	No	%			
1. To avoid reporting losses	8	2.6	68	22.5	6	2	162	53.6	58	19.2	3.64	5	.020
2. To avoid reporting a decline	31	10.3	203	67.2	40	13.2	26	8.6	2	0.7	2.22	9	.033
3. To report profits	3	1	45	14.9	14	4.6	142	47	98	32.5	3.95	2	.000
4. To sustain last year's profit performance	24	7.9	192	63.6	38	12.6	43	14.2	5	1.7	2.38	7	.001
5. To increase the value of management compensation	-	-	67	22.2	8	2.6	133	44	94	31.1	3.84	3	.000
6. To meet regulatory objectives	2	0.7	70	23.2	20	6.6	117	38.7	93	30.8	3.76	4	.343
7. To enhance the chances of obtaining bank loans	32	10.6	219	72.5	23	7.6	26	8.6	2	0.7	2.16	10	.418
8. To meet predetermined expectations (budgets)	7	2.3	159	52.6	15	5	94	31.1	27	8.9	2.92	6	.419
9. To decrease the amount of taxes	21	7	222	73.5	16	5.3	34	11.3	9	3	2.30	8	.589

Table (5.5) continued													
Earnings Management Motivations	Level of agreement										Overall Mean Score	Overall Rank	Level of significant
	Strongly Disagree		Disagree		No View		Agree		Strongly Agree				
	No	%	No	%	No	%	No	%	No	%			
10. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation	-	-	32	10.6	13	4.3	95	31.5	162	53.6	4.28	1	.000
11. To increase information value	86	28.5	180	59.6	22	7.3	14	4.6	-	-	1.88	11	.289

Notes:

- The responses were reported on a 5-point scale ranking from: 1 (Strongly Disagree), 2 (Disagree), 3 (No View), 4 (Agree), 5 (Strongly Agree).
- A significance Level: P value (probability) <0.05 that means there are significant differences between at least two groups from the six groups of respondents.

Table 5.5 shows that the second, third and fourth motivations for practicing earnings management were 'to report profits', 'to increase the value of management compensation', and 'to meet regulatory objectives' with overall mean score (3.95), (3.84), and (3.76), respectively. Also, 79.5 percent, 75.1 percent and 69.5 percent, respectively, in total from all six groups agreed or strongly agreed with these motivations. There was a significant difference in the responses of the six groups for the motivation 'to report profits' (at the 5% level). By comparing the responses of the six groups, it appears that lenders and tax officers showing much lower levels of agreement than other groups, possibly due to their daily work. Firstly, lenders deal with the financial statements of companies that attempt to get loans and because state-owned companies in the Libyan environment are supported by the government, these kinds of companies usually do not attempt to get loans from the banks or any external financing. Moreover, Table 5.5 shows that the motivation 'to enhance the chances of obtaining bank loans' was at the end of the motivations rank and there was no significant difference in the responses from the groups of respondents.

Secondly, companies that manage their earnings reports due to tax motivation decrease their income taxes. Therefore, tax officers showed much lower levels of agreement than the other groups with the motivation 'to report profits'. Moreover, it can be seen from Table 5.5 that the reason 'to decrease the amount of taxes' was in rank eight of 11 of earnings management motivations and there was no significant difference in the responses from all six groups of respondents. This result is supported by Noronha et al. (2008), who found that state-owned companies had stronger motivations than tax decreases to manage their earnings.

As presented above, the desire to mitigate the threat of displacement (i.e. safeguard job position) and/or enhance their reputation was the first ranked motivation, reflecting support for prior literature findings (Fudenberg and Tirole, 1995; DeFond & Park, 1997; Noronha et al., 2008) that concern about job security creates motivations for practicing earnings management. The second ranked motivations for earnings management was 'to report profits', and the third motivation was 'To increase the value of management compensation', which is consistent with Healy (1985); Gaver et al. (1995); Guidry et al. (1999); and Holthausen et al. (1995). Meeting regulatory objectives was the fourth ranked motivation. The top-four ranked motivations for earnings management are in general linked together, because achieving large profits is not the main objective of state-owned companies in Libya in general. Therefore, when state-owned companies achieve a small percentage of profits, it shows good management performance. This in turns leads to achieving job security, increasing management compensation and meeting regulatory objectives. Moreover, avoiding reporting losses was ranked fifth, which reflects support for the previous commentary.

During the interview survey stage of this study, the issue of earnings management motivations was raised with respondents. Most of the interviewees showed support for the previous results. The financial manager in a company from the state-owned sector pointed out that:

> *"In my view, many management of state-owned companies practice earnings management since they want to safeguard their job position, enhance their reputation, and increase the value of their compensation, which can be reached by avoiding reporting losses and by reporting profits. Other motivations are minor and do not have too much influence on why the state-owned companies engage in practising earnings management, such as the state-owned companies in general do not use earnings management to decrease the amount of taxes since they want to avoid reporting losses and they want to reporting profits".*

Confirming this view, a tax officer made the following remark:

> *"In my experience, I can say that state-owned companies usually do not attempt tax evasion compared with private companies".*

Moreover, a bank officer, who is working in the financing department, stated that:

> *"In my experience, usually the state-owned companies in the Libyan environment do not attempt to get loans from the banks or any external financing because they are usually supported by the government".*

Table 5.6 presents the results of the responses related to respondents' views on earnings management motivations in private companies. It can be seen from the table 'to decrease the amount of taxes' has the highest mean (4.44). Also, a total of 92.1 percent of respondents from all six groups agreed or strongly agreed with this motivation. Regarding this motivation there was no significant difference in the responses from the six groups of respondents. This result reflecting supports for prior literature findings (Beatty, 1995; Baralexis, 2004; Noronha et al., 2008).

The second motivation was 'to enhance the chance of obtaining bank loans'. Also, a total of 87.1 percent of respondents from all six groups agreed or strongly agreed with this motivation. In addition, there was significant difference (at the 5% level) in the responses of the six groups of respondents. By comparing the responses of the six groups, the result indicates that tax officers showing much lower levels of agreement than other groups , where 50 percent of tax officers were agreed or strongly agreed, compared to 82.8 percent and above in the other groups (see appendix 5). This is possibly due to the fact that they work as tax officers, which limits their experience to the situation of companies increasing their earnings. This result supports prior literature findings such as Watts and Zimmerman (1986).

The third and fourth motivations for practicing earnings management were 'to avoid reporting losses' and 'to report profits', respectively. A total of 35.7 percent and 32.1 percent from all six groups agreed or strongly agreed with these motivations, respectively. there were significant differences (at the 5% level) among the six groups of respondents, In addition, by comparing the responses of the six groups, it appears that lenders' opinions differed significantly from other groups and the former provided much higher levels of agreement, where 55.3 percent and 71.1 percent agreed or strongly agreed, respectively, compared to the responses of other groups (40 percent and 33 percent) agreed or strongly agreed, respectively (see appendices 5).

Table (5.6): Overall Analysis of Earnings management Motivations in private companies

Earnings Management Motivations	Level of agreement										Overall Mean Score	Overall Rank	Level of significant
	Strongly Disagree		Disagree		No View		Agree		Strongly Agree				
	No	%	No	%	No	%	No	%	No	%			
1. To avoid reporting losses	26	9.6	148	49	20	6.6	84	27.8	24	7.9	2.77	4	.030
2. To avoid reporting a decline	28	9.3	178	58.9	33	10.9	55	18.2	8	2.6	2.46	7	.307
3. To report profits	17	5.6	152	50.3	36	11.9	67	22.2	30	9.9	2.80	3	.000
4. To sustain last year's profit performance	19	6.3	147	48.7	40	13.2	85	28.1	11	3.6	2.74	5	.121
5. To increase the value of management compensation	67	22.2	211	69.9	11	3.6	12	4	1	0.3	1.9	10	.004
6. To meet regulatory objectives	38	12.6	165	54.6	34	11.3	61	20.2	4	1.3	2.43	8	.224
7. To enhance the chances of obtaining bank loans	1	0.3	34	11.3	4	1.3	94	31.1	169	56	4.31	2	.000
8. To meet predetermined expectations (budgets)	13	4.3	207	68.5	15	5	58	19.2	9	3	2.48	6	.159
9. To decrease the amount of taxes	1	0.3	20	6.6	3	1	98	32.5	180	59.6	4.44	1	.086

Table (5.6) continued													
Earnings Management Motivations	**Level of agreement**										**Overall Mean Score**	**Overall Rank**	**Level of significant**
	Strongly Disagree		**Disagree**		**No View**		**Agree**		**Strongly Agree**				
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**	**No**	**%**			
10. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation	40	13.2	173	57.3	20	6.6	64	21.2	5	1.7	2.41	9	.015
11. To increase information value	81	26.8	186	61.6	23	7.6	12	4	-	-	1.89	11	.143

Notes:

- The responses were reported on a 5-point scale ranking from: 1 (Strongly Disagree), 2 (Disagree), 3 (No View), 4 (Agree), 5 (Strongly Agree).
- A significance Level: P value (probability) <0.05 that means there are significant differences between at least two groups from the six groups of respondents.

The motivation 'to mitigate the threat of displacement and/or enhance their reputation' and 'to increase the value of management compensation', as discussed previously in the literature in Chapter Two (Sections 2.1.6.5.2and 2.1.6.4, respectively), were ranked ninth and tenth, reflecting weak support for prior literature findings (Fudenberg & Tiorle, 1995; DeFond & Park, 1997; Healy, 1985; Watts & Zimmerman, 1986; Guidry et al., 1999; Gaver et al., 1995). This is possibly due to the fact that most Libyan private companies are family owned. The owners of these companies might be management. Therefore, these motivations were not ranked as the main earnings management motivations in Libyan private companies.

During the interview, the motivations that are behind practicing earnings management in private companies were raised with respondents. The majority of interviewees indicated that Libyan private companies commit earnings management since they want to decrease the amount of taxes and enhance the chances of obtaining bank loans, which means these companies use both income-increasing and income-decreasing techniques to achieve the aims behind earnings management. Other motivations are minor and do not have a great deal of influence on why private companies in Libya engage in earnings management. An internal auditor stated that:

> *"The aim of using earnings management in private companies in the Libyan environment depends on the motivations behind that as some of the private companies practice earnings management for tax evasion, which means these companies use income-decreasing techniques to manage their earnings reports. However, others seek to enhance the chances of obtaining bank loans, and therefore, these companies use income-increasing techniques to manage their earnings reporting".*

Confirming this view, a bank officer, who is working in the financing department, made the following remark:

> *"From my experience, one of the main aims that the private companies want to achieve by practicing earnings management (income-increasing) is to get loans from the banks or any external financing".*

In addition, an academic stated that:

> *"Libya is a country emerging from a conservative and traditional heritage, where the Islamic teaching (faith) plays a major role in shaping culture and relationships in the society. It is known that loans with interest are forbidden in the Islamic religion. Therefore, the majority of private companies do not seek bank loans because the majority of banking loans in Libya are with interest. However, there are some companies which accept this service with interest. As result, in my view, Libyan private companies have more incentive to practice earnings management for tax evasion than to use it to enhance the chances of obtaining bank loans".*

In addition, a tax officer stated that:

> *"Definitely, private companies in Libya commit earnings management (income-decreasing) to decrease the amount of taxes as seen by the large number of tax evasion cases that we have been faced with in the private sector".*

It was mentioned in Chapter Two (2.1.7) that the extent of earnings management is affected by the environment in which a corporation operates and the kind of corporation it is. The environment may create conditions for practicing earnings management (Goncharov, 2005). Moreover, Noronha et al. (2008) stated that the issue which should be considered is how managers consider the importance of the motivations. Corporations are working in different environments with different variables. As a result, management will have different priorities on motivations. Also, they present two factors that influence motivation preferences, which are corporation size and the corporation ownership structure. This study was also concerned with one of these factors, the effect of ownership in the motivation preference. The above results from both state-owned and private companies' motivations reflect strong support for Wang (2006) and Noronha et al. (2008). It can be seen from a comparison between the motivations of state-owned and private companies that the motivation preference of earnings management in the Libyan environment is influenced by the ownership structure of the companies.

The majority of interviewees indicated that the ownership structure of the company has an effect on the earnings management motivations. An academic interviewee pointed out that:

> *"In my view, earnings management motivations are influenced by the corporation ownership structure listed/unlisted companies or private/state-owned companies). Each type of these companies has different conditions that lead the company to practise earnings management for different motivations and to achieve different goals".*

5.4 Earnings Management Techniques

As presented in Chapter Two (Section 2.1.5), earnings management might be practiced by using several techniques. The accounting literature presents many different techniques that may be used to manage earnings, such as business combinations, revenue recognition, fixed assets, intangible assets, accounting changes and prior period adjustments, transfers of receivables, consolidations and equity/cost method and investments and leases (Scott, 1997; Dechow & Skinner, 2000; Mulford & Comiskey, 2002; Nelson et al., 2002; Schitlit, 2002; Nelson et al., 2003; Ortega & Grant, 2003; McKee, 2005; Ronen & Yaari, 2007; Noronha et al., 2008). An attempt is made in this section to derive respondents' experiences on the frequency of utilising such techniques in the Libyan environment. The questionnaire included a list of techniques that might be used to manage the figure of reported earnings. The respondents were asked to indicate their experiences of the frequency of using these techniques by Libyan companies, on a Likert scale of 1 (never), 2 (seldom), 3 (sometimes), 4 (usually), 5 (always). Table 7.7 presents the frequency of the earnings management techniques as perceived by the respondents.

It can be seen from Table 5.7 that manipulation of the value of inventory was the most frequently used technique for practicing earnings management, and there was no significant difference among the six groups of respondents. 'Improper assets revaluation' and 'incorrect capitalising rather than expensing expenditures' were ranked second and third, respectively. For each of these two techniques, there were significant differences in the responses from the six groups of respondents. These differences may be because of the level of experience of each group of respondents in the practical field.

'Manipulation of accrual estimation', 'incorrect use of expenses on asset acquisition' and 'related-party transactions' were ranked fourth, fifth and sixth, respectively. Also, there were no significant differences among the six groups of respondents for 'manipulation of accrual estimation' and 'related-party transactions' techniques. In contrast, there was a significant difference (at the level 5% of significance) in the responses from the six groups of respondents with 'incorrect use of expenses on asset acquisition' technique. The result revealed that tax officers' opinions differed significantly at the 5% level from other groups. Analysis of responses of each group shows that more than half of the tax officers (73.3 percent) perceived that this technique occurred either 'usually' or 'always', compared to other groups (less than 48 percent), who classified it either 'usually' or 'always' (see appendices 5). Possibly, this difference is due to the experience of the tax officers working with decreasing earnings by companies that tried to reduce the value of tax payment.

'Deferring recognition of expenses' and 'accelerating recognition of income' were ranked seventh and eighth, respectively. 'Accelerating recognition of expenses' and 'deferring recognition of income' were ranked ninth and tenth, respectively. Moreover, it can be seen from Table 5.7 that the least frequent techniques for practicing earnings management in the Libyan environment were perceived to be 'manipulation of investment classification between trading and available-for-sales investment to present unrealised gain or loss from valuation', 'manipulation of depreciation/mortification figures', 'manipulation of deferred tax, and manipulation of bad debts provision', respectively.

During the interview, the earnings management techniques were discussed with respondents who participated in the interview. The interviewees mentioned the following issues which they had faced in their practical life:

Table (5.7): Overall Analysis of Earnings management techniques

Earnings Management Techniques	Level of agreement										Overall Mean Score	Overall Rank	Level of significance
	Never		Seldom		Sometimes		Usually		Always				
	No	%		%	No	%	No	%	No	%			
1. Accelerating recognition of income	-	-	8	19.9	154	51.2	67	22.3	20	66	3.16	8	.000
2. Deferring recognition of income	4	1.3	10	25.8	152	50.2	59	19.5	9	3	2.97	10	.130
3. Accelerating recognition of expenses	4	1.3	9	25.2	147	48.7	68	22.5	7	2.3	22.9	9	.757
4. Deferring recognition of expenses	1	3	7	19.2	153	50.7	68	22.5	22	7.3	3.17	7	.000
5. Incorrect use of expenses on asset acquisition	1	3	5	19.5	119	39.4	105	34.8	18	6	3.26	5	.003
6. Incorrect capitalising rather than expensing expenditures	4	1.3	3	14.2	114	37.7	97	32.1	44	14.6	3.44	3	.000
7. Manipulation of bad debts provision	243	80.5	20	15.6	5	1.7	5	1.7	2	0.7	1.26	20	.075
8. Manipulation of the value of inventory	3	1	1	9.6	103	34.1	152	50.3	15	5	3.49	1	.170
9. Manipulation of impairment of assets	53	17.5	13	41.1	110	36.4	14	4.6	1	0.3	2.29	13	.000
10.Manipulationof depreciation/ amortisation figures	213	70.5	18	22.5	13	4.3	7	2.3	1	0.3	1.39	18	.018

Table (5.7) continued													
Earnings Management Techniques	Level of agreement										Overall Mean Score	Overall Rank	Level of significance
	Never		Seldom		Sometimes		Usually		Always				
	No	%	No	%	No	%	No	%	No	%			
11. Manipulation of deferred tax	221	73.2	19	23.8	6	2	3	1	-	-	13.1	19	.093
12. Manipulation of investment classification between trading and available-for-sales investment to present unrealised gain or loss from valuation	195	64.6	17	26.2	25	8.3	3	1	-	-	1.46	17	.013
13. Manipulation of accrual estimation	6	2	4	15.2	102	33.8	139	46	9	3	3.33	4	.931
14. Manipulation of finance lease contract to operating lease contract to avoid recording assets and liabilities	71	23.5	14	49.3	65	21.5	13	4.3	4	1.3	2.11	14	.000
15. Making inadequate provisions	108	35.8	16	53	25	8.3	7	2.3	2	0.7	1.79	16	.053
16. Improper assets revaluation	5	1.7	2	7.3	125	41.4	128	42.4	22	7.3	3.46	2	.039
17. Related-party transactions	1	0.3	6	19.9	116	38.4	111	36.8	14	4.6	3.25	6	.948
18. Sale-and-lease buy back transactions	7	2.3	11	28.8	147	48.7	36	11.9	25	8.3	2.95	11	.003
19. Changing accounting policy	8	2.6	12	34.4	128	42.4	50	16.6	12	4	2.85	12	.017
20. Classification in financial statements	88	29.1	15	59.9	26	8.6	7	2.3	-	-	1.84	15	.000

Notes:

- The responses were reported on a 5-point scale ranking from: 1 (Never), 2 (Seldom) 3 (Sometimes), 4 (Usually), 5 (Always).
- A significance Level: P value (probability) <0.05 means there are significant differences between at least two groups from the six groups of respondents

An external auditor stated that:

> *"In my view, earnings management techniques that might be used to manage earnings reporting in Libya depend on the motivations behind that. From my experience, manipulation of the value of inventory, incorrect capitalising recurrent expenditure, early recognition of income, and improper assets revaluation are the most frequent techniques utilised for managing earnings reporting. These techniques may effectively allow companies to increase their earnings reporting. However, other companies that seek to decrease the amount of taxes will use the techniques that enable them to decrease their earnings, such as delayed recognition of income".*

Another external auditor remarked that:

> *"From my experience, the techniques that are used by Libyan companies to manage their earnings include overstating the sales revenue before the end of the year, and re-recording these transactions as sales returns in the next year disclosing the inventory at the higher figure, and manipulating the work-in-process and long term contracts especially in construction companies. Also, some private companies are using related party transactions to practice earnings management because most of them are family companies".*

Moreover, most of the interviewees agree that Libyan companies rarely used techniques, such as manipulation of deferred tax, manipulation of investment classification, manipulation of bad debts provision and manipulation of depreciation/amortisation figures. Also, an academic interviewee stated that:

> *"There are areas of flexibility within accounting standards used in Libya because these standards are a mixture of international accounting standards and American accounting standards, which are generally accepted by accountants in Libya. However, there is no specific law or specific professional accounting body that determines such standards. Therefore, Libyan companies have more flexibility to manage their earnings reporting".*

In contrast, a tax officer remarked that:

> *"Accounting income in the state-owned companies is measured in the same way as tax income. Therefore, the companies are obliged to prepare items of financial statements according to the requirements of the law. From my experience, the techniques of income-decrease usually used by private companies to decrease the amount of taxes include deferring recognition of income, accelerating recognition of expenses, and improper assets revaluation".*

5.5 Summary and Conclusions

The main objective of this chapter has been to investigate respondents' perceptions of the motivations behind the practice of earnings management in Libyan corporations, the most frequent techniques that are used to practise earnings management in Libyan corporations. A questionnaire and semi-structured interviews were used to obtain the data at this stage of this study. This chapter and the next chapter are based on 302 usable responses to a questionnaire survey from 500 copies which were distributed to a number of external auditors, financial managers and senior accountants, internal auditors, lenders, tax officers and accounting academics. Furthermore, the questionnaire survey was combined with semi-structured interviews with 18 interviewees, all of whom also answered the questionnaire.

This chapter sought to investigate two issues related to the earnings management phenomenon in Libyan corporations. These issues were earnings management motivations in Libyan state-owned and private corporations, and the most frequent techniques used to practice earnings management.

With regard to the earnings management motivations in the state-owned corporations, the top-four motivations were 'to mitigate the threat of displacement (i.e. safeguard job position) and/or enhance their reputation', 'to report profits', 'to increase the value of management compensation' and 'to meet regulatory objectives'. However, lower levels of agreement were given for the lower four motivations, which were 'to increase information value', 'to enhance the chances of obtaining bank loans', 'to avoid reporting a decline' and 'to decrease the amount of taxes'.

As regards earnings management motivations in private corporations, there was a high level of agreement with the statements that the main motivations to practice earnings management were 'to decrease the amount of taxes' and 'to enhance the chance of obtaining bank loans'. On the other hand, much lower levels of agreement for the other motivations were shown by the participants in this study.

In addition, this study was also concerned about the effect of ownership in the motivation preference. The above results from both state-owned and private companies' motivations reflect strong support for the prior literature review. It can be seen from a comparison between the motivations of state-owned and private companies that the motivation preference of earnings management in the Libyan environment is influenced by the ownership structure of corporations.

The most frequent techniques used to practice earnings management were 'manipulation of the value of inventory', 'improper assets revaluation', 'incorrect capitalising rather than expensing expenditures', 'manipulation of accrual estimation', 'incorrect use of expenses on asset acquisition' and 'and related-party transactions'. However, the techniques that were perceived to be the least frequent used were 'manipulation of bad debts provision', 'manipulation of deferred tax', 'manipulation of depreciation/amortisation figures' and 'manipulation of investment classification between trading and available-for-sales investment to present unrealised gain or loss from valuation'.

The next chapter provides the research findings derived from the questionnaire and interview data analysis to investigate the procedures which should be taken to constrain earnings management and improve the quality of financial reporting in Libyan corporations, which includes accounting standards, internal corporate governance and external audit quality.

CHAPTER SIX
ANALYSIS OF QUESTIONNAIRE SURVEY AND SEMI-STRUCTURED INTERVIEW FINDINGS RELATED TO EARNINGS MANAGEMENT CONSTRAINTS

6.1 Introduction

The aim of this chapter is to provide the overall findings derived from both the questionnaire and semi-structured interviews related to earnings management constraints in the Libyan environment. The analysis and discussion of the findings on the earnings management phenomenon in the Libyan environment are presented on a section-by-section basis as appeared in the rationale to the questionnaire. The remainder of this chapter is divided into two sections: Section Two provides detailed survey results about earnings management constraints, which include accounting standards, internal corporate governance mechanisms and external audit quality. Section Three presents a summary of the chapter's contents.

6.2 Earnings Management Constraints in the Libyan Environment

The main objective of corporate financial reports is to provide useful information to the users groups to enable them to evaluate the performance of the corporation and make informed decisions. Therefore, financial reports of low quality provide information that may lead to problems in the allocation of resources (Schipper & Vincent, 2003). Moreover, according to Leuz et al. (2003), financial reports with extensive earnings management inaccurately reflect corporation performance and thus weaken users' ability to assess the corporation performance. Consequently, earnings management has a negative relationship with the quality of financial reports, when managers use earnings management opportunistically. Therefore, constraining earnings management will positively influence the quality of financial reports. Baralexis (2004) presents factors that influence the quality of financial reports, such as poor management performance, weak corporate governance structure, weak accounting profession, limited extent of external auditing and unsophisticated users.

Levitt (1998) called for an action plan to improve the quality of financial reports by constraining earnings management. The action plan includes improving the accounting framework, enhancing outside auditing in the financial reporting process, strengthening the audit committee process and pursuing cultural change on the part of corporate management. Also, Goncharov (2005) presents additional factors that constrict earnings management, such as political forces, culture, corporate governance, external auditing and accounting standards.

In this section, an attempt is made to discover the actions that may be taken to constrict practicing earnings management by Libyan companies and improve the quality of financial reporting in the Libyan environment. Part four in the questionnaire investigated three factors provided by the literature, which might influence practicing earnings management and the quality of financial reporting in the Libyan environment. These factors were accounting standards, internal corporate governance mechanisms and external audit quality. In the next sections an attempt is made to derive respondents' experiences about constricting earnings management and improving the quality of financial reporting in the Libyan environment.

6.2.1 Accounting Standards

Accounting standards give managers different accounting choices, which managers can select from to prepare financial reports. As a result, financial reports may provide earnings with different quality. Earnings management is expected to be more extensive under flexible systems that leave a sufficient gap for making judgments (Goncharov, 2005). Several studies in the earnings management literature examine the relationship between earnings management and accounting standards, such as Yu (2004), Ewert and Wagenhofer (2005), Ball et al. (2003) and Jeanjean and Stolowy (2008). Part 4.1 of the questionnaire provided five actions concerning accounting standards that might help to reduce the practice of earnings management and improve the quality of financial reporting in the Libyan environment. Respondents were asked to indicate their level of agreement with each of the actions on the list on a Likert scale of 1 (strongly disagree), 2 (disagree), 3 (no view), 4 (agree), 5 (strongly agree).

Table (6.1): Overall Analysis of Earnings management Constraints/ Accounting Standards

Accounting Standards Issues	Level of agreement										Overall Mean Score	Overall Rank	Level of significant
	Strongly Disagree		Disagree		No view		Agree		Strongly agree				
	No	%	No	%	No	%	No	%	No	%			
1. Issuing more detailed accounting legislation	3	1	10	3.3	2	0.7	187	61.9	100	33.1	4.23	1	.772
2. Issuing accounting standards which fit with Libyan environment	12	4	65	21.5	18	6	150	49.7	57	18.9	4.16	4	.510
3. Issuing standards aimed at specific problems	2	0.7	12	4	5	1.7	184	60.9	99	32.8	4.21	2	.436
4. Increasing the level of disclosure	1	0.3	38	12.6	30	9.9	162	53.6	71	23.5	4.08	5	.234
5. Quarterly disclosure	2	0.7	12	4	6	2	186	61.6	96	31.8	4.20	3	.555

Notes:

- The responses were reported on a 5-point scale ranking from: 1 (Strongly Disagree), 2 (Disagree), 3 (No View), 4 (Agree), 5 (Strongly Agree).
- A significance Level: P value (probability) <0.05 that means there are significant differences between at least two groups from the six groups of respondents.

It can be seen from Table 6.1 that 'issuing more detailed accounting legislation' elicited the greatest level of agreement, with a total of 95 percent from all six groups of respondents stating that they either agree or strongly agree, with overall mean score of 4.23. 'Issuing standards aimed at specific problems', 'quarterly disclosure', and 'issuing accounting standards which fit with the Libyan environment' were ranked second, third and fourth, respectively. A total of 93.7 percent, 93.4 percent and 86.1 percent of respondents from all six groups agreed or strongly agreed, and with overall mean score 4.21, 4.20 and 4.16, respectively. The last action on the rank was 'increasing the level of disclosure' with the lowest agreement from respondents, with an overall mean score 4.08, and 81.8 percent from all six groups agreed or strongly disagreed. With all actions there were no significant differences in the responses from the six groups of respondents.

Moreover, it can be seen from Table 6.1 that the lowest mean score for these actions was 4.08. This reflected that the participants of this study felt that the right way to restrict earnings management in the Libyan environment is by using all identified actions in Table 8.1 collectively. This result was supported by comments that were given by the interviewees that the accounting standards are not the only solution to restrict earnings management and improve the quality of the financial reporting in Libya. This result showed support for the findings of Ball et al. (2003) and Jeanjean and Stolowy (2008), who argue the relationship between the quality of financial reports and accounting standards. The authors provide results that show it is impossible for countries with low quality accounting standards to have high quality financial reports. On the other hand, high quality accounting standards do not guarantee restriction of earnings management and financial reports with high quality. The data obtained from the interview stage regarding this part will be discussed in Section 6.5.2.1.

6.2.2 Internal Corporate Governance Mechanisms

6.2.2.1 Greater Reliance on Internal Corporate Governance Mechanisms

As mentioned in Chapter Four (Section 2.2.4), earnings management gives managers opportunities to manage a corporation's performance in a way that depends on their motivations. Academic researchers have found a positive relationship between weaknesses in corporate governance and poor financial reporting quality on the one hand and weaker internal controls, financial statement fraud and earnings manipulation on the other (e.g. Beasley, 1996; Dechow et al., 1996). Corporations with good corporate governance mechanisms may restrict the possibility of managing earnings reports (Rezaee, 2002). The internal corporate governance structure includes an independent and competent board of directors, an effective audit committee, an effective internal audit function and legal protection. However, it is widely accepted that there are distinct corporate governance differences between countries. The three basic differences are orientation, ownership concentration and time horizon of economic relationships (Shleifer & Vishny, 1997). Also, it should be noted that the Libyan case is different from developed countries because the ownership structures of corporations in Libya are largely determined by unlisted companies, which are state and family owned. Therefore, the objective of this section is to introduce some elements of internal corporate governance mechanisms to the Libyan environment that could help to restrict earnings management and improve the quality of financial reporting and facilitate improvements in corporations' performance. A list of these internal corporate governance mechanisms was provided in the questionnaire part 4.2. Respondents were asked to indicate their level of agreement with each of the actions on the list on a Likert scale of 1 (strongly disagree), 2 (disagree), 3 (no view), 4 (agree), 5 (strongly agree).

Table 6.2 provides a summary of the overall mean score of the respondents' perceptions toward the greater reliance on internal corporate governance actions. As can be seen from the table, 'the existence of an effective audit committee' has the highest overall mean 4.28, with 98 percent of all groups of respondents agreeing or strongly agreeing. 'The existence of an effective internal audit function' was the second ranked action with 95.4 percent of all groups of respondents pointing out they are either agree or strongly agree, and overall mean score was 4.27. 'The existence of an independent and competent of directors' was the last action with overall mean score 4.25, with a total of 94.8 percent of all six groups of respondents indicating that they either agree or strongly agree.

Table (6.2) Greater reliance on internal corporate governance mechanisms

corporate governance mechanisms	Level of agreement										Overall Mean Score	Overall Rank	Level of significance
	Strongly Disagree		Disagree		No view		Agree		Strongly agree				
	No	%	No	%	No	%	No	%	No	%			
1. The existence of an effective audit committee	-	-	2	0.7	4	13	203	67.2	93	30.8	4.28	1	.301
2. The existence of an effective internal audit function	-	-	6	2	8	2.6	186	61.6	102	33.8	4.27	2	.161
3. The existence of an independent and competent board of directors	-	-	6	2	10	3.3	188	62.3	98	32.5	4.25	3	.376

Notes:
- The responses were reported on a 5-point scale ranking from: 1 (Strongly Disagree), 2 (Disagree), 3 (No View), 4 (Agree), 5 (Strongly Agree).
- A significance Level: P value (probability) <0.05 that means there are significant differences between at least two groups from the six groups of respondents.

There were no significant differences in the responses from all six groups of respondents. The participants of this study felt that the right way to restrict earnings management in Libya is by using all identified actions in Table 6.2 collectively. This result was supported by comments that were given by the interviewees that actions presented in Table 6.2 should be taken together to restrict earnings management and improve the quality of the financial reporting in Libya.

During the interview stage, several comments received were from the different types of interviewee. Most of them mentioned actions which should be taken together to restrict earnings management and improve the quality of the financial reporting in the Libyan environment. The suggested actions are as follows:

- Establishing specific professional accounting body dealing with the accounting issues.
- Establishing an accounting oversight board which should be set as a top priority to reorganising of the accounting profession in Libya and enhancing of the professionalism of accountants.
- Establishing and developing accounting legislation to eliminate any difficulties that prevent improvement of financial statements quality.
- Issuing Libyan accounting standards or following international standards in order to establish a unified accounting framework that covers all accounting issues. Also, these standards should be reviewed regularly in order to include any issues that may occur during the practical practice.
- Increasing the level of disclosure and setting non-financial disclosure requirement in law.
- Creating and using effective internal corporate governance mechanisms collectively (in terms of the existence of an effective board of directors, the existence of an effective audit committee and the existence of an effective internal audit function).
- Guarding the independence and impartiality of all parties of internal corporate governance mechanisms.
- Establishing a specific mechanism to prosecute any person, such as the board of directors or internal auditor, who deliberately manages earnings reports.

In addition to the previous actions, other points related to external audit will be discussed in Section 6.2.3.

6.2.2.2 The Existence of an Effective Audit Committee

6.2.2.2.1 Audit committee functions

The importance of the audit committee has been highlighted in the recommendations of corporate governance guidelines. The main functions regarding the activities that should be performed by the audit committee and that were suggested in the literature review as provided in Chapter Four (Section 2.2.4.3) are: (1) oversight of financial statements; (2) oversight of external auditors; and (3) oversight of the internal control systems (e.g. Wolnizer, 1995; Burke & Guy, 2001). The audit committee's responsibilities can be classified into four main areas. Firstly, there is oversight of the financial statement, which includes considering both significant accounting policies and any changes to them, and any significant estimates and judgments, assisting directors in discharging their statutory responsibilities as regards financial reporting, reviewing financial statements with management and the external auditors, and disclosure of financial and non-financial transactions and related information presented with the financial statements. Secondly, the audit committee should evaluate and review the corporation's internal control procedures, and monitor and review the effectiveness of the internal audit function to prevent or detect fraudulent activities or irregularities, and improve communication between the board and external auditors. Thirdly, it should review the qualifications, independence and performance of the external auditor, review and discuss with management and the external auditor the annual audited financial statements and other financial information, to develop and implement policy on the engagement of the external auditor to supply non-audit services, and coordinate the work of internal and external auditors, and improve communicational between the board and external auditors. Finally, the audit committee should report findings to the board of directors and strengthen the role and effectiveness of non-executive directors.

Part 4.2.2.1 of the questionnaire aimed to elicit respondents' perceptions of the audit committee functions. A list of 15 possible functions, which could be performed by an effective audit committee, was presented in this part of the questionnaire. The aim of that was to elicit respondents' views on audit committee functions, which may assist in improving the quality of the financial reporting and restrict earnings management in the Libyan environment. Respondents were asked to indicate their view of the level of importance of each of the functions in the list on a five-point Likert scale of 1 (not important at all), 2 (not important), 3 (little of importance), 4 (important), 5 (extremely important).

Table 6.3 presents the analysis of respondents' views about audit committee functions. It can be seen from the table that the most important audit committee functions were: 'reviewing significant changes in accounting policies and practices', 'reviewing the internal control system', 'reviewing the independence of the internal audit department' and 'overseeing the scope of internal and external audit activities' (with overall mean scores of 4.53, 4.33, 4.21, and 3.96, respectively). Also, 94.4 percent, 83.8 percent, 84.1 percent and 74.5 percent in total, respectively, from all six groups of respondents, recorded these functions as important or extremely important.

As discussed in Chapter Five (Section 5.4), changes in accounting policies and practices is one of the techniques that is frequently used to manage the earnings reporting in Libyan companies. Additionally, this result suggests that the audit committee should pay more attention when reviewing significant changes in accounting policies and practices because these may be frequently manipulated by companies.

The second and third important functions were related to internal control system (reviewing the internal control system, reviewing the independence of the internal audit department). This result reflects how much importance was attached to the effectiveness and improvement of the internal audit function in the point of view of respondents due to the fact that an effective internal control system may guarantee that every function in the system of the company is working properly, which might be helpful to restrain the practice of earnings management and improve the quality of financial statements as suggested by CCR (1992) and Cohen et al. (2002). Moreover, regular review and monitoring of the internal control system by audit committee members may give them more understanding of the client's business and operations, and more opportunities to discover earnings management (Bishop et al., 2000). In addition, the fourth important function was 'overseeing the scope of internal and external audit activities'. This result with the second and third functions (which were reviewing the internal control system, reviewing the independence of the internal audit department) show support for the results of DeZoort (1997), who investigated the responsibilities of audit committee in issues related to corporate governance, auditing and financial reporting. His results showed that the evaluation of the internal control system was ranked consistently by committee members as the most important function, with financial statement review and the evaluation of internal auditor and external auditor considered highly important.

It can also be seen from Table 6.3 that the two least important functions were review of the audited financial statements and the interim reports. In addition, the results presented in Table 8.3 showed that there were no significant differences in the responses from all six groups of respondents with the first, second and third functions. Whereas, there was significant difference between the respondent groups for the fourth function, which was possibly due to external auditors' fear of being controlled by the audit committee.

In this particular study, comments were received during the interview stage. Most of them expressed the respondents' views on the audit committee function that it was responsible for performing the following functions:

- reviewing the company's internal control system and the independence of the internal audit department. Also, oversight of the internal auditor's reports and the procedures that were taken to deal with the recommendations made by the internal auditor.
- Reviewing the company's accounting policies and practices and any significant changes in them.
- Overseeing the scope of external audit activities and the independence of the external auditor.
- Discussing the non-audit services fees with external auditor.
- Reviewing the financial statements before presenting them to the board of directors.

Table (6.3) Audit committee functions

Audit Committee Function	Level of agreement										Overall Mean Score	Overall Rank	Level of significance
	Not Important at all		Not Important		Little of importance		Important		Extremely Important				
	No	%	No	%	No	%	No	%	No	%			
1. Reviewing the corporation's accounting policies and practices	-	-	9	3	115	38.1	140	46.4	38	12.6	3.69	8	.844
2. Reviewing significant changes in accounting policies and practices	-	-	2	0.7	15	5	105	34.8	180	59.6	4.53	1	.407
3. Reviewing the audited financial statement	-	-	96	31.8	28	9.3	150	49.7	28	9.3	3.36	14	.362
4. Reviewing the interim reports	39	12.9	180	59.6	47	15.6	25	8.3	11	3.6	2.30	15	.259
5. Reviewing the corporation's internal control system	-	-	5	1.7	44	14.6	99	32.8	154	51	4.33	2	.348
6. Reviewing significant transactions outside the corporation's normal business	-	-	23	7.6	111	36.8	116	38.4	52	17.2	3.65	10	.212
7. Reviewing related party transactions	1	0.3	19	6.3	73	24.2	157	52	52	17.2	3.79	5	.593
8. Monitoring compliance with accounting standards	-	-	14	4.6	119	39.4	124	41.1	45	14.9	3.66	9	.766
9. Overseeing the scope of internal and external audit activities	-	-	8	2.6	69	22.8	152	50.3	73	24.2	3.96	4	.000

Table (6.3) continued													
Audit Committee Function	**Level of agreement**										**Overall Mean Score**	**Overall Rank**	**Level of significance**
	Not Important at all		**Not Important**		**Little of importance**		**Important**		**Extremely Important**				
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**	**No**	**%**			
10. Holding frequent meetings with internal and external auditors to discuss any problems arising	-	-	20	6.6	90	29.8	150	49.7	42	13.9	3.71	7	.137
11. Reviewing the independence of the internal audit department	-	-	19	6.3	29	9.6	125	41.4	192	42.7	4.21	3	.183
12. Reviewing audit fee	-	-	65	21.5	43	14.2	130.43	64	64	21.2	3.64	11	.888
13. Reviewing types and fee of non-audit services by external auditors	-	-	71	23.5	45	14.9	119	39.4	67	22.2	3.60	12	.990
14. Reviewing the independence and objectivity of the external auditor	-	-	66	21.9	38	12.6	152	50.3	46	15.2	3.59	13	.939
15. Ascertaining whether proper action is taken to deal with the recommendations made by the internal auditor	-	-	65	21.5	11	3.6	157	52	69	22.8	3.76	6	.726

Notes:

- The responses were reported on a 5-point scale ranking from: 1 (Not Important at all), 2 (Not Important), 3 (Little of importance), 4 (Important), 5 (Extremely Important).
- A significance Level: P value (probability) <0.05 that means there are significant differences between at least two groups from the six groups of respondents.

An external auditor emphasised that there are many benefits derived from applying an effective audit committee. He stated that:

> *"In my personal opinion, there are many benefits which will be derived from applying an effective audit committee, such as monitoring and reviewing the internal control system regularly by audit committee members may give more opportunities to detect any practice of earnings management. Also, the communication between external auditor and the members of the audit committee may benefit the company because: firstly, an effective audit committee will support external auditors in front of the board of directors. Secondly, the committee might help the external auditor to discover new issues from their questions during meetings, and identify and solve these issues. Thirdly, the members of the audit committee may have in-depth information that may help the external auditor to get a better understanding of the company's business. However, if the audit committee is not effective (if there is no clear framework of audit committee members' duties or it is clearly stated but the members of the audit committee may not practice their duties appropriately) that may put pressure on the external auditors".*

6.2.2.2.2 Attributes of audit committee members

As stated in the literature review in Chapter Tow (Section 2.2.4.3), several recommendations have been suggested to enhance the effectiveness of the audit committee in order to detect earnings management and improve the quality of the financial statements. According to CCR (1992), the members of an audit committee should be independent from non-executive directors and at least three members of the audit committee should be financially literate. Moreover, a significant amount of literature suggests that audit committee members should be independent from non-executive directors and financially literate (DeZoort, 1997; McDaniel et al., 2002; DeZoort et al., 2002). Also, the international bodies of corporate government, such as the BRC Report and Recommendations in the US (1999), and National Association of Corporate Directors (2000), provided various recommendations that members of an audit committee should have certain types of knowledge, which are an understanding of how business activities are presented in financial statements and the ability to analyse these statements, and an understanding of the nature and purposes of the financial statement audit. They also stressed that at least one member should have accounting or related financial management expertise.

In this section, this study tried to elicit respondents' views on the attributes of the audit committee. A list of four attributes was provided in the questionnaire, (part 4.2.2.2). Respondents were asked to indicate their level of agreement with each of the attributes on the list on a Likert scale of 1 (strongly disagree), 2 (disagree), 3 (no view), 4 (agree), 5 (strongly agree).

Table 6.4 presents an analysis of respondents' views on how far they believe the attributes of an audit committee are expected to improve the effectiveness the audit committee and help to restrict earnings management. It can be seen from the table that the majority of the respondents from all six groups agreed or strongly agreed that knowledge and experience of accounting or other related subjects was the most important attribute of audit committee members. A total of 97 percent of the respondents either agreed or strongly agreed that knowledge and experience of accounting helps to increase the communication with external and internal auditors (with overall mean score of 4.48). This result showed support to prior literature that external auditors and audit committee members should communicate regularly on several issues to reduce misstatements between both of them (SET, 1990; ICTAAT, 2000). There was a significant difference in the responses from the six groups of respondents in terms of this attribute. The results indicated that external auditors opinions differed significantly from other groups (at the 5%level), where external auditors showed a lower level of agreement with this statement (see appendix 5). Possibly this was due to external auditors observing that it is difficult to put this communication into practice. Also, a total of 92.7 percent of the respondents either agreed or strongly agreed that knowledge and experience of accounting helps in constraining earnings management and improves the quality of financial statements (with overall mean score of 4.41). 'Independence from the executive directors' was ranked as the second most important attribute as a total of 93 percent of the respondents either agreed or strongly agreed (with overall mean score of 4.40). There were no significant differences in the responses from all six groups of respondents on this attribute.

Table (6.4) Attributes Of Audit Committee Members

Attributes Of Audit Committee Members	Level of agreement										Overall Mean Score	Overall Rank	Level of significance
	Strongly Disagree		Disagree		No view		Agree		Strongly agree				
	No	%	No	%	No	%	No	%	No	%			
1. The existence of accounting and auditing experts in the audit committee will:													
A- Help in constraining earnings management and improve the quality of financial reports	-	-	13	4.2	9	3	120	39.7	160	53	4.41	1	.406
B- Help in increasing the communication with external and internal auditors	1	0.3	8	2.6	-	-	129	42.7	164	54.3	4.48		.000
2. Independence from the executive directors will help in reducing the opportunity to manipulate financial reports	1	0.3	15	5	5	1.7	123	40.7	158	52.3	4.40	2	.739
3. Knowledge about the corporation's activities	4	1.3	75	24.8	45	14.9	154	51	24	7.9	3.39	3	.699
4. Integrity and sound judgment and Personal qualities	17	5.6	170	56.3	41	13.6	58	19.2	16	5.3	2.62	4	.605

Notes:

- The responses were reported on a 5-point scale ranking from: 1 (Strongly Disagree), 2 (Disagree), 3 (No View), 4 (Agree), 5 (Strongly Agree).
- A significance Level: P value (probability) <0.05 that means there are significant differences between at least two groups from the six groups of respondents.

The aforementioned results appear to highlight the importance of knowledge and experience, and of independence from the executive directors, as the most important accounting attributes of the audit committee members. Knowledge about the corporation's activities, and integrity and sound judgment and personal qualities, were ranked fourth and fifth attributes, respectively (with overall mean score of 3.39 and 2.62, respectively).

The following is a comment received during the interview stage. An academic interviewee remarked that:

> *"In my opinion, the most important things to enhance the effectiveness of the audit committee are that the members of the audit committee should be independent from non-executive directors, have primary knowledge about the company's business, able to devote the necessary time, and have financial backgrounds that help them to have good communication with external auditors".*

6.2.2.3 The Existence of an Effective Internal Audit Function

As pointed out in Chapter Two (Section 2.2.4.4), several studies have suggested a number of functions that could be performed by the internal auditor. Significant empirical studies show that internal auditing plays an important role in external financial reporting and restricting earnings management, and it is part of the solution to the perceived control, reporting and ethical problems in the corporate sector (Coram et al., 2008). Eighme and Cashell (2002) mention that internal auditors can assist in reducing earnings management by performing two functions, which are (1) evaluating the effectiveness of relevant internal controls and risk management processes, and (2) supporting the audit committee and management in evaluating earnings management risks. Basel Committee (2000) argued that the work of internal auditing activities can be categorised into two main streams: first, as an important part of internal control; second, internal auditors play an important role in the audit of financial statements by providing assistance to external auditors. In addition, the BRC on Improving the Effectiveness of Corporate Audit Committees (1999) pointed out that the internal auditor plays a significant role in working with management, the audit committee and the external auditor in ensuring the effectiveness of internal controls and in bringing any weaknesses to the attention of the appropriate parties.

Furthermore, Krislmamoorthy (2002) indicated that external auditors usually check and evaluate the internal control structure and the internal audit function. Therefore, good communication and coordination of the internal and external auditors could improve the effectiveness and efficiency of the auditing process. Edge and Farley (1991) mention two major benefits to the external auditor of utilising the work of the internal auditor, which are: (1) reducing the time taken for the audit and the cost of the external audit; and (2) improving the quality of the external audit function because the internal auditor examines in more depth the internal control system and has a better knowledge of the client accounting system. Braiotta and Marsh (1992) explain that internal auditors are responsible for reviewing, assessing and monitoring the internal control structure, policies and procedures. Also, an effective internal auditing function will provide the external auditor with the necessary information about the design and effectiveness of the entity's internal control policies and procedures and help them to assess the control risk and the extent of their substantive procedures.

Consistent with the above requirements, the questionnaire survey in part 4.2.3 presented a list of main functions that could be performed by internal auditors. Respondents were asked to indicate their level of importance with each of the functions in the list on a five-point Likert scale of 1 (not important at all), 2 (not important), 3 (little of importance), 4 (important), 5 (extremely important).

Table 6.5 presents an analysis of respondents' perceptions on the importance of internal auditor functions. As shown in the table, the most important function that should be performed by an effective internal audit is 'evaluating and monitoring the effectiveness of the internal control system' (with an overall mean score of 4.69), and all respondents from all six groups recording this function as important or extremely important.

Table (6.5) Functions of Internal Audit

Internal Auditor Functions	Level of agreement										Overall Mean Score	Overall Rank	Level of significance
	Not Important at		Not Important		Little of importance		Important		Extremely Important				
	No	%	No	%	No	%	No	%	No	%			
1. Evaluating the effectiveness of the internal control system	-	-	-	-	-	-	93	30.8	209	69.2	4.69	1	.094
2. Reviewing whether or not management has consistent treatment for similar transactions	-	-	-	-	4	1.3	138	45.7	160	53	4.52	2	.057
3. Providing assistance to external auditors	-	-	6	2	82	27.2	162	53.6	52	17.2	3.86	3	.023
4. Discussing the findings of internal audits with the audit committee members and management	-	-	8	2.6	82	27.2	167	55.3	45	14.9	3.82	4	.162
5. Providing the audit committee with an opinion on the credibility of information contained in interim reports	-	-	9	3	114	37.7	140	46.4	39	12.9	3.69	5	.560

Notes:

- The responses were reported on a 5-point scale ranking from: 1 (Strongly Disagree), 2 (Disagree), 3 (No View), 4 (Agree), 5 (Strongly Agree).
- A significance Level: P value (probability) <0.05 that means there are significant differences between at least two groups from the six groups of respondents.

The next function in terms of importance was 'reviewing whether or not management has consistent treatment for similar transactions' (with overall mean score of 4.52). A total of 98.7 percent of the respondents from all six groups indicated that they regarded this function as either important or extremely important. There were no significant differences in the responses from all six groups of respondents with this function. The third most important function was 'providing assistance to external auditors' (with overall mean score of 3.82 and 3.69). A total of 70.8 percent of all respondents from all six groups recorded this function as important or extremely important, with an overall mean score of 3.86.

However, a slight difference can be observed between external auditor and other groups, where the former showed a higher level of 'extremely important' with regard to this function than other groups. Possibly this difference is due to external auditors are seeking more cooperation from internal auditors. The last two ranked important functions were 'discussing the findings of internal audits with the audit committee members and management' and providing the audit committee with an opinion on the credibility of information contained in interim reports, respectively.

A total of 70.2 percent and 59.3 percent, respectively, of all respondents from all groups indicated that they regarded these functions as either important or extremely important. There were no significant differences in the responses from all six groups of respondents with regard to these functions.

During the interview stage several comments were received from the different types of interviewee. An internal auditor highlighted some factors that determine the effectiveness of the internal auditors. He remarked that:

> *"In my experience, the most important factors that determine the effectiveness of the internal auditors are: educational background and qualifications, experience and knowledge about the company's operations and auditing techniques, independence from the executive management, the number of staff in the internal audit department compared to the scale of to the company's activates".*

Moreover, an external auditor mentioned other issues which are:

> *"In my opinion, the training of internal audit department staff is very important to improve the effectiveness of internal audit. Also, in my experience, there are some companies which lack audit coverage because of shortage of internal auditing staff".*

Another external auditor stated that:

> *"My decision to rely on the work of internal auditors depends on their independence, competence, and performance. In some companies it is very difficult to put full reliance on the internal auditors' work because of the level of their reporting and poor competence".*

6.2.2.4 The Existence of a Competent and Independent Board of Directors

The board of directors is an important element of the internal corporate governance mechanism and is charged with monitoring the corporation's management to protect its owners' interests. As stated by Pass (2004), the board of directors, which is appointed by the general assembly of the company, is responsible for the governance of its company and has an important monitoring role to play. Generally, the board of directors consists of two types of directors: executive and non-executive. Various recommendations have been made by the international bodies of corporate governance and a number of recent empirical studies have suggested that some characteristics of the board of directors should be achieved, and these characteristics are expected to have a great influence on the quality of financial reporting as measured by the level of earnings management.

The board of directors usually includes two kinds of directors, which are inside directors who are employed by corporations in an executive or operational capacity, and outside directors who should be independent, and have no relationship with the corporation other than the relationship of being a member of the board of directors. The international bodies of corporate governance, such as the CCR in the UK (1992), the Toronto TSE (1994) and the BRC Report and Recommendations in the US (1999), have provided various recommendations that having a majority of outside or independent directors can make a positive contribution to the board's monitoring responsibilities. Moreover, significant empirical studies have investigated the impact of independent board directors on the effectiveness of the board. Beasley (1996) indicated that a larger proportion of independent members on the board significantly decreases the probability of a company practicing earnings management, because they are properly independent from the corporation's management, which makes them able to monitor the management effectively.

Moreover, Xie et al. (2003) stated that the monitoring that outside directors provide may improve when they are financially sophisticated, due the fact that a member of the board of directors with a financial background might be more familiar with earnings management issues and might better understand the implications of earnings manipulation. In addition, another important characteristic that may influence the effectiveness of the board of directors is the separation between the role of chairman and the chief executive officer. The chairman's position and the chief executive officer should be separated to ensure an effective monitoring system, since the chairman is the head of the board of directors which monitors management, while the chief executive officer is mainly responsible for corporate management.

In part 4.2.4 of the questionnaire a list of statements was presented about the effect of a competent and independent board of directors on restricting earnings management and improving the quality of financial reporting. Respondents were asked to indicate their level of agreement with each statement in the list on a Likert scale of 1 (strongly disagree), 2 (disagree), 3 (no view), 4 (agree), 5 (strongly agree). Their responses are analysed and presented in table (6.6).

From Table 6.6 it can be seen that the statement that 'corporations with a greater proportion of non-executive directors on the board are less likely to engage in earnings management practices than those whose boards are staffed primarily with executive directors' has an overall mean score of 4.41. Also, a total of 94 percent of respondents from all six groups indicated that they either agreed or strongly agreed with this statement.

Moreover, it can be seen from Table 6.6 that the statement 'boardroom members with a financial background are more likely to detect any activities of earnings management' received an overall mean score of 4.13 and 84.4 percent of all six groups either agreed or strongly agreed. This result showed support to the prior literature review, which indicated through prior studies and the recommendations of various committees that there is a positive relationship between the board's monitoring effectiveness and the independence and experience of the members of the board of directors (CCR, 1992; Beasley, 1996; BRC, 1999; Klein, 2002; Monks & Minow, 2001; Xie et al., 2003; Park & Shin, 2004; Peasnell et al., 2005; Davidson et al., 2005). Also, there were no significant differences in the responses from all six groups of respondents with these statements.

In addition, Table 6.6 shows the level of agreement of the respondents with the last three statements on the table. The results indicate that the statement 'prohibit the CEO from acting as chairman of the board of directors' received an overall mean score of 4.34, and that 95.4 percent of all six groups either agreed or strongly agreed. Also, the statement 'prohibit the CEO from being responsible for setting the board's agenda and meeting requirements' received an overall score of 3.93. A total of 75.8 percent of respondents from all six groups agreed or strongly agreed with this statement. These results are therefore compatible with the prior literature review (e.g. Pearce & Zahra, 1991; CCR, 1992; and Stile & Taylor, 1993). Moreover, the statement 'hold frequent seminars and workshops for boardroom members to familiarise them with recent developments in accounting issues' with an overall mean score of 3.90 and 82.4 percent of the respondents from all six groups either agreed or strongly agreed with this statement. However, there was a significant difference in the responses from all six groups of respondents with the statement 'prohibit the CEO from being responsible for setting the board's agenda and meeting requirements', where the financial managers and senior accountants showed lower levels of agreement with this statement than other groups. Possibly, this was due to the confidence of the financial manger and senior accountants in the reliability of the CEO and the management of the company in general compared with other groups.

Table (6.6) the Existence of a Competent and Independent Board of Directors

Independent and Competent Board of Directors	Level of agreement										Overall Mean Score	Level of significance
	Strongly Disagree		Disagree		No view		Agree		Strongly agree			
	No	%	No	%	No	%	No	%	No	%		
1. Corporations with a greater proportion of non-executive directors on the board are less likely to engage in earnings management practices than those whose boards are staffed primarily with executive directors	2	0.7	15	5	1	0.3	122	40.4	162	53.6	4.41	.626
2. Boardroom members with a financial background are more likely to detect any activities of earnings management	7	2.3	33	10.9	7	2.3	123	40.7	132	43.7	4.13	.072
3. In order to improve the effectiveness of the board of directors in preventing any fraudulent practices, companies should: A. prohibit the Chief Executive Officer (CEO) from acting as Chairman of the Board of Directors	-	-	14	4.6	-	-	157	52	131	43.4	4.34	.060
B. Prohibit the (CEO) from being responsible for setting the board's agenda and meeting requirements	9	3	55	18.2	9	3	104	34.4	125	41.4	3.93	.000

Table (6.6) continued												
Independent and Competent Board of Directors	**Level of agreement**										**Overall Mean Score**	**Level of significance**
	Strongly Disagree		**Disagree**		**No view**		**Agree**		**Strongly agree**			
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**	**No**	**%**		
C. holds frequent seminars and workshops for boardroom members to familiarize them with recent developments in accounting issues	1	0.3	16	5.3	36	11.9	207	68.5	42	13.9	3.90	.248

Notes:

- The responses were reported on a 5-point scale ranking from: 1 (Strongly Disagree), 2 (Disagree), 3 (No View), 4 (Agree), 5 (Strongly Agree).
- A significance Level: P value (probability) <0.05 that means there are significant differences between at least two groups from the six groups of respondents

During the interview stage, the interviewees provided a number of characteristics of the board of directors that can help to improve the effectiveness of the board of directors in the Libyan environment. An external auditor remarked that:

> *"In my opinion, selecting and appointing the members of the board of directors in the Libyan environment is based on emotion rather than qualifications and experiences. Therefore, they are not playing a useful role in the supervision of the company's performance".*

An internal auditor stated that:

> *"In my view, increasing the number of non-executive directors would enhance the quality of financial statements. However, selecting them should be in the appropriate method that will give them full independence to be able to perform their job successfully and also, it will help to support the position and role of the internal auditors, the audit committee, and the external auditors".*

In addition, the following are comments from an academic interviewee:

> *"In my opinion, selecting and appointing the member of the board of directors should be based on their professional qualifications (financial background), their experience, their business skills, and their reputations. Also, they should be independent from the company's management, with a separation between the role of chairman and the executive officers, which will give the board more independence".*

6.2.3 External Audit Quality

6.2.3.1 The Impact of External Auditors on Earnings Management

Auditing is the accumulation and evaluation of evidence about information to determine and report on the degree of correspondence between the information and established criteria. Therefore, external auditing plays an important role in the monitoring of financial statements because it reports any observed breaches of restrictive covenants to the users of financial statements (DeAngelo, 1981a). The objective of an external audit is the expression of an opinion on the fairness of financial statements regarding all material respects, financial position, results of operations and cash flows in conformity with an applicable financial reporting framework (IAASB, 2004a). Moreover, external auditors need to obtain sufficient evidence that makes them able to provide that opinion about the fairness of financial statements and to issue an appropriate audit report.

The practice of earnings management might start with small actions or inappropriate adjustment of assumptions and changes in judgments by management. Motivations and pressures might lead these actions to increase to the extent that they result in fraudulent financial reporting. Thus, users of financial reporting seek assurance from independent auditors that the information is free from material errors or other misstatements. Consequently, external auditors are expected to detect opportunistic earnings management, and, in that case, they are considered high-quality auditors. The quality of an audit is a function of both auditor competence (which is the auditor's ability to detect material omissions or misstatements in the financial statements) and auditor independence (which is the auditor's propensity to correct and reveal material errors) (DeAngelo, 1981a).

In part 4.3.1 of the questionnaire a list of statements was presented about the impact of external auditors on earnings management. Respondents were asked to indicate their level of agreement with each of statements in the list on a Likert scale of 1 (strongly disagree), 2 (disagree), 3 (no view), 4 (agree), 5 (strongly agree). Their responses were analysed and presented in Table 6.7.

As can be seen from Table 6.7, the statement that 'external auditors would not like to lose their reputation because they cannot detect earnings management' received an overall mean score of 3.68. A total of 70.6 percent of the respondents from the six groups either agreed or strongly agreed with this statement. However, there was a significant difference in the responses from all six groups of respondents to this statement (at the 5% level of significance). The results revealed that external auditors' opinions differed significantly from other groups, where the external auditors showed higher levels of agreement than other groups. This result possibly reflects external auditors' awareness about their reputation and the negative impact of reputation loss in the job market.

During the interview stage of this study, an external auditor remarked that:

> *"In my view, all external auditors in Libya have a strong motivation to protect their reputations, such as losing their place in the job market, and culture".*

Moreover, the result from Table 6.7 indicated that the statements that 'external auditors constrain a corporation's management from practicing earnings management' and 'external auditors can detect earnings management effectively' received an overall mean score of 3.18 and 2.88, respectively. A total of 54 percent, and 42 percent of the respondents from all six groups either agreed or strongly agreed with these statements. In addition, the results revealed that external auditors' opinions differed significantly from other groups at the 5% level of significance, where external auditors showed higher levels of agreement than other groups with both of the statements. Possibly these results reflect external auditors' confidence in their ability and experience to detect earnings management. However, the statement 'external auditors are trained to detect earnings management' received an overall mean score of 2.75 and a total of 37.4 percent of the respondents from all six groups either agreed or strongly agreed. There was a significant difference in the responses from the six groups of respondents with this statement. By comparing the responses of the six groups, the results revealed that external auditors' opinions differed significantly from other groups (at the 5% level of significance) that external auditors showed lower levels of agreement (see appendix 5). Possibly this was due to their perception that normal audit training may focus on accounting standards and auditing techniques, and it is not aimed at detecting earnings management particularly, which means audit training that applies only to accounting standards and auditing techniques may not be enough to enable external auditors to detect earnings management effectively.

During the interview stage of this study, an external auditor showed support for the results above and drew attention to the fact that:

> *"In my opinion, some earnings management techniques might be difficult to discover under normal training. Therefore, external auditors should attend special training courses in order to provide good services and help them to detect earnings management. Also, regarding to this issue big audit firms have greater resources that enable them to provide their staff good training courses".*

Table (6.7) the Impact of External Auditors on Earnings Management

The Impact of External Auditors on Earnings Management	Level of agreement										Overall Mean Score	Level of significance
	Strongly Disagree		Disagree		No view		Agree		Strongly agree			
	No	%	No	%	No	%	No	%	No	%		
1. External auditors are trained to detect earnings management	37	12.3	127	42.1	25	8.3	99	32.8	14	4.6	2.75	.044
2. External auditors constrain a corporation's management to practise earnings management	21	7	88	29.1	30	9.9	142	47	21	7	3.18	.046
3. External auditors can detect earnings management effectively	29	9.6	130	43	16	5.3	103	34.1	24	7.9	2.88	.001
4. External auditors would not like to lose their reputation because they cannot detect earnings management	10	3.3	58	19.2	21	7	143	47.4	70	23.2	3.68	.013

Notes:
- The responses were reported on a 5-point scale ranking from: 1 (Strongly Disagree), 2 (Disagree), 3 (No View), 4 (Agree), 5 (Strongly Agree).
- A significance Level: P value (probability) <0.05 that means there are significant differences between at least two groups from the six groups of respondents.

6.2.3.2 The Impact of Lengthy Tenure on External Audit Quality

Hayes el at. (2005) believe that mostly the first year of auditing is perceived as less thorough, since it takes some time to identify all potential audit risks for a new client. Moreover, since the better identification and understanding of a client's business and risk is useful in detecting material misstatements in the financial statements, the auditor learning argument suggests that audit quality and the integrity of the auditee's accounting reports is lower during the early years of tenure, and improves as audit tenure increases.

On the other hand, Johnson et al. (2002) and Boone et al. (2008) believe that the auditor might lose his professional scepticism if the length of tenure is very long, so that after a long tenure the auditor may become less sceptical of the client's accounting practices and judgments based on a ''learned confidence'' in the client. In other words, the audit quality could be enhanced by long length of tenure because it provides better identification of client's risk, better understanding of client's business and industry and knowledge about the corporation's operations, which are essential for an adequate audit to assess the risk of misstatement of the financial statements whether due to error or fraud, and to design the nature and extent of further audit procedures. However, it may decrease the auditors' independence and objectivity due to the closeness of the auditor-client relationship developed over an extended period.

Consistent with the above, the questionnaire survey in part 4.3.2 aimed to elicit respondents' perceptions on the advantages and disadvantages of lengthy tenure with audit clients in the Libyan environment. Respondents were asked to indicate their level of agreement with each of the statements on the list on a Likert scale of 1 (strongly disagree), 2 (disagree), 3 (no view), 4 (agree), 5 (strongly agree). Their responses were analysed and presented in Table 6.8.

From Table 6.8 it can be seen that the statement that lengthy tenure gives more expertise to external auditor received an overall mean score of 3.72. A total of 81.8 percent of the respondents from all six groups either agreed or strongly agreed. Moreover, statements that important advantages of lengthy tenure are helping external auditors to gain, better identification of client's risk and better understanding of client's business received overall a mean score of 3.76 and 3.77, respectively. A total of 83.4 percent and 83.7 percent from all six groups agreed or strongly agreed with these statements, respectively. Also, external auditors showed a higher level of agreement with these statements than other groups, where 90.80 percent , 90.70 percent and 92.30 percent of external auditors either agreed or strongly agreed that lengthy tenure with audited clients helped them to achieve more experience, better identification of client's risk and a better understanding of client's business, respectively. These results support the literature review, which indicates that lengthy tenure provides better identification of a client's risk, better understanding of client's business and industry and knowledge about the corporation's operations, which are essential for an adequate audit to assess the risk of misstatement of the financial statements whether due to error or fraud, and to design the nature and extent of further audit procedures (Geiger & Raghunandan, 2002; Ghosh & Moon, 2003; Myers et al., 2003; Hayes el at., 2005; Chen et al., 2008; Jackson et al., 2008; George, 2009).

It can also be seen from Table 6.8 that the statement that lengthy tenure may lead to lower external auditors' scepticism received an overall mean of score 3.45, and 68.2 percent of respondents from all groups agreed or strongly agreed with this statement. Moreover, the statement that lengthy tenure might make external auditors less innovative received an overall mean score of 3.41 and a total of 65.2 percent of respondents either agreed or strongly agreed. Also, the statement that lengthy tenure might impair the independence of external auditors received an overall mean score of 3.62, and 73.2 percent of all respondents agreed or strongly agreed with it. These results are consistent with the studies of Deis and Giroux (1992), Johnson et al., (2002), Boone et al., (2008), Chen et al., (2008) and Dao et al., (2008).

There was a significant difference in the responses from all six groups of respondents with the statement that the lengthy tenure might impair the independence of external auditors. Financial managers, senior accountants and internal auditors groups showed higher levels of agreement, where 87.9 percent and 84.6 percent of them agreed or strongly agreed with this statement, respectively.

Table (6.8) the Impact of Lengthy Tenure on External Audit Quality

The Results	Level of agreement										Overall Mean Score	Level of significance
	Strongly Disagree		Disagree		No view		Agree		Strongly agree			
	No	%	No	%	No	%	No	%	No	%		
1. More expertise	10	3.3	46	15.2	8	2.6	149	64.2	44	14.6	3.76	.002
2. Better identification of client's risk	10	3.3	45	14.9	6	2	188	62.3	53	17.5	3.76	.004
3. Better understanding of client's business	12	4	40	13.2	9	3	185	61.3	56	18.5	3.77	.000
4. Less skepticism	17	5.6	64	21.2	15	5	177	58.6	29	9.6	3.45	.442
5. Less innovation	20	6.6	76	25.2	9	3	154	51	43	14.2	3.41	.309
6. Less independence	12	4	64	21.2	5	1.7	166	55	55	18.2	3.62	.000

Notes:
- The responses were reported on a 5-point scale ranking from: 1 (Strongly Disagree), 2 (Disagree), 3 (No View), 4 (Agree), 5 (Strongly Agree).
- A significance Level: P value (probability) <0.05 that means there are significant differences between at least two groups from the six groups of respondents.

Conversely, 43.5 percent of external auditors either disagreed or strongly disagreed with the statement that length tenure might lead to lower external auditors' independence. These differences are possibly due to economic dependence and personal involvement that might compromise external auditors' objectivity, as suggested by Church and Schneider (1992) and Brody and Kaplan (1996). However, from the external auditors' side, these differences are possibly due to their aim to retain their audit clients for a long tenure, and may be to gain a better identification of client's risk and better understanding of client's business.

During the interview stage of this study, an internal auditor remarked that:

> *"In my view, external auditors should have experience and industry expertise that can help them to provide high quality performance, because it is very risky if external auditors do not understand the client's business and they just follow auditing standards or the last year's auditing steps".*

Also, an external auditor remarked that:

> *"In my opinion, lengthy tenure has advantages and disadvantages regarding audit quality. It could enhance external auditors' experience and help them to gain a better understanding of a client's business and operations. On the other hand, it may affect external auditors' independence because of the relationship that may develop between auditor and client over on extended time".*

Moreover, an academic stated that:

> *"In my view, lengthy tenure and the provision of non-auditing services might influence audit quality since external auditors might overlook something which they think that they already know, which is sometimes very risky".*

6.2.3.3 The Impact of Non-auditing Services on External Audit Quality

The joint supply of audit and non-audit services to the same client could be a contributor to compromising auditors' independence, due to the fact that audit firms might not be willing to criticise the work carried out by their consultancy division, and might not wish to lose lucrative consultancy services (Lennox, 1999). Several studies have shown that the joint provision of both services can cause a reduction in the quality of audit reports and might compromise the independence of auditors (Frankel et al., 2002; Gul et al, 2006; Basioudis et al., 2008; Quick & Warming-Rasmussen, 2009). On the other hand, other studies conclude that non-audit services might help auditors to obtain more experience and a better understanding of a client's business (Antle et al., 2006, Lim, 2008; Patel et al., 2009).

Consistent with the above, part 4.3.3 of the questionnaire aimed to elicit respondents' perceptions on the advantages and disadvantages of non-auditing services in the Libyan environment. Respondents were asked to indicate their level of agreement with each of the statements on the list on a Likert scale of 1 (strongly disagree), 2 (disagree), 3 (no view), 4 (agree), 5 (strongly agree). Their responses were analysed and presented in Table 6.9.

From Table 6.9 it can be seen that the statement that non-auditing services enable external auditors to gain more expertise was an important advantage and received an overall mean score of 4.30. A total of 97 percent of the respondents from all six groups either agreed or strongly agreed. In addition, the statement that non-auditing services could help external auditors to gain a better identification of client's risk, and better understanding of client's business, received an overall mean score of 4.34 and 4.33, respectively. Also, the majority of all six groups (97 percent, 97.4 percent in total) agreed or strongly agreed with these statements, respectively. There were no significant differences in the responses from all six groups of respondents with these statements. These results support the literature review, suggesting that non-auditing services provide better identification of client's risk, better understanding of client's business and industry, and knowledge about the corporation's operations, and improve audit quality (Antle et al., 2006; Lim, 2008; Patel et al., 2009).

Furthermore, it can be seen from Table 6.9 that the statement that non-auditing services might reduce external auditors' scepticism received an overall mean score of 3.74. A total of 78.8 percent of all respondents either agreed or strongly agreed with this statement. Moreover, the statement that less innovation is a weakness of non-auditing services received an overall mean score of 3.68, and a total of 75.9 percent of all respondents agreed or strongly agreed. There were no significant differences in the responses from all six groups of respondents with these statements. In addition, from the table it can be seen that non-auditing services might lead to a reduction in the independence of external auditors, with an overall score of 3.79. A total of 78.8 percent of all respondents agreed or strongly agreed. This result was consistent with the literature on non-auditing services (Frankel et al., 2002; Gul et al., 2006; Basioudis et al., 2008; Quick & Warming-Rasmussen, 2009).

There was a difference in the responses at the 5% level of significance. By comparing the responses of the six groups, the results indicated that external auditors' opinions differed significantly from other groups, with external auditors showing less agreement than the other groups (see appendix 5). Possibly because the latter believe that economic dependence might impair auditors' independence in order to increase their income from non-auditing services.

During the interview stage of this study, interviewees showed support to the previous results related to lengthy tenure and non-auditing services. One of the academics made the following comment:

> *"In my opinion, non-auditing services could help external auditors to have more experience, and better understanding of client's business. However, external auditors may not criticise the work provided by their staff".*

Table (6.9) the Impact of Non-auditing Services on External Audit Quality

The Results	Level of agreement										Overall Mean Score	Level of significance
	Strongly Disagree		Disagree		No view		Agree		Strongly agree			
	No	%	No	%	No	%	No	%	No	%		
1. More expertise gained	1	0.3	6	2	2	0.7	184	60.9	109	36.1	4.30	.861
2. Better identification of client's risk	1	0.3	5	1.7	3	1	174	57.6	119	39.4	4.34	.513
3. Better understanding of client's business	1	0.3	5	1.7	2	0.7	179	59.3	115	38.1	4.33	.837
4. Less scepticism	10	3.3	48	45.9	6	2	186	61.6	52	17.2	3.74	.189
5. Less innovation	8	2.6	59	19.5	6	2	179	59.3	50	16.6	3.68	.316
6. Less independence	11	3.6	43	14.2	10	3.3	171	56.6	67	22.2	3.79	.000

Notes:
- The responses were reported on a 5-point scale ranking from: 1 (Strongly Disagree), 2 (Disagree), 3 (No View), 4 (Agree), 5 (Strongly Agree).
- A significance Level: P value (probability) <0.05 that means there are significant differences between at least two groups from the six groups of respondents

Moreover, an external auditor remarked that:

> *"In my experience, non-auditing services are helpful to get more experience and understanding of client's operations. Therefore, non-auditing services may have a negative effect on auditors' independence because the low audit fees in the Libyan environment may make external auditors provide non-auditing services to increase their income".*

6.2.3.4 The Impact of other Components on External Audit Quality

The questionnaire in part 4.3.4 aimed to elicit respondents' perceptions on the impact of other components on external audit quality in the Libyan environment, which include firm size, audit fees, competition, lawsuits, technology, accounting education and accounting and auditing standards. Respondents were asked to indicate their level of agreement with each of the statements in the list in a Likert scale of 1 (strongly disagree), 2 (disagree), 3 (no view), 4 (agree), 5 (strongly agree). Their responses were analysed and presented in Table 6.10.

The size of an audit firm is considered one of factors that affect audit quality and it has been used as a proxy to measure it. Prior studies examine whether larger auditing firms provide higher quality audits than smaller auditing firms. These studies assumed that large audit firms, due to their greater resources, are more likely to provide more precise information and higher quality audit services than small audit firms. Moreover,

large audit firms have a greater motivation to protect their reputation and they are less likely to be economically dependent on a few clients. Therefore, it could enhance auditors' independence because large firms do not rely on revenue from a single client. (DeAngelo, 1981b; Moore & Scott, 1989; Davidson & Neu, 1993; Lys & Watts, 1994; DeFond et al., 2002; Chan et al., 2005; Jong-Hag, 2010). On the other hand, there is other evidence to suggest that there is no relationship between audit firm size and quality (Jeong & Rho, 2004; Khurana & Raman, 2004; Krishnan, 2005).

Table (6.10) the Impact of other Components on External Audit Quality

Components which may leading to higher audit quality	Level of agreement										Overall Mean Score	Level of significance
	Strongly Disagree		Disagree		No view		Agree		Strongly agree			
	No	%	No	%	No	%	No	%	No	%		
1. The large the firm size, the higher the audit quality	80	26.5	146	48.3	7	23	46	15.2	23	7.6	2.29	.420
2. Strong competition helps in getting high audit quality	2	0.7	15	5	10	3.3	166	55	109	36.1	4.21	.119
3. More lawsuits result high audit quality	2	7	25	8.3	9	3	149	49.3	117	38.7	4.17	.067
4. High audit fees helps in getting high audit quality	7	2.3	55	18.2	17	6.6	147	48.7	76	25.2	3.76	.569
5. Using more technology helps in getting high audit quality	8	2.6	86	28.5	35	11.6	138	45.7	35	11.6	3.35	.637
6. Strong accounting education of auditors helps in achieving high audit quality	3	1	25	8.3	11	3.6	162	53.6	101	33.4	4.10	.082
7. Strong accounting and auditing standards helps in achieving high audit quality	1	3	8	2.6	1	3	142	47	150	49.7	4.43	.102

Notes:

- The responses were reported on a 5-point scale ranking from: 1 (Strongly Disagree), 2 (Disagree), 3 (No View), 4 (Agree), 5 (Strongly Agree).
- A significance Level: P value (probability) <0.05 that means there are significant differences between at least two groups from the six groups of respondents.

From Table 6.10 it can be seen that the statement that the larger the firm size, the higher the audit quality received an overall score of 2.29. A total of 22.8 percent of respondents from all six groups either agreed or strongly agreed. There was no significant difference in the responses from all six groups of respondents. However, the majority of audit offices in Libya are medium and small offices, as revealed in the interviews. As a result, the size of audit offices has no affect on audit quality in the Libyan environment.

Consistent with the previous result, during the interview stage of this study, an academic stated that:

> *"The size of the audit firm does not have influence in the Libyan environment because most audit offices in Libya are medium or small size and their quality services depend on individual competence, experience, and attitude. Moreover, in my opinion, the absence of large audit firms negatively affects the audit quality in the Libyan environment due to the fact that the existence of these firms will help to improve the audit quality services by transferring their experience and knowledge to the Libyan environment".*

Jensen and Payne (2005a) believe that price competition affects audit quality. Therefore, audit firms are likely to re-evaluate their positions in the marketplace. Also, audit firms with relatively high production costs will provide services if the competitive environment allows them to charge fees commensurate with those costs. Several empirical studies have addressed the issue of increasing competitiveness in the market for audit services and its impact on audit fees and audit quality. Some pointed out that high audit quality might result in higher audit fees (Zeithaml, 1988; Lichtenstein et al., 1993). Other studies suggest that audit fees should decrease as the level of competitiveness in the audit market increases (Jensen & Payne, 2005b). In addition, Pearson and Trompeter (1994) argue that lower levels of competition could harm clients through higher fees and lower levels of service. Also, Chaney et al. (2003) argue that greater competition among audit firms results in lower fees and improved service quality. However, it may lead to reduced pricing with possibly detrimental quality effects. Similarty, Behn (2009) mentions that prior research has demonstrated that price competition leads to discounting, which can result in unrealistically low audit fees and poor audit quality. In other words, strong competition may lead to higher audit quality services. However, it may lead to lower audit fees, which affects audit firms due to the fact that they might accept lower audit fees, or exit the market. Also, some audit firms (possibly audit firms with a lack of experience) may use fees competition as an opportunity to exploit their competitive advantage by using audit fees to gain market share

It can also be seen from Table 6.10 that the statement that high audit fees help in achieving high audit quality had an overall score of 3.76. A total of 73.9 percent of respondents from all groups agreed or strongly agreed. Also, the statements that strong competition helps in achieving high audit quality received an overall score of 4.21. A total of 91.1 percent of respondents from all groups agreed or strongly agreed. Also, there was no significant difference in the responses from all six groups of respondents. These results support prior literature that high audit fees and strong competition results in increased audit quality (Copley & Doucet, 1993) and lower levels of competition could harm clients through higher fees and lower levels of service (Pearson & Trompeter, 1994). Also, audit fees should decrease as the level of competitiveness in the audit market increases (Jensen & Payne, 2005b).

During the interview stage of this study, an external auditor stated that:

> *"In my opinion, low audit fees in the Libyan environment may affect external auditors' independence and encourage them provide non-auditing services to increase their income".*

Another external auditor remarked that:

> *"In my view, in the Libyan environment the supply of audit service is more than the demand for this service, which might lead to lower audit fees. Moreover, the real competition in the Libyan audit market is restricted to a group of audit offices. This issue affects other audit offices due to the fact that they might accept lower audit fees in order to enter the market".*

Lys and Watts (1994) provide three factors that are necessary for a disclosure lawsuit. First, there is existence of cause, which includes practicing earnings management; the probability that the auditor did not discover the financial statements were misleading, or discovered them and failed to report it; and the existence of a loss by a plaintiff. Secondly, plaintiffs discover the cause. Finally, plaintiffs may have net benefits from the suit. Palmrose (1988) suggests that the increasing frequency of lawsuits against an auditing firm is viewed as a negative signal about the quality of auditing services provided by the firm and impairs its reputation.

Table 6.10 presents the results of the responses related to respondent's views on the impact of lawsuits on audit quality. It can be seen from the table that the statement 'more lawsuits result in high audit quality' received an overall score of 4.17. A total 88 percent of respondents from all six groups agreed or strongly agreed. Also, there was no significant difference in the responses from the six groups of respondents. This result does not reflect any support from prior literature findings (Palmrose, 1988).

During the interview stage of this study, an academic remarked that:

> *"In my opinion, there is a positive relationship between lawsuits and quality of audit. However, in the Libyan environment, the culture and social relations might negatively affect this relationship by decreasing the number of lawsuits against external auditors".*

Audit knowledge that refers to the understanding of the relevance of accounting and auditing standards, the audit process, audit technique and client evaluation has an influence on audit achievement. Audit knowledge needs a high level of education and training in audit and related subjects. According to Navaratnam (1994) a quality audit depends on who is carrying out the audit and the location of the auditee. Auditing needs knowledge, skills and experience. These should be developed by a formal auditor training course, observations of audits, work experience in audits and conducting audits. Moreover, Catanach and Walker (1999) mention that audit quality is deemed to be a function of performance. Specifically, the auditor's ability, which includes knowledge, experience, technical competence, industry specialisation, technological proficiency and professional conduct, affects performance.

From Table 6.10, it can be seen that the statements that strong accounting and auditing standards helps in achieved high audit quality, strong accounting education of auditors helps in achieved high audit quality and using more technology helps in achieved high audit quality, received an overall score of 4.43, 4.10 and 3.35, respectively. Also, a total of 96.7 percent, 87 percent and 57.3 percent of respondents from all six groups indicated that they either agreed or strongly agreed with these statements. There was no significant difference in the responses from the six groups of respondents. These results in general support prior literature (Navaratnam, 1994; Catanach & Walker, 1999; Sudsomboon & Ussahawanitchakit, 2009) that professional audit competencies have a positive impact on audit quality and audit reputation, which affects audit success. Also, audit knowledge refers to the understanding of the relevance of accounting and auditing standards, the audit process, audit technique and client evaluation, all of which have an influence on audit achievement. Audit knowledge needs a high level of education and training in audit and related subjects.

During the interview stage of this study, an academic recommended that:

> *"...reorganising the auditing profession in Libya in order to increase the professionalism of the auditors. Also, ensuring the application of the law that relates to the minimum qualifications and experience in order to improve the audit quality in Libya".*

> *"In my experience, it is good for an external auditor to have strong skills in technology. However, due to the fact that the accounting system in the Libyan environment is still basic in the paper accounting system. Therefore, it is enough for them to have the basic knowledge in technology that can help them to perform their work efficiently".*

Consistent with the previous results, an external auditor stated that:

> *"In my view, the computerised audit is designed and might be workable in developed countries, and it might not work in developing countries, such as Libya where is the accounting system is not paperless".*

In addition, another external auditor remarked that:

> *"In my opinion, certainly the absence of local standards which take into account the local context negatively affects audit quality in Libya, because in this case external auditors are applying international standards, which are flexible and provide too much scope for local interpretation. Therefore, it does not fit with all environments around the world".*

In addition, during the interview stage, several comments were received from the different types of interviewee that mentioned other components. Most of them mentioned actions that can help to improve the audit service quality in the Libyan environment. The suggested actions were as follows:

- An active professional body must be founded in order to develop audit quality in Libya.
- A guide to professional ethics and conduct is necessary, and it should be in that law.
- There must be a board of accounting principles.
- Binding laws must be issued in order to develop the audit profession in Libya.
- There must be an examination, which must be passed as a condition for exercising the profession.
- There should be conferences in issues of accounting and auditing in Libya.
- Intensive training courses for practitioners of the profession must be found as a strategy to develop the audit quality.
- A system of quality control must be established in Libya in order to develop the audit profession.

6.3 Summary and Conclusions

The main objective of this chapter has been to investigate respondents' perceptions of the procedures that should be taken to constrain earnings management and improve the quality of financial reporting in Libyan corporations, which include accounting standards, internal corporate governance mechanisms and external audit quality. As mentioned in the previous chapter a questionnaire and semi-structured interviews were used to obtain the data at this stage of this study. The results of this chapter were presented as following:

When considering respondents' perceptions of the actions that should be taken to constrain earnings management and improve the quality of financial reporting in Libyan corporations, they perceived that accounting standards were not the only solution to restrict earnings management and improve the quality of financial reporting in Libya. Also, in the view of the respondents, the correct way to restrict earnings management and improve the quality of financial reporting in the Libyan environment is to combine all the identified actions, which are related to accounting standards and internal corporate governance mechanisms that include the existence of an effective audit committee, the existence of an effective internal audit function and the existence of an independent and competent board of directors.

As regards respondents' perceptions on the existence of an effective internal audit function, they agreed that audit committee members should review the following: 'significant changes in accounting policies and practices', 'the internal control system', 'the independence of the internal audit department', 'the scope of internal and external audit activities' and 'related party transactions'. Further, respondents agreed that the audit committee members should have knowledge and experience of accounting or other related subjects, and they should be independent from the executive directors in order to detect earnings management effectively.

In addition, with regard to the existence of an effective internal audit function, respondents agreed that the internal audit should evaluate and monitor the effectiveness of the internal control system, reviewing whether or not management has consistent treatment for similar transactions, and provide assistance to external auditors. Also, the internal audit should have a relevant educational background and qualifications, experience and knowledge about the company's operations and auditing techniques, and should be independent from the executive management.

Furthermore, as regards respondents' perceptions on the existence of an independent and competent board of directors, they agreed that a larger proportion of independent members on the board significantly reduce the probability of a company practicing earnings management. Also, they agreed that there was a positive relationship between the boards' monitoring effectiveness and the independence and experience of the members of the board of directors.

With regard to the external audit quality, the results indicated that lengthy tenure and the provision of non-audit services give the external auditor more expertise and better identification and understanding of a client's risk and his business. On the other hand, it may affect external auditors' independence and may lead to external auditors becoming less sceptical and less innovative.

Moreover, respondents' agreed that high audit fees, strong competition, increasing numbers of lawsuits, strong accounting and auditing standards and strong accounting education all have a positive impact on audit quality and audit reputation. However, it was felt that the size of a firm has no effect on audit quality in the Libyan environment. Also, 'using more technology' component does not have a significant influence in the audit quality due to the fact that the accounting system in Libya is not a paperless system. The next chapter provides an overview of the study, summarises conclusions drawn from the study findings, and also points out the study's limitations and contributions. The chapter concludes by making some suggestions for future research

CHAPTER SEVEN
SUMMARY AND CONCLUSION

7.1 Summary and Review of Findings

7.1.1 Overview of the Thesis

This study has focused on the earnings management phenomenon in the Libyan environment, which includes the existence and the direction of earnings management in Libyan companies, earnings management motivations, the most frequently used techniques to practice earnings management, and constraining earnings management and improving the quality of financial reporting in Libyan corporations. This study consists of seven chapters. Chapter One provided background information related to earnings management research, the motivations of carrying out this study, and the aims and the questions of the study.

Chapter Two presented the literature review of earnings management which includes definition of earnings management, perspectives of earnings management and patterns of earnings management. Also, it critically discussed the techniques and motivations of earnings management. . In addition, it provided a review and discussion of the literature relevant to earnings management constraints and the factors that affect earnings management practice. These factors include political forces, culture, accounting standards, internal corporate governance mechanisms and the impact of ownership structure on corporate governance, and external audit quality. Chapter Three presented details and justifications of the research methodology that was adopted in order to achieve the objectives of this research.

Chapter Foure presented and described the adoption of an accruals-based approach to investigate the existence and the direction of earnings management in Libyan companies. Also, it provided study findings of the secondary analysis of data by using discretionary accruals as a proxy for earnings management. Chapters Five and Six presented the overall findings derived from both the questionnaire and semi-structured interviews. Chapter Seven provides a summary and conclusions drawn from the study's findings, and points out the study's limitations and contributions; the chapter concludes the thesis by making some suggestions for future research.

7.1.2 Review of Findings

7.1.2.1 Findings of Secondary Data Analysis

The conclusions and the main findings of this stage are presented below:

1- This study applied four different versions of the cross-sectional Modified Jones model to generate firm specific coefficients, which includes: the Modified Jones model; the Modified Jones model with operation cash flows as additional variable; the Modified Jones model with performance matching on return on assets as additional variables; and the Modified Jones model with cash flows from operating and performance matching on return on assets as additional variables. The results indicated that the fourth version has the highest adjusted R^2. As a result, the fourth version model fitted the Libyan data better than other versions. Therefore, this study used firm-specific coefficients that were generated from the fourth version to estimate the expected nondiscretionary accruals.

2- The results indicated that the total discretionary accruals had a negative mean in years one and three and with a positive mean in year two. Also, there was a negative median in all years. Moreover, approximately 47 percent, 47 percent and 46 percent of the sample companies were adopting income-increasing policies in years one, two and three, respectively. On the other hand, the mean of current discretionary accruals was positive in all years. Also, there was a negative median in years one and three and a positive median in year two. Moreover, approximately 42 percent, 56 percent and 47 percent of the sample companies were adopting income-increasing policies in years one, two and three, respectively.

3- The whole sample was divided into two sub-samples regarding the nature of company ownership, which are state-owned companies and private companies. The results of the relationship between the direction of earnings management and ownership nature showed that 71 percent, 75 percent and 69 percent of state-owned companies were adopting income-increasing accruals policies in years one, two and three, respectively. Meanwhile, 78 percent, 83 percent and 78 percent of the companies that engaged in earnings management by using income-increasing policies accruals in years one, two and three, respectively, were state-owned companies. On the other hand, 79 percent, 83 percent and 70 percent of private companies were adopting income-decreasing accruals policies in years one, two and three, respectively. Moreover, 72 percent, 76 percent and 70 percent of the companies that engaged in earnings management by using income-decreasing accruals policies in years one, two and three, respectively, were private companies. The above results indicated that there are linkages between the direction of earnings management and the nature of company ownership.

4- As regards the relationship between the direction of earnings management and company size, the results of the state-owned companies group indicated that company size was positively and significantly associated with discretionary total accruals. This means that as a company's size increases, the company adopts income-increasing accruals policies. On the other hand, the results of the private companies group indicated that company size was negatively and significantly linked to discretionary total accruals. This means that in the private sector, as company size increases, the company adopts income-decreasing accruals policies. The above results indicated that there are linkages between the direction of earnings management and company size.

7.1.2.2 Findings of Questionnaire and Semi-Structured Interview

The main findings of this stage are summarised and presented below:

1- The results related to the earnings management motivations in the Libyan state-owned companies revealed that the top-four motivations were 'to mitigate the threat of displacement (i.e. safeguard job position) and/or enhance their reputation', 'to report profits', 'to increase the value of management compensation' and 'to meet regulatory objectives'. On the other hand, motivations such as 'to increase information value', 'to enhance the chances of obtaining bank loans', 'to avoid reporting a decline' and 'to decrease the amount of taxes' did not appear to play an important role in managing earnings reports in Libyan state-owned companies. In addition, the results indicated that the main earnings management motivations in private companies are 'to decrease the amount of taxes' and 'to enhance the chance of obtaining bank loans'. Moreover, the above results from both state-owned and private companies' motivations show that the motivation preference of earnings management in the Libyan environment is influenced by the ownership structure of corporations. The above results were confirmed by interviews.

2- The most frequent techniques used to practice earnings management in Libyan companies were 'manipulation of the value of inventory', 'improper assets revaluation', 'incorrect capitalising rather than expensing expenditures', 'manipulation of accrual estimation', 'incorrect use of expenses on asset acquisition' and 'and related-party transactions'. These results could be of interest to Libyan regulators and external auditors in their efforts to constrain earnings management and improve the quality of financial reporting.

3- When considering respondents' perceptions of the actions that should be taken to constrain earnings management and improve the quality of financial reporting in Libyan companies, the results from the questionnaire and interviews showed a consensus among respondents on the importance of these issues. Also, accounting standards cannot be the only solution to restrict earnings management and improve the quality of financial reporting in Libya. Therefore, in the view of the respondents, the correct way to restrict earnings management and improve the quality of financial reporting in the Libyan environment is to combine several actions, which are related to accounting standards, internal corporate governance mechanisms, which includes the existence of an effective audit committee, the existence of an effective internal audit function, and the existence of an independent and competent board of directors, and the quality of external audit.

4- According to respondents' perceptions on the existence of effective audit committee functions, they agreed that the audit committee members should review the following: 'significant changes in accounting policies and practices', 'the internal control system', 'the independence of the internal audit department', 'the scope of internal and external audit activities' and 'related party transactions'. Further, respondents agreed that knowledge and experience of accounting or other related subjects were the most important attributes that help the audit committee members in their work and enable them to become more effective monitors. Also, the audit committee members should be independent from the executive directors in order to detect earnings management effectively. Moreover, having knowledge about the company's activities might help the audit committee members to focus on risk areas and become familiar with how company's activities are operated and identify possible areas for practicing earnings management.

5- With regard to the existence of effective internal audit functions, respondents agreed that the internal audit should evaluate and monitor the effectiveness of the internal control system, reviewing whether or not management has consistent treatment for similar transactions, and provide assistance to external auditors. Further, the internal audit should have a relevant educational background and qualifications, experience and knowledge about the company's operations and auditing techniques, and should be independent from the executive management.

6- According to respondents' perceptions on the existence of an independent and competent board of directors, they agreed that a larger proportion of independent outside members on the board of directors is expected to provide more effective monitors and significantly reduce the probability of a company practicing earnings management. Further, they agreed that there was a positive relationship between the boards' monitoring effectiveness and the level of experience of the members of the board of directors. However, during the interview stage of this study, several concerns were expressed related to selecting the members of the board of directors. It was argued by a number of interviewees that selecting and appointing the members of the board of directors should be based on their professional qualifications (financial background), their experience, their business skills and their reputations. This will help them to be able to perform their job successfully. Also, a separation between the role of chairman and the executive officers will give the board more independence, which will help them to play a useful role in the supervision of the company's performance, and to support the position and role of the internal auditors, the audit committee and the external auditors.

7- With regard to the external audit quality, the results indicated that normal audit training may focus on accounting standards and auditing techniques, and it is not aimed at detecting earnings management particularly, which means audit training that applies only to accounting standards and auditing techniques may not be enough to enable external auditors to detect earnings management effectively. Therefore, external auditors should attend special training courses in order to provide good services and help them to detect earnings management.

8- Both lengthy tenure and the provision of non-audit services had positive and negative effects on the audit quality. On the one hand they give the external auditor more expertise, and better identification and understanding of a client's risk and his business. On the other hand, they may affect external auditors' independence because of the relationship that may develop between auditor and client over on extended time. Further, they may lead to external auditors becoming less sceptical and less innovative.

9- Respondents agreed that high audit fees, strong competition, increasing numbers of lawsuits, strong accounting and auditing standards and strong accounting education all have a positive impact on audit quality and audit reputation. However, it was felt that the size of a firm does not have a significant influence on audit quality in the Libyan environment because most audit offices in Libya are medium or small in size, and their service quality depends on individual competence, experience and attitude. In contrast, the absence of large audit firms negatively affects audit quality in the Libyan environment due to the fact that the existence of these firms would help to improve the audit service quality by transferring their experience and knowledge to the Libyan environment. The results also revealed that the 'using more technology' component does not have a significant influence on audit quality due to the fact that the accounting system in Libya is not a paperless system. These results might be of interest to Libyan regulators and external auditors in their efforts to constrain earnings management and improve the quality of financial reporting.

7.2 Contributions of the Study

There is a growing body of research that has been examining earnings management in developed countries. However, research is still lacking in developing countries generally and in Libya specifically, where more studies need to be done. Moreover, the results of studies in developed countries are not always applicable to developing countries' environment. This is due to the fact that companies located in developing countries have received little attention in the literature and have a different environment to companies located in developed countries; these differences include poor management performance, a small number of listed companies, weak corporate governance structure, unsophisticated users, weak accounting profession and a preponderance of family-controlled firms.

Consequently, this study contributes to the literature of earnings management conducted in developing countries in general. Also, this study has investigated the current state of the earnings management phenomenon in the Libyan environment, which is a different setting to most prior research, where, to the best of the researcher's knowledge, this study is the first of its kind in the Libyan context. Further, this study is a comprehensive study of the earnings management phenomenon because it investigates the existence of earnings management, why earnings management takes place, how it is achieved and how it can be constrained. Therefore, it is hoped it provides useful insights, policy implications and recommendations for policy makers and regulatory bodies, external auditors and accounting professionals in Libya in order to enhance the monitoring mechanisms, corporate control and the quality of financial statements. Also, this research provides a foundation for future research into the earnings management phenomenon in the Libyan environment.

Further, this study measured earnings management by applying discretionary accruals models, which was a cross-sectional of the Modified Jones model with cash flow from operating and performance matching on return on assets as additional variables. Also, this study established relationships between the direction of earnings management and the nature of company ownership and company size.

Furthermore, this study draws to attention the importance that internal corporate governance mechanisms and audit quality have in overseeing the integrity of financial statements, which is useful to both regulators and professional bodies in their efforts to enhance the quality of financial statements, and the findings of this study could be useful for developing and improving the accounting system in Libya.

7.3 Scope and Limitations of the Study

This research has certain limitations like any research study. Despite the following limitations that are related to analytical methods and data collection, a significant effort was made in ensuring that the questions of this study were answered and the study objectives were reached.

First modelling limitations, the study used discretionary accruals as a statistical proxy for earnings management. The literature review documented the statistical limitations in respect of earnings management models, particularly relating to separating total accruals into non-discretionary and discretionary components. Despite their limitations, prior studies have applied these models. To the extent that the criticisms of existing earnings management models are applicable, the findings of the earnings management analysis provided in this study might be limited. In addition, the mean adjusted R^2 of the regression model that was used to measure earnings management was approximately 52 percent, which suggests that additional explanatory variables could be concerned in order to improve the explanation of earnings management.

Second secondary data sample limitations, this study excluded financial companies and banks from the sample of secondary data because these firms' financial statements are different from other companies, and they operate under specific regulations. Further, this study also excluded listed companies, since there is a small number of listed companies because of the fact that the Libyan capital market was only established in 2007, and all of the companies listed on the market are banks and financial companies, which are excluded from the sample of secondary data. In addition, although a significant effort was undertaken to collect the secondary data from unlisted companies, which are state-owned and private companies, a lack of publicly available data was faced. However, the size of the earnings management sample analysed in this study is comparable to that in prior research. The above secondary data sample limitations might reduce the generalisability of this study's findings related to the existence of earnings management in Libyan companies.

Third questionnaire survey limitations, although the administration of the questionnaire survey was carefully planned and performed, the response rate was approximately 60 percent. Therefore, this study may suffer from response rate limitations. On the other hand, this study used semi-structured interviews in order to overcome these limitations.

Despite the above limitations, this study provides evidence of the state of earnings management in Libya, and it sheds light on corporate governance and the important role of external auditors in overseeing the integrity of financial statements. Also, this study is a starting point for future research related to earnings management in the Libyan environment.

7.4 Future Research

Although this study answers the specific questions it set out to investigate, it stimulates further research to be carried out in this respect.

1- Future research should measure earnings management by using other approaches, such as the specific accrual approach, in order to focus on a set of specific accruals or the influence of managers' discretion on specific accrual by focusing on the given findings provided in this study. Also, investigating the existence of earnings management in Libyan companies by applying the distributional approach, which focuses on the statistical properties of earnings to determine behaviour that affects earnings and is based on the distribution of earnings after management.

2- Listed companies should be included in future research in order to gain a comprehensive understanding of earnings management in Libya. Further, examining earnings management in IPO events in order to found out whether Libyan listed companies manage their earnings reports before issuing their shares to the public. Also, applying a matched-pair approach, which matches each IPO firm with a non-IPO firm from the same industry with comparable earnings performance as the IPO firm during the issue year.

3- This study confined itself to accounting standards, the internal corporate governance mechanism and audit quality as factors that constrict the practice of earnings management in Libya. The future research should include the impact of political forces and culture on inhibiting the practice of earnings management, and thus to improve the quality of financial reports in Libya.

REFERENCES

Aaker, D., Kumar, A., & George, S. (1998). *Marketing Research* (6th ed.). New York: John Wiley and Sons.

Abdussalam, A. (1979). *The role of money and banking in the Libyan development process.* Unpublished PhD Thesis, University of Colorado at Boulder: USA.

Agrawal, A., & Chadha, S. (2005). Corporate governance and accounting scandals. *Journal of law and Economics, 48*, 371-406.

Ahlawat, S. S., & Lowe, D. J. (2004). An examination of internal auditor objectivity: In-house versus outsourcing. *Auditing: A Journal of Practice and Theory, 23*(2), 147-158.

Ahmad-Zaluki, N., Campbell, K., Goodacre, A. (2011). Earnings management in Malaysian IPOs: The East Asian crisis, ownership control, and post-IPO performance, *The International Journal of Accounting, 46(2), 111-137.*

Al-Fayoumi, N., Abuzayed, B., & Alexander, D. (2010). Ownership structure and earnings management in emerging markets: The case of Jordan. *International Research Journal of Finance and Economics, 38*, 1450-2887.

Aljifri, K. (2007). Measurement and motivations of earnings management: A critical perspective. *Journal of Accounting – Business & Management, 14*, 75-95.

Al-Khabash, A. A., & Al-Thuneibat, A. A. (2009). Earnings management practices from the perspective of external and internal auditors. Evidence from Jordan. *Managerial Auditing Journal, 24*(1), 58-80.

Amat, O., Blake, J., & Oliveras, E. (2000). The ethics of creative accounting: Some Spanish evidence, Available at http://www.econ.upf.edu/docs/papers/downloads/455.pdf. [Accessed on 25/06/2008].

Antle, R., Gordon, E., Narayanamoorthy, G., & Zhou, L. (2006). The joint determination of audit fees, non-audit fees, and abnormal accruals. *Review of Quantitative Finance and Accounting, 27*(3), 235-266.

Arens, A. A., Elder, R. J., & Beasley, M. S. (2008). *Auditing and assurance services: An integrated approach* (12th ed.). New Jersey: prentice Hall.

Arya, A., Glover, J., & Sunder, S. (2003). Are unmanaged earnings always better for shareholders? *Accounting Horizons, 17*, 111-116.

ASX. (2003). *Corporate governance council, principles of good corporate governance and best practice recommendations*. Sydney: Australian Stock Exchange.

Ball, R., Kothari, S. P., & Robin, A. (2000). The effect of international institutional factors on properties of accounting earnings. *Journal of Accounting & Economics, 29*(1), 1-52.

Ball, R., Robin, A., & Wu, J. S. (2003). Incentives versus standards: properties of accounting income in four East Asian countries. *Journal of Accounting and Economics, 36*(1-3), 235-270.

Ball, R., & Shivakumarb, L. (2008). Earnings quality at initial public offerings. *Journal of Accounting and Economics, 45*, 324-349.

Balsam, S., Bartov, E., & Marquardt, C. (2002). Accruals management, investor sophistication, and equity valuation: Evidence from 10-Q filings. *Journal of Accounting Research, 40*(4), 987-1012.

Balsam, S., Krishnan, J., & Yang, J. (2003). Auditor industry specialization and earnings quality. *Auditing: A Journal of Practice and Theory, 22*(2), 71-97.

Baralexis, S. (2004). Creative accounting in small advancing countries. The Greek case. *Managerial Auditing Journal, 19*(3), 440-461.

Barnea, A., Ronen, J., & Sadan, S. (1976). Classificatory smoothing of income with extraordinary items. *The Accounting Review, 51*(1), 110- 122.

Barth, M. E., Elliott, J. A., & Finn, M. W. (1999). Market rewards associated with patterns of increasing earnings. *Journal of Accounting Research, 37*(2), 387-413.

Bartov, E., Gul, F. A., & Tsui, J. (2001). Discretionary-accruals models and audit qualifications. *Journal of Accounting and Economics, 30*(3), 421-452.

Basioudis, I. G., Papakonstantinou, E., & Geiger, M. A. (2008). Audit fees, non-audit fees and auditor going-concern reporting decisions in the United Kingdom. *Abacus, 44*(3), 284-309.

Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review, 71*(4), 443-465.

Beatty, A., Chamberlian, S., & Magliolo, J. (1995). Managing financial reports of commercial banks: the influence of taxes, regulatory capital and earnings. *Journal of Accounting Research, 33*(2), 231-261.

Beatty, A., Ke, B., & Petroni, K. (1999). Differential earnings management to avoid earnings declines and losses across publicly and privately-Held Banks. *Working Paper, Penn State University.*

Beaver, W. H. (2002). Perspectives on recent capital market research. *The Accounting Review, 77*(2), 453-474.

Beaver, W. H., McNichols, M. F., & Nelson, K. K. (2003). Management of the loss reserve accrual and the distribution of earnings in the property-casualty insurance industry. *Journal of Accounting and Economics, 35*(3), 347-376.

Beaver, W. H., & Ryan, S. G. (2005). Conditional and unconditional conservatism: concepts and modeling. *Review of Accounting Studies, 10*(2-3), 269-309.

Becker, C. L., Defond, M. L., Jiambalvo, J., & Subramanyam, K. R. (1998). The effect of audit quality on earnings management. *Contemporary Accounting Research, 15*(1), 1-24.

Bedard, J., Chtourou, S. M., & Courteau, L. (2004). The effect of audit committee expertise, independence, and activity on aggressive earnings management. *Auditing: A Journal of Practice and Theory, 23*(2), 13-35.

Behn, K. B., Lee, J. H., & Jin, L. H. (2009). An empirical analysis of audit fee price competition after the Korean 1999 Omnibus Cartel Repeal Act. *Journal of International Accounting, Auditing & Taxation, 18*(2), 132-140.

Beneish, M. D. (1997). Detecting GAAP violation: Implications for assessing earnings management among firms with extreme financial performance. *Journal of Accounting and Public Policy, 16*(3), 271-309.

Beneish, M. D. (2001). Earnings management: a perspective. *Managerial Finance, 27*(12), 3-17.

Berry, W., & Feldman, S. (1985). *Multiple Regressions in Practice*. Newbury Park, California: SAGE Publications.

Bierstaker, J. L., Burnaby, P., & Thibodeau, J. (2001). The impact of information technology on the audit process: An assessment of the state of the art and implications for the future. *Managerial Auditing Journal, 16*(3), 159-164.

Bishop, W. G., Hermanson, D. R., Lapides, P. D., & Rittenberg, L. E. (2000). The year of the audit committee. *The Internal Auditor, 57*(2), 46-51.

Bissessur, S. W. (2008). *Earnings Quality and Earnings Management: The Role of Accounting Accruals*: VDM Verlag.

Blaxter, L., Hughes, C., & Tight, M. (1998). *How to Research*: Open University Press, UK.

Boone, J. P., Khurana, I. K., & Raman, K. K. (2008). Audit firm tenure and the equity risk premium. *Journal of Accounting, Auditing and Finance, 23*(1), 115-140.

Braiotta, L. (1999). *The Audit Committee Handbook* (3th ed.). New York: John Wiley and Sons.

Braiotta, L., & Marsh, H. (1992). Developing a constructive relationship under the guidance of SAS No. 65. *The Internal Auditing, 8*, 3-11.

BRC. (1999). *Report and Recommendations of the Blue Ribbon Committee on Audit Committee Characteristics and Restatements: A Study of the Efficacy of Certain*: New York: New York Stock Exchange and National Association of Securities Dealer.

BRC. (1999). *Report and Recommendations of the Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees*: New York Stock Exchange and National Association of Securities Dealers.

Bribsh, F. N. (2006). *The Quality of Corporate Annual Reports: Evidence from Libya.* Unbupublished PhD Thesis, univeristy of Glamorgan.

Brody, R., & Kaplan, S. (1996). Escalation of commitment among internal auditors. *Auditing: A Journal of Practice & Theory, 15*, 1-15.

Brody, R. G., Golen, S. P., & Reckers, P. M. (1998). An empirical investigation of the interface between internal and external auditors. *Accounting and Business Research, 28*(3), 160-171.

Bryman, A., & Bell, E. (2007). *Business Research Methods* (2nd ed.): Oxford University Press.

Burgstahler, D., & Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics, 24*(1), 99-126.

Burgstahler, D., & Eames, M. (2006). Management of earnings and analysts' forecasts to achieve zero and small positive earnings surprises. *Journal of Business Finance & Accounting, 33*(5-6), 633-652.

Burke, F. M., & Guy, D. M. (2001). Audit committees: A Guide for Directors, Management, and Consultants, New York: Aspen Law & Business.

Cahan, S., Emanuel, D., Hay, D., & Wong, N. (2008). Non-audit fees, long-term auditor–client relationships and earnings management. *Accounting and Finance, 48*(2), 181-207.

Cahan, S. F. (1992). The effect of antitrust investigations on discretionary accruals: A refined test of the political cost hypothesis. *The Accounting Review, 67*, 77-95.

Cahan, S. F., Chavis, B. M., & Elmendorf, R. G. (1997). Earnings management of chemical firms in response to political costs from environmental legislation. *Journal of Accounting, Auditing & Finance, 12*(1), 37-65.

Carcello, J, V., & Nagy, A. L. (2004). Audit firm tenure and fraudulent financial reporting. *Auditing: A Journal of Practice and Theory, 23*(2), 55-69.

Carcello, J. V., & Neal, T. L. (2000). Audit committee composition and auditor reporting. *The Accounting Review, 75*(4), 453-467.

Carslaw, C. (1988). Anomalies in income numbers: Evidence of goal oriented behavior. *The Accounting Review, 36*(2), 321-327.

Cassell, C., & Symon, G. (1994). *Qualitative Methods in Organisational Research.* London: SAGE Publications Ltd.

Catanach, A. H., & Walker, P. L. (1999). The international debate over mandatory auditor rotation: A conceptual research framework. *Journal of International Accounting, Auditing, and Taxation, 8*(1), 43-66.

CCR. (1992). Cadbury Committee Report, Report of the Committee on the Financial Aspects of Corporate Governance. *London: Gee.*

Central Bank of Libya. (2005). Economic Bulletin. 44,4th Quarter. Research and Statistics Department. Tripoli, Libya.

Chanchani, S., & Willett, R. (2004). An empirical assessment of Gray's accounting value constructs. *International Journal of Accounting, 39*(2), 15-24.

Chaney, P., Jeter, D. C., & Shaw, P. E. (2003). The impact on the market for audit services of aggressive competition by auditors. *Journal of Accounting and Public Policy, 22*(6), 487-516.

Chen, C. Y., Lin, C. J., & Lin, Y. C. (2008). Audit partner tenure, audit firm tenure, and discretionary accruals: Does long auditor tenure impair earnings quality? *Contemporary Accounting Research, 25*(2), 415-445.

Chen, J. J. (2004). Corporatisation of China's state-owned enterprises and corporate governance. *Corporate Ownership and Control, 1*(2), 82-93.

Chen, K. Y., Lin, K. L., & Zhou, J. (2005). Audit quality and earnings management for Taiwan IPO firms. *Managerial Auditing Journal, 20*(1), 86-104.

Chen, M; Tsai, Y.(2010). Earnings management types and motivation: A study in Taiwan. *Social Behavior and Personality: an international journal*, 38(7), 955-962.

Chung, R., Firth, M., & Kim, J. (2002). Institutional monitoring and opportunistic earnings management. *Journal of Corporate Finance, 8*(1), 29-48.

Church, B., & Schneider, A. (1992). Internal auditor involvement in internal control system design: Is objectivity impaired? *Journal of, applied Business Research, 8*, 15-24.

CIPE. (2002). Instituting Corporate Governance in Developing, Emerging, and Transitional Economies, A Handbook, Centre For International Private Enterprise, New York: CIPE.

Cohen, J. R., Krishnamoorthy, G., & Wright, A. M. (2002). Corporate governance and the audit process. *Contemporary Accounting Research, 19*(4), 573-594.

Cohen, L., Lawrence, M., & Morrison, K. (2000). *Research Methods in Education* (5th ed.). London: Routledge Falmer.

Collis, J., & Hussey, R. (2003). *Business Research: A practical Guide for Undergraduate and Postgraduate Students*: Palgrave Macmillan.

Cooper, D. R., & Emory, C. W. (1995). *Business Research Methods* (5th ed.): Irwin.

Copeland, R. M. (1968). Income smoothing. *Journal of Accounting Research, Empirical Research in Accounting: Selected Studies, 6*, 101-116.

Copley, P. A., & Doucet, M. S. (1993). The impact of competition on the quality of governmental audits. *Auditing: A Journal of Practice and Theory, 12*(1), 88-98.

Coram, P., Ferguson, C., & Moroney, R. (2008). Internal audit, alternative internal audit structures and the level of misappropriation of assets fraud. *Accounting and Finance, 48*(4), 543-559.

Cosserat, G., & Rodda, N. (2009). *Modern Auditing* (3th ed.). West Sussex: John Wiley and Sons.

Creswell, J. W. (2009). *Research Design: Quantitative, Qualitative and Mixed Methods Approaches* (3th ed.). London: SAGE Publications.

Creswell, J. W., & Clark, V. P. (2007). *Designing and Conducting Mixed Methods Research*: SAGE Publications Ltd.

Dao, M., Mishra, S., & Raghunandan, K. (2008). Auditor tenure and shareholder ratification of the auditor. *Accounting Horizons, 22*(3), 297-314.

Davidson, R., Goodwin, J., & Kent, P. (2005). Internal governance structures and earnings management. *Journal of Accounting and Finance, 45*(2), 241-267.

Davidson, R. A., & Neu, D. (1993). A note on the association between audit firm size and audit quality. *Contemporary Accounting Research, 9*(2), 479-488.

Davis, L. B., Soo, B., & Trompeter, G. (2005). Auditor tenure and the ability to meet or beat earnings forecasts. *Working paper, Michigan Tech University.*

DeAngelo, H., DeAngelo, L., & Skinner, D. (1996). Reversal of fortune: Dividend signalling and the disappearance of sustained earnings growth. *Journal of Financial Economics, 40*, 341-371.

DeAngelo, L. E. (1981a). Auditor independence, low balling, and disclosure regulation. *Journal of Accounting and Economics, 3*(2), 113-127.

DeAngelo, L. E. (1981b). Auditor size and audit quality. *Journal of Accounting and Economics, 3*(3), 183-199.

DeAngelo, L. E. (1988). Managerial competition, information costs, and corporate governance: The use of accounting performance measures in proxy contests. *Journal of Accounting and Economics, 10*(1), 3-36.

DeAngleo, L. E. (1986). Accounting numbers as market valuation substitutes: A study of management buyouts of public stockholders. *The Accounting Review, 61*(3), 400-420.

Dechow, P. (1994). Accounting earnings and cash flows as measures of firm performance: The role of accounting accruals. *Journal of Accounting and Economics, 18*(1), 3-42.

Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review, 77*, 35-59.

Dechow, P. M., Richardson, S., & Tuna, I. (2003). Why are earnings Kinky? An examination of the earnings management explanation. *Review of Accounting Studies, 8*(2-3), 355-384.

Dechow, P. M., & Skinner, D. J. (2000). Earnings management: Reconciling the views of accounting academics, practitioners, and regulators. *Accounting Horizons, 14*(2), 235-250.

Dechow, P. M., & Sloan, R. G. (1991). Executive incentives and the horizon problem: An empirical investigation. *Journal of Accounting and Economics, 14*, 51-89.

Dechow, P. M., Sloan, R. G., & Soliman, M. T. (2004). Implied equity duration: A new measure of equity risk. *Review of Accounting Studies, 9*(2-3), 197-228.

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1996). Causes and consequences of earnings manipulation: an analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research, 13*(1), 1-36.

Dechow, P. M., Sloan, R. G., & Sweeny, A. P. (1995). Detecting earnings management. *The Accounting Review, 70*(2), 193-225.

DeFond, M. L., & Jiambalvo, J. (1994). Debt covenant violation and manipulation of accruals. *Journal of Accounting and Economics, 17*, 145-176.

DeFond, M. L., & Park, C. W. (1997). Smoothing Income in Anticipation of Future Earnings. *Journal of Accounting and Economics, 23*, 115-139.

DeFond, M. L., Raghunandan, K., & Subramanyam, K. R. (2002). Do non-audit service fees impair auditor independence? Evidence from going concern audit opinions. *Journal of Accounting Research, 40*(4), 1247-1274.

DeFuentes, C., & Pucheta-Martínez, M. (2009). Auditor independence, joint determination of audit and non-audit fees and the incidence of qualified audit reports. *Academia, Revista Latinoamericana de Administración, 43*, 63-92.

DeGeorge, F., Patel, J., & Zeckhauser, R. (1999). Earnings management to exceed thresholds. *Journal of Business, 72*(1), 1-33.

Deis, D. R., & Giroux, G. A. (1992). Determinants of audit quality in the public sector. *The Accounting Review, 67*, 462-479.

Dempsey, C. J., Hunt, H. G., & Schroeder, N. W. (1993). Earnings management and corporate ownership structure: An examination of extraordinary item reporting. *Journal of Business Finance & Accounting, 20*(4), 479-500.

Denzin, N. K. (1978). *The Research Act: A Theoretical Introduction to Sociological Methods*. New York: McGraw-Hill.

DeZoort, F. (1997). An investigation of audit committees' oversight responsibilities. *Abacus, 33*(2), 208-227.

DeZoort, F., Hermanson, D., Archambeault, D., & Reed, S. (2002). Audit committee effectiveness: A synthesis of the empirical audit committee literature. *Accounting Literature, 21*, 38-75.

DeZoort, F. T., Friedberg, A., & Reisch, J. T. (2000). Implementing a communications programme for audit committees: Comments from Internal audit directors. *The Internal Auditing, 15*(4), 11-18.

DeZoort, F. T., & Salterio, S. (2001). The effects of corporate governance experience, financial reporting and audit knowledge on audit committee members' judgments. *Auditing: A Journal of Practice and Theory, 20*, 31-47.

Ding, Y., Zhang, H., & Zhang, J. (2007). Private vs state ownership and earnings management: evidence from Chinese listed companies. *Corporate Governance: An International Review, 15*(2), 223-238.

Dnes, A. W. (2005). Corporate governance: An international perspectives. *Managerial and Decision Economics, 26*(7), 411-412.

Douglas, F., Prawit, D. F., Smith, J. L., & Wood, D. A. (2009). Internal audit quality and earnings management. *The Accounting Review, 84*(4), 1255-1280.

DuCharme, L. L., Malatesta, P. H., & Sefcik, S. E. (2001). Earnings management: IPO valuation and subsequent performance. *Journal of Accounting, Auditing and Finance, 16*, 369-396.

DuCharme, L. L., Malatesta, P. H., & Sefcik, S. E. (2004). Earnings management, stock issues, and shareholder lawsuits. *Journal of Financial Economics, 71*(1), 27-49.

Duke, J. C., & Hunt, H. G. (1990). An empirical examination of debt covenant restrictions and accounting-related debt proxies. *Journal of Accounting and Economics, 12*, 45-63.

DuPlessis, J. J., McConvill, J., & Bagaric, M. (2005). *Principles of Contemporary Corporate Governance*: Cambridge University Press.

Durtschi, C., & Easton, P. (2005). Earnings management? The shapes of the frequency distributions of earnings metrics are not evidence Ipso facto. *Journal of Accounting Research, 43*(4), 557-592.

Dye, R. (1988). Earnings management in an overlapping generations model. *Journal of Accounting Research, 26*(2), 195-235.

Easterby-Smith, M., Richard, T., & Andy, L. (1991). *Management Research: An Introduction*: SAGE Publications Ltd.

Edge, W. R., & Farley, A. A. (1991). External auditor evaluation of the internal audit function. *Accounting and Finance, 31*, 69-83.

Edwik, A. A. (2007). *Oil Dependency, Economic Diversification and Development: A Case Study of Libya*. Unpublished PhD Thesis, University of Salford.

Eighme, J. E., & Cashell, J. D. (2002). Internal auditors' roles in overcoming the financial reporting crisis. *International Auditing, 17*, 3-10.

Elliott, J. A., & Shaw, W. H. (1988). Write-Offs as accounting procedures to manage perceptions. *Journal of Accounting Research, 33*(2), 231-261.

Erickson, M., & Wang, S. (1999). Earnings management by acquiring firms in stock for stock mergers. *Journal of Accounting and Economics, 27*, 149-176.

Eisenhardt, M, K. (1989). Agency theory: An assessment and review. Academy of Management Review, 14(1), 57-74.

Ewert, R., & wagenhofer, A. (2005). Economic effects of tightening accounting standards to restrict earnings management. *The Accounting Review, 80*(4), 1101-1124.

Fairchild, R. (2008). Auditor tenure, managerial fraud, and report qualification: A game-theoretic approach. *Journal of Audit Practice, 5*(2), 42-54.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics, 26*(2), 301-325.

FASB. (1978). Objectives of Financial Reporting by Business Enterprises. Statement of Financial Accounting Concepts No. 1. Norwalk, CT: Financial Accounting Standards Board.

FASB. (1985). Elements of Financial Statements. Statement of Financial Accounting Concepts No. 6. Norwalk, CT: Financial Accounting Standards Board.

Field, A. (2000). *Discovering Statistics Using SPSS for Windows*: Sage Publications Ltd.

Flowerday, S., Blundell, A. W., & Solm, R. V. (2006). Continuous auditing technologies and models: A discussion. *Computers and Security, 25*(5), 325-331.

Francis, J. R., Maydew, E. L., & Sparks, H. C. (1999). The role of Big 6 auditors in the credible reporting of accruals. *Auditing: A Journal of Practice and Theory, 18*(2), 17-34.

Frankel, R. M., Johnson, M. F., & Nelson, K. K. (2002). The relation between auditors' Fees for nonaudit services and earnings management. *The Accounting Review, 77*(4), 71-105.

Frankfort-Nachmias, C., & Nachmias, D. (1996). *Research Methods in the Social Sciences* (5th ed.). New York: Martin's Press.

Friedlan, J. M. (1994). Accounting choices of issuers of initial public offerings. *Contemporary Accounting Research, 11*(1), 1-31.

Fudenberg, D., & Tirole, J. (1995). A theory of income and dividend smoothing based on incumbency rents. *Journal of political Economy, 103*(1), 75-93.

Gallegos, F. (2004). Safeguarding auditor objectivity: corporate governance practices must not compromise auditor independence. *The Internal Auditor, 61*(5), 37.

Gaver, J. J., Gaver, K. M., & Austin, J. R. (1995). Additional evidence on bonus plans and income management. *Journal of Accounting and Economics, 19*(1), 3 -28.

Gaver, J. J., & Paterson, J. S. (2001). The association between external monitoring and earnings management in the property-casualty insurance industry. *Journal of Accounting Research, 39*(2), 269-282.

Geiger, M., & Raghunandan, K. (2002). Auditor tenure and auditor reporting failures. *Auditing: A Journal of Practice & Theory, 21*(1), 67-78.

Geiger, M. A., & Rama, D. V. (2006). Audit firm size and going-concern reporting accuracy. *Accounting Horizons, 20*(1), 1-17.

George, N. (2009). The relationship between audit firm tenure and probability of financial statement fraud. *Journal of the Academy of Business and Economics, 9*(4), 54-65.

Ghauri, P., Gronhaug, K., & Kritainslund, I. (1995). *Research Methods in Business Studies*. New York: Prentice Hall.

Ghosh, A., & Moon, D. C. (2003). Does auditor tenure impair audit quality? Working paper, Office of Economics Analysis and State University of New York.

Goldeng, E., Grünfeld, L. A., & Benito, G. R. (2008). The performance differential between private and state owned enterprises: The roles of ownership, management and market structure. *Journal of Management Studies, 45*(7), 1246-1273.

Goncharov, I. (2005). *Earnings management and Its Determinants: Closing Gaps in Empirical Accounting Research*: Peter Lang GmbH.

Goodwin, J., & Seow, J. L. (2002). The influence of corporate governance mechanisms on the quality of financial reporting and auditing: Perceptions of auditors and directors in Singapore. *Accounting and Finance, 42*(3), 195-223.

Goodwin, J., & Yeo, T. Y. (2001). Two factors affecting internal audit independence and objectivity: Evidence from Singapore. *International Journal of Auditing, 5*(2), 107-125.

Graham, J. J. (2004). Balancing Relationships: achieving symmetry among the internal audit function, board, and management is more important than ever. *The Internal Auditor, 61*(1), 35-36.

Gramling, A. A., Maletta, M. I., Schneider, A., & Church, B. K. (2004). The role of the internal audit function in corporate governance. *Journal of Accounting Literature, 23*, 194-244.

Gray, S. J. (1988). Towards a theory of cultural influence on the development of accounting systems internationally. *Abacus, 24*(1), 1-15.

Grbich, C. (2007). *Qualitative Data Analysis: An Introduction*: SAGE Publications Ltd.

Grix, J. (2004). *The Foundations of Research*: Palgrave Macmillan.

Guay, W. (2006). Discussion of the role of accruals in asymmetrically timely gain and loss recognition. *Journal of Accounting Research, 44*(2), 243-255.

Guay, W. A., Kothari, S. P., & Watts, R. L. (1996). A market-based evaluation of discretionary accrual models. *Journal of Accounting Research, 34*(3), 83-105.

Guba, E. G., & Lincoln, Y. S. (1994). *Competing paradigms in Qualitative Research. In Denzin, N. K. and Lincoln, Y. S. (eds). Handbook of Qualitative Research*: Sage Publishers, USA.

Guidry, F., Leone, A. J., & Rock, S. (1999). Earnings-based bonus plans and earnings management by business-unit managers. *Journal of Accounting and Economics 26*(1-3), 113-142.

Gul, F. A., Tsui, J., & Dhaliwal, D. S. (2006). Non-audit services, auditor quality and the value relevance of earnings. *Accounting and Finance, 46*(5), 797-817.

Hague, P. N. (1993). *Questionnaire Design*. London: Kogan Page.

Han, J. C., & Wang, S. (1998). Political costs and earnings management of oil companies during the 1990 Persian Gulf Crisis. *The Accounting Review, 73*(1), 103-118.

Hand, J. (1989). Did firms undertake debt-equity swaps for an accounting paper profit or true financial gain? *The Accounting Review, 64*, 587-623.

Hao, J. (1999). Economic analysis on the adverse effect of the non-trading characteristics of state-owned shares. *Research on Financial and Economic Issues, 2*.

Hayes, R., Dassen, R., Schilder, A., & Wallage, P. (2005). *Principles of Auditing: An Introduction to International Standards on Auditing* (2nd ed.): Prentice Hall.

Hayn, C. (1995). The information content of losses. *Journal of Accounting and Economics, 20*, 125-153.

Healy, M., & Perry, C. (2000). Comprehensive criteria to judge validity and reliability or qualitative research of qualitative research within the realism paradigm. *Qualitative Market Research: An International Journal, 3*(3), 118-126.

Healy, P. M. (1985). The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics, 7*(1-3), 85- 107.

Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons, 13*(4), 365-383.

Hermalin, B. E., & Weisbach, M. S. (1991). The effect of board composition and direct incentives on firm performance. *Journal of Financial Management, 20*(4), 101-112.

Hermalin, B. E., & Weisbach, M. S. (1998). Endogenously chosen boards of directors and their monitoring of the CEO. *American Economic Review 88*(1), 96-118.

Hippler, H. J., Schwarz, N., & Sudman, S. (1987). *Social Information Processing and Survey Methodology*. New York: Springer-Verlag.

Holland, D., & Ramsay, A. (2003). Do Australian companies manage earnings to meet simple earnings benchmarks? *Accounting and Finance, 43*(1), 41-62.

Holthausen, R. W., Larcker, D. F., & Sloan, R. G. (1995). Annual bonus schemes and the manipulation of earnings. *Journal of Accounting and Economics, 19*(1), 29-74.

Hoque, Z. (2006). *Methodological Issues in Accounting Research: Theories and Methods*: Spiramus Press.

Hyde, K. F. (2000). Recognising deductive processes in qualitative research. *Qualitative Market Research: An International Journal, 3*(2), 82-89.

IAASB. *(2004a).The Auditor's Responsibility to Consider Fraud in an Audit of Financial Statements. International standard on auditing (ISA) 240 (Revised), International Auditing and Assurance Standards Board.* New York: International Federation of Accountants (IFAC).

IAASB. (2004b). Objective and General Principles Governing an Audit of financial Statement. International standard on auditing (ISA), International Auditing and Assurance Standards Board. New York: International Federation of Accountants (IFAC).

IIARF. (1999). *Competency Framework for Internal Auditing*: The Institute of Internal Auditors Research Foundation.

Jackson, A. B., Moldrich, M., & Roebuck, P. (2008). Mandatory audit firm rotation and audit quality. *Managerial Auditing Journal, 23*(5), 420-437.

Jacob, J., & Jorgensen, N. (2007). Earnings management and accounting income aggregation. *Journal of Accounting and Economics, 43*(2-3), 369-390.

Jaggi, B., & Lee, P. (2002). Earnings management response to debt covenant violation and debt restructuring. *Journal of Accounting, Auditing, and Finance, 17*(4), 295-324.

Janes, J. (1999). On research survey construction. *Library Hi Tech, 17*(3), 321-325.

Jeanjean, T., & Stolowy, H. (2008). Do accounting standards matter? An exploratory analysis of earnings management before and after IFRS adoption. *Journal of Accounting and Public Policy, 27*(6), 480-494.

Jensen, K. L., & Payne, J. L. (2005a). The introduction of price competition in a municipal audit market. *Auditing: A Journal of Practice and Theory, 24*(2), 137-152.

Jensen, K. L., & Payne, J. L. (2005b). Audit procurement: Managing audit quality and audit fees in response to agency costs. *Auditing: A Journal of Practice and Theory, 24*(2), 27-48.

Jeonge, S. W., & Rho, J. (2004). Big Six auditors and audit quality: The Korean evidence. *The International Journal of Accounting, 39*(2), 175-196.

Jiraporn, P., Miller, G. A., Yoon, S. S., & Kim, Y. S. (2008). Is earnings management opportunistic or beneficial an agency theory perspective? *International Review of Financial Analysis, 17*(3), 622-634.

Johnson, R. B., Onwuegbuzie, J., & Turner, L. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112-133.

Johnson, V., Khurana, I., & Reynolds, J. (2002). Audit-firm tenure and the quality of financial reports. *Contemporary Accounting Research, 19*(4), 637-660.

Jones, J. J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research, 29*(2), 193-228.

Jones, K. L., Krishnan, G. V., & Melendrez, K. D. (2008). Do models of discretionary accruals detect actual cases of fraudulent and restated earnings? An empirical analysis. *Contemporary Accounting Research, 25*(2), 499-531.

Jong-Hag, C., Kim, F., Jeong-Bon, K., & Yoonseok, Z. (2010). Audit office size, audit quality, and audit pricing. *Auditing: A Journal of Practice and Theory, 29*(1), 73-97.

Jordan, C., & Clark, S. (2004). Big bath earnings management: the case of goodwill impairment under SFAS No. 142. *Journal of Applied Business Research, 20*(2), 63-69.

Kamel, H. M. (2006). *Earnings quality evaluation with special reference to the earnings management of Egyptian IPOs.* Unpublished PhD Thesis, Cardiff University, Cardiff.

Kang, S. (1999). Earnings management to avoid losses and performance of accrual prediction models. Working paper, Yale School of Management, New Haven.

Kang, S. H., & Sivaramkrishnan, K. (1995). Issues in testing earnings management and an instrumental variable approach. *Journal of Accounting Research, 33*(2), 353-367.

Kaplan, S. N., & Reishus, D. (1990). Outside directorships and corporate performance. *Journal of Financial Economics, 27*(2), 389-410.

Kasznik, R., & McNichols, M. (2002). Does meeting expectations matter? Evidence from analyst forecast revisions and share prices. *Journal of Accounting Research, 40*(3), 727-759.

Kasznik, R., & McNichols, M. F. (2002). Does meeting earnings expectations matter? Evidence from analyst forecast revisions and share prices. *Journal of Accounting Research, 40*(3), 727-759.

Kealey, B. T., Lee, H. Y., & Stein, M. T. (2007). The association between audit-firm tenure and audit fees paid to successor auditors: Evidence from Arthur Andersen. *Auditing: A Journal of Practice and Theory, 26*(2), 95-116.

Key, K. (1997). Political cost incentives for earnings management in the cable television industry. *Journal of Accounting and Economics, 23*(3), 309-337.

Khurana, I. K., & Raman, K. K. (2004). Are big four audits in ASEAN countries of higher quality than non-big four audits? Asia-Pacific. *Journal of Accounting and Economics, 11*(2), 139-166.

Kinnunen, J., & Koskela, M. (2003). Who is miss world in cosmetic earnings management? A cross-national comparison of small upward rounding of net income numbers among eighteen countries. *Journal of International Accounting Research, 2*(2), 39-68.

Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics, 33*(3), 375-400.

Knechel, W. R., & Vanstraelen, A. (2007). The relationship between auditor tenure and audit quality implied by going concern opinions. *Auditing: A Journal of Practice and Theory, 26*(1), 113-131.

Koh, P. S. (2003). On the association between institutional ownership and aggressive corporate earnings management in Australia. *The British Accounting Review, 35*, 105-128.

Kothari, S. P., Leone, A. J., & Wasley, C. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics, 39*(1), 163-197.

Koutsoyiannis, A. (1988). *Theory of Econometrics* (2nd ed.): Macmillan Education.

Krauss, S. E. (2005). Research Paradigms and Meaning Making: A Primer, the Qualitative Report, 10 (4), 758-770.

Krippendorff, K. (1996). *Content Analysis: An Introduction to its Methodology*: SAGE Publications Ltd.

Krishnamoorthy, G. (2002). A multistage approach to external auditors' evaluation of the internal audit function. *Auditing: A Journal of Practice and Theory, 21*(1), 95-121.

Krishnan, G. V. (2003). Audit quality and the pricing of discretionary accruals. *Auditing: A Journal of Practice and Theory, 22*(1), 109-126.

Krishnan, G. V. (2005). Did Houston clients of Arthur Andersen recognise publicly available bad news in a timely fashion? *Contemporary Accounting Research, 22*(1), 165-193.

Kumar, R. (1999). *Research Methodology: A Step-By-Step Guide for Beginners*. London: SAGE Publications Ltd.

Lambert, R. (1984). Income smoothing as rational equilibrium behavior. *The accounting Review, 59*(4), 604-618.

LaPorta, R., Loped-de-Silanes, F., Shleifer, A., & Vishny, R. (2002). Investor protection and corporate valuation. *Journal of Finance, 57*(3), 1147-1170.

LaPorta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *Journal of Finance, 54*(2), 471-517.

Larcker, D. E., & Richardson, S. A. (2004). Fees paid to audit firms, accrual choices, and corporate governance. *Journal of Accounting Research, 42*(3), 625-656.

Leech, N. L., & Onwuegbuzie, A. J. (2009). A typology of mixed methods research designs. *Quality and Quantity, 43*(2), 265-275.

Lennox, C. S. (1999). Non-audit fees, disclosure and audit quality. *European Accounting Review, 8*(2), 239-252.

Leuza, C., Nandab, D., & Wysocki, P. D. (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics, 69*(3), 505-527.

Levitt, A. (1998). The numbers game. *CPA Journal, 68*(12), 14-19.

Lichtenstein, D. R., Ridgeway, N. M., & Netemeyer, R. G. (1993). Price perceptions and consumer shopping behavior: A field study. *Journal of Marketing Research, 30*, 234-245.

Lim, C., & Tan, H. (2008). Non-audit service fees and audit quality: The impact of auditor specialization. *Journal of Accounting Research, 46*(1), 199-246.

Litwin, M. S. (1995). *How to Measure Survey Reliability and Validity*: SAGE Publication.

Liu, J., Nissim, D., & Thomas, J. (2002). Equity valuation using multiples. *Journal of Accounting Research, 40*, 135-172.

Lys, T., & Watts, R. L. (1994). Lawsuits against auditors. *Journal of Accounting Research, 32*(3), 65-93.

Mahmud, M. B. (1997). *Accounting and the Economic Development of the Oil and Gas Sector in Libya: Historical Review, theoretical Analysis and Empirical Investigation*. Unpublished PhD Thesis, University of Dundee.

Mallin, C. (2007). *Corporate Governance* (2nd ed.): Oxford University Press.

Marquardt, C. A., & Wiedman, C. I. (2004). How are earnings managed? An examination of specific accruals. *Contemporary Accounting Research, 21*(2), 461-489.

Mashat, A. A. (2005). *Corporate Social Responsibility disclosure and accountability (The case of Libya)*. Unpublished PhD Thesis, Manchester Metropolitan University.

May, T. (2001). *Social Research: Issues, Methods and Process*: Open University Press.

Maylor, H., & Blackmon, K. (2005). *Researching Business and Management*: Palgrave Macmillan.

McDaniel, L., Martin, R. D., & Maines, L. A. (2002). Evaluating financial reporting quality: The effects of financial expertise vs. financial literacy. *The Accounting Review, 77*, 139-167.

McKee, T. E. (2005). *Earnings Management: An Executive Perspective*: Thomson.

McMullen, D. A., & Raghunandan, K. (1996). Enhancing audit committee effectiveness. *Journal of Accountancy, 182*, 79-81.

McNichols, M., & Wilson, G. P. (1988). Evidence of earnings management from the provision for bad debts. *Journal of Accounting Research, 26*(3), 1-31.

McNichols, M. F. (2000). Research design issues in earnings management studies. *Journal of Accounting and Public Policy, 19* (4-5), 313-345.

McNichols, M. F. (2002). Discussion of `The quality of accruals and earnings: The role of accrual estimation errors'. *The Accounting Review, 77*, 61-69.

Miles, M., & Huberman, A. (1994). *Management and Analysis: Collecting and Interpreting Qualitative Materials*. London: SAGE Publications Ltd.

Miller, G. S., & Skinner, D. J. (1998). Determinants of the valuation allowances for deferred tax assets under SFAS No109. *The Accounting Review, 73*(2), 213-233.

Mintz, S. M., & Morris, R. E. (2008). *Ethical Obligations and Decision Making in Accounting. Text and Cases*: McGraw-Hill.

Monks, R., & Minow, N. (2001). *Corporate governance* (2nd ed.): Blackwell Publishers Ltd.

Moore, G., & Scott, W. R. (1989). Auditors' legal liability, collusion with management, and investors' loss. *Contemporary Accounting Research, 5*(2), 754-774.

Morck, R. (2000). *Concentrated Corporate Ownership*: National Bureau of Economic Research.

Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research, 1*(1), 48-76.

Moses, D. O. (1987). Income smoothing and incentives: Empirical using accounting changes. *The Accounting Review, 62*(2), 259-377.

Mulford, C. W., & Comiskey, E. E. (2002). *The Financial Numbers Game: Detecting Creative Accounting Practices*: John Wiley and Sons.

Myers, J., Myers, L., & Omer, T. (2003). Exploring the term of auditor-client relationship and the quality of earnings: A case for mandatory auditor rotation? *The Accounting Review, 78*(3), 779-799.

NACD. (2000). *Report of the NACD Blue Ribbon Commission on Audit Committees: A Practical Guide.* Washington D C: National Association of Corporate Directors.

Navaratnam, K. K. (1994). Quality assurance audits in technical and further education. *Total Quality Management, 5*(4), 219-225.

Nelson, M., Elliott, J., & Tarpley, F. L. (2003). How are earnings managed? Examples from auditors. *Accounting Horizons, 17*, 17-35.

Nelson, M., Elliott, J., & Tarpley, R. (2002). Evidence from auditors about managers' and auditors' earnings-management decisions. *The Accounting Review, 77*, 175-202.

Newman, I., & K McNeil, K. (1998). *Conducting Survey Research in the Social Sciences*: Lanham: University Press of America.

Ng, C. Y. (2005). An empirical study on the relationship between ownership and performance in a family-based corporate environment. *Journal of Accounting, Auditing and Finance, 20*(2), 121-146.

Noronha, C., Zeng, Y., & Vinten, G. (2008). Earnings management in China: an exploratory study. *Managerial Auditing Journal, 23*(4), 367-385.

NYSE. (2002). *Corporate Accountability and Listing Standards Committee.* New York: New York Stock Exchange Report.

Onwuegbuzie, A. J., & Leech, N. L. (2005). Taking the "Q" out of research: Teaching research methodology courses without the divide between quantitative and qualitative paradigms. *Quality and Quantity, 39*(3), 267-295.

Oppenheim, A. N. (1992). *Questionnaire Design, Interviewing and Attitude Measurement.* London: Pinter.

Ortega, W. R., & Grant, G. H. (2003). Maynard manufacturing: An analysis of GAAP-based and operational earnings management techniques. *Strategic Finance, 85*(1), 50-56.

Pallant, J. (2001). *SPSS Survival Manual*: Open University Press.

Palmrose, Z. (1988). Analysis of auditor litigation and audit service quality. *The Accounting Review, 63*(1), 55-73.

Parfet, W. U. (2000). Accounting subjectivity and earnings management: A preparer perspective. *Accounting Horizons, 14*(4), 481-488.

Park, Y. w., & Shin, H. H. (2004). Board composition and earnings management in Canada. *Journal of Corporate Finance, 10*(3), 431-457.

Pass, C. (2004). Corporate governance and the role of non-executive directors in large UK companies: An empirical study. *Corporate Governance: An International Review, 4*(2), 52-63.

Patel, A., Varma, V. S., & Prasad, P. (2009). Provision of non-audit services, low balling, audit tenure and auditor type. *Journal of Audit Practice, 6*(1), 62-70.

Pawson, R., & Tilley, N. (1997). *Realistic Evaluation.* London: Sage Publications Ltd.

Payne, J., & Robb, S. (2000). Earnings management: The effect of ex-ante earnings expectations *Journal of Accounting, Auditing and Finance, 15*(4), 371-392.

Pearce, J. A., & Zahra, S. A. (1991). The relative power of CEOs and boards of directors: Associations with corporate performance. *Strategic Management, 12*(2), 135-137.

pearson, M. (1980). A profile of the 'Big Eight' independent position. *Baylor Business Studies, 11*, 7-27.

Pearson, T., & Trompeter, G. (1994). Competition in the market for audit services: The effect of supplier concentration on audit fees. *Contemporary Accounting Research, 11*(1), 15-135.

peasnell, K. V., Pope, P. F., & Young, S. E. (2000). Detecting earnings management using cross-sectional abnormal accruals models. *Accounting and Business Research, 30*(4), 313-326.

peasnell, K. V., Pope, P. F., & Young, S. E. (2005). Board monitoring and earnings management: Do outside directors influence abnormal accruals? *Journal of Business Finance and Accounting, 32*(7-8), 1131-1346.

Penman, S. H. (2004). *Financial Statement Analysis and Security Valuation* (2nd ed.). New York: McGraw-Hill Irwin.

Petroni, K., & Beasley, M. (1996). Errors in accounting estimates and their relation to audit firm type. *Journal of Accounting Research, 34*(1), 151-171.

Petroni, K. R. (1992). Optimistic reporting in the property casualty insurance industry. *Journal of Accounting and Economics, 15*(4), 485-508.

Pincus, K. V., Rusbarsky, M., & Wong, J. (1989). Voluntary formation of corporate audit committees among NASDAQ firms. *Journal of Accounting and Public Policy, 8*(4), 239-265.

Pornupatham, S. (2006). *An empirical examination of earnings management, audit quality and corporate governance in Thailand: Perceptions of auditors and audit committee members.* Unpublished PhD Thesis, University of Wales, Cardiff.

Pourciau, U. (1993). Earnings management and non-routine executive changes. *Journal of Accounting and Economics 16*(1-3), 317-336.

Quick, R., & Warming-Rasmussen, B. (2009). Auditor independence and the provision of non-audit services: Perceptions by German investors. *International Journal of Auditing, 13*(2), 141-162.

Raghunandan, K., Read, W. J., & Rama, D. V. (2001). Audit committee composition, "gray directors", and interaction with internal auditing. *Accounting Horizons, 15*(5), 105-118.

Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). *Doing Research in Business and Management: An Introduction to Process and Method.* London: Sage Publications Ltd.

Revsine, L., Collins, D. W., & Johnson, W. B. (2002). *Financial Reporting and Analysis* (2nd ed.). New Jersey: Prentice Hall.

Rezaee, Z. (2002). *Financial Statement Fraud: Prevention and Detection*: John Wiley and Sons.

Rezaee, Z., Elam, R., & Sharbatoghlie, A. (2001). Continuous auditing: the audit of the future. *Managerial Auditing Journal, 16*(3), 150-158.

Richard, M. S., & Deborah, P. (2000). The corporate governance: The new frontier-report on corporate board management. *The Internal Auditor, 57*(6), 34.

Riege, A. M. (2003). Validity and reliability tests in case study research: a literature review with 'hands-on' applications for each research phase. *Qualitative Market Research: An International Journal, 6*(2), 75-86.

Robson, K., Humphrey, C., & Khalifa, R. (2007). Transforming audit technologies: Business risk audit methodologies and the audit field. *Accounting, Organizations and Society, 32*(4-5), 409-438.

Ronen, J., & Sadan, S. (1981). *Smoothing Income Numbers: Objectives, Means, and Implications*: Addison-Wesley Publishing Co.

Ronen, J., & Yaari, V. (2007). *Earnings Management: Emerging Insights in Theory, Practice, and Research*: Springer.

Ronen, T., Ronen, J., & Yaari, V. L. (2003). The effect of voluntary disclosure and pre-emptive preannouncements on earnings response coefficients (ERC) when firms mange earnings. *Journal of Accounting, Auditing and Finance, 18*(3), 379-410.

Roosenbooma, P., Gootb, T., & Mertensa, G. (2003). Earnings management and initial public offerings: Evidence from the Netherlands. *The International Journal of Accounting, 38*(3), 243-266.

Roychowdhury, R. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics, 42*, 335-370.

Salter, S. B., & Niswander, F. (1995). Cultural influence on the development of accounting systems internationally: a test of Gray's (1988) theory. *Journal of International Business Studies, 26*, 379-397.

Sarantakos, S. (1998). *Social Research* (2nd ed.): Palgrave.

Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research Methods for Business Students* (5th ed.): Pearson Education Limited.

Schilit, H. (2002). *Financial shenanigans* (2nd ed.): McGraw-Hill.

Schipper, K. (1989). Commentary on earnings management. *Accounting Horizons, 3*, 91-102.

Schipper, K., & Vincent, L. (2003). Earnings quality. *Accounting Horizons, 17*, 97-110.

Scholes, M., Wilson, G. P., & Wolfson, M. (1990). Tax planning, regulatory capital planning, and financial reporting strategy for commercial banks. *Review of Financial Studies, 3*, 625-650.

Schulze, W. S., Lubatkin, M. H., Dino, R., & Buchholtz, A. K. (2001). Agency relationships in family firms: Theory and evidence. *Organization Science, 12*(2), 99-116.

Scott, W. R. (1997). *Financial reporting theory* (International Edition ed.). New Jersey: Prentice Hall.

Scott, W. R. (2003). *Financial Accounting Theory* (3th ed.). Toronto: Prentice-Hall.

Seale, C. (1999). *The Quality of the Qualitative Research.* London: Sage Publications.

Secord, P., & Su, X. (1994). An empirical analysis of culture and accounting models in Asia. *Asian Review of Accounting, 2*(1), 3-21.

Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach* (4th ed.). New York: John Wiley and Sons.

Shleifer, A., & Vishny, R. (1997). A survey of corporate governance. *Journal of Finance, 52*(2), 737-783.

Siregar, S., & Utama, S. (2008). Type of earnings management and the effect of ownership structure, firm size, and corporate-governance practices: Evidence from Indonesia. *The International Journal of Accounting, 43*, 1-27.

Skinner, D. J., & Sloan, R. G. (2002). Earnings surprises, growth expectations, and stock returns or don't let an earnings torpedo sink your portfolio. *Review of Accounting Studies* 7(2-3), 289-312.

Sobh, R., & C Perry, C. (2006). Research design and data analysis in realism research. *European Journal of Marketing, 40*(11-12), 1194-1209.

Solomon, J., & Solomon, A. (2003). *Corporate Governance and Accountability*. West Sussex, England: John Wiley & Sons, L td.

Spira, F. L., & Page, M. (2003). Risk management, the reinvention of internal control and the changing role of internal audit. *Accounting, Auditing and Accountability Journal, 16*(4), 640-661.

Spira, L. F. (2002). *The Audit Committee: Performing Corporate Governance.* Boston: Kluwer Academic Publishers.

Steinberg, R. M., & Pojunis, D. (2000). The corporate governance: The new frontier - report on corporate board management. *The Internal Auditor, 57*(6), 34-39.

Stice, J. D. (1991). Using financial and market information to identify pre-engagement factors associated with lawsuits against auditors. *The Accounting Review, 66*(3), 516-533.

Stiles, J. (2003). A philosophical justification for a realist approach to strategic alliance research. *Qualitative Market Research: An International Journal, 6*(4), 263-271.

Stiles, P., & Taylor, B. (1993). Maxwell - The Failure of Corporate Governance. *Corporate Governance: An International Review, 1*(1), 34-45.

Stlowy, H., & Breton, G. (2004). Accounts manipulation: A literature review and proposed conceptual framework. *Review of Accounting and Finance, 3*(1), 5-66.

Strickland, D., Wiles, K., & Zenner, M. (1996). A requiem for the USA: Is small shareholder monitoring effective? *Journal of Financial Economics, 40*(2), 319-338.

Strong, J. S., & Meyer, J. R. (1987). Asset Writedowns: Managerial Incentives and Security Returns. *The Journal of finance, 43*(3), 643-661.

Subramanyam, K. R. (1996). The pricing of discretionary accruals. *Journal of Accounting and Economics, 22*(1-3), 249-281.

Sudsomboon, S., & Ussahawanitchakit, P. (2009). Professional audit competencies: The effects on Thai's CPAs audit quality, reputation, and success. *Review of Business Research, 9*(3), 66-85.

Sweeney, A. P. (1994). Debt-covenant violations and managers' accounting responses. *Journal of Accounting and Economics, 17*(3), 281-308.

Teoh, S. H., Welch, I., & Wong, T. J. (1998a). Earnings management and the long-run market performance of initial public offerings. *The Journal of Finance, 53*(6), 1935-1974.

Teoh, S. H., Welch, I., & Wong, T. J. (1998b). Earnings management and the underperformance of seasoned equity offerings. *Journal of Financial Economics, 50*, 63-99.

Teoh, S. H., Wong, T. J., & Rao, G. R. (1998). Are accruals during initial public offerings opportunistic? *Review of Accounting Studies, 3*, 175-208.

Thomas, J., & Zhang, X. (2000). Identifying unexpected accruals: A comparison of current approaches. *Journal of Accounting and Public Policy, 19*, 347-376.

Thomas, J. K. (1989). Unusual patterns in reported earnings. *The Accounting Review, 64*(4), 773-787.

Ticehurst, G. W., & Veal, A. J. (2000). *Business Research Methods: A Managerial Approach*. South Melbourne: Addison Wesley Longman.

TSE. (1994). Where Were the Directors? Toronto Stock Exchange, Toronto Stock Exchange Committee on Corporate Governance in Canada.

Tseng, L., & Lai, C. (2007). The relationship between income smoothing and company profitability: An empirical study. *International Journal of Management, 24*(4), 727-733.

Tucker, J., & Zarowin, P. (2006). Does income smoothing improve earnings informativeness. *Accounting Review, 81*(1), 251-270.

VanMaanen, J. (1983). *Qualitative Methodology*. London: Sage.

Verschoor, C. C. (1993). Benchmarking the audit committee. *Journal of Accountancy, 176*, 59-64.

Vicknair, D., Hickman, K., & Cames, K. C. (1993). A note on audit committee independence: Evidence from the NYSE on Grey area directors. *Accounting Horizons, 7*(1), 53-57.

Wahlen, J. M. (1994). The nature of information in commercial bank loan loss disclosures. *The Accounting Review, 69*, 455-478.

Walker, P. L., Shcnkir, W. G., & Barton, T. L. (2003). ERM in practice: examples of auditing's role in enterprise risk management efforts at five leading companies shed light on how this new paradigm is impacting audit practitioners. *The Internal Auditor, 60*(4), 51-54.

Walker, R. G. (2004). Gaps in guidelines on audit committees. *Abacus, 40*(2), 157-192.

Walliman, N. (2006). *Social Research Methods*: SAGE Publications Ltd.

Wang, D. (2006). Founding family ownership and earnings quality. *Journal of Accounting and Research, 44*, 619-655.

Wass, V. J., & Wells, P. E. (1994). *Principles and Practice in Business and Management Research*: Aldershot: Dartmouth.

Watts, R. L., & Zimmerman, J. L. (1986). *Accounting Theory.* New Jersey: Prentice-Hall.

Wells, P. (2002). Earnings management surrounding CEO changes. *Journal Accounting and Finance, 42*(2), 169-193.

Wolnizer, P. W. (1995). Are audit committees red herrings? *Abacus, 31*(1), 45-66.

Xie, B., Davidson, W., & DaDalt, P. J. (2003). Earnings management and corporate governance: The role of the board and the audit committee. *Journal of Corporate Finance, 9*(3), 295-316.

Xie, H. (2001). The mispricing of abnormal accruals. *The Accounting Review, 76*, 357-373.

Yoon, S. S., & Miller, G. (2002). Earnings management of seasoned equity offering firms in Korea. *The International Journal of Accounting, 37*, 57-78.

Young, M., Ahlstrom, D., Bruton, G., & Chan, E. (2001). The resource dependence, service and control functions of boards of in Hong Kong and Taiwanese firms. *Asia Pacific Journal of Management, 18*(2), 223-244.

Yu, M. D. (2005). International Earnings Management and Accounting Standards, working paper Washington State University - Department of Accounting. Available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=825146 [Accessed on 01/ 02/ 2011].

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing, 52*(3), 2-22.

Zheka, V. (2005). Corporate governance, ownership structure and corporate efficiency: The case of Ukraine. *Managerial and Decision Economics, 26*(7), 451-460.

Zhu, L. H., & Su, Z. (2002). Earnings management in small and medium sized firms. *China Economic and Trade Herald, 18*.

APPENDICES:

1- Questionnaire survey (English).

2- Interview Questions (English).

3- Mann-Whitney test results.

APPENDIX(1)

Questionnaire survey (English)

Dear Participant

I am a student at University of Gloucestershire, Business School investigating the earnings management phenomenon in the Libyan environment. This questionnaire survey is an important part of the research that the researcher is undertaking for the degree of Doctor of Philosophy in accounting.

This survey seeks information about earnings management motivations and techniques, and earnings management constraints, which includes accounting standards, internal corporate governance mechanisms, and audit quality. Therefore, I would be very grateful to you if you could spare a few minutes to complete this questionnaire and include any other comments. Please read the questionnaire carefully and answer all the questions, while answering the questions, please be sure to select the answers that indicate accurately depicts the present situation in the Libyan environment. Your responses to the questionnaire will be completely confidential.

Thank you in advance for your participation in the completion of this questionnaire.

Yours faithfully,

Alhussien Elseraiti
Alhosrs@yahoo.com

This questionnaire contains 4 sections. Please complete all the questions by circling your answer or by placing a tick in the appropriate box.

Section 1: General Information

1-1 Job position

1	2	3	4	5	6
External auditor	Financial manger/ Senior accounting	Internal Auditor	Lender	Tax Officer	academic

1-2 Period of experience in your current position

1	2	3	4	5
Less than 1 year	1-5 years	6-10 years	11-15 years	More than 15 years

1-3 Educational qualifications

1	2	3	4	5
Diploma	Bachelor degree	Master degree	Doctoral degree	Other*

* Please specify……………………………………………………………………

1-4 Educational specialisation

1	2	3	4	5
Accounting	Finance	Management	Economics	Other*

* Please specify……………………………………………………………………

Section 2: Earnings Management Motivations

The accounting literature provides motivations that lie behind the manipulation of earnings in financial reports. Please indicate, according to the Libyan environment, the extent to which you agree or disagree with the following motivations by circling the appropriate number on the following scale of 1 to 5, where:

1	2	3	4	5
Strongly Disagree (SD)	**Disagree (D)**	**No View (NV)**	**Agree (A)**	**Strongly Agree (SA)**

Earnings Management Motivations	**Ownership**	**SD**	**D**	**NV**	**A**	**SA**
1. To avoid reporting losses.	State-owned	1	2	3	4	5
	Private	1	2	3	4	5
2. To avoid reporting profits decline.	State-owned	1	2	3	4	5
	Private	1	2	3	4	5
3. To report profits.	State-owned	1	2	3	4	5
	Private	1	2	3	4	5
4. To sustain last year's profit performance.	State-owned	1	2	3	4	5
	Private	1	2	3	4	5

Earnings Management Motivations (Continued)	Ownership	SD	D	NV	A	SA
5. To increase the value of management compensation.	State-owned	1	2	3	4	5
	Private	1	2	3	4	5
6. To meet regulatory objectives.	State-owned	1	2	3	4	5
	Private	1	2	3	4	5
7. To enhance the chances of obtaining bank loans.	State-owned	1	2	3	4	5
	Private	1	2	3	4	5
8. To meet predetermined expectations (budgets).	State-owned	1	2	3	4	5
	Private	1	2	3	4	5
9. To decrease the amount of taxes.	State-owned	1	2	3	4	5
	Private	1	2	3	4	5
10. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.	State-owned	1	2	3	4	5
	Private	1	2	3	4	5
11. To increase information value.	State-owned	1	2	3	4	5
	Private	1	2	3	4	5
12. Other (please specify)……………………	State-owned	1	2	3	4	5
………………………………………………	Private	1	2	3	4	5

Section 3: Earnings Management Techniques

The accounting literature presents techniques that are used to manipulate earnings in financial reports. Please state the extent to which you have experienced the following forms of techniques. Please indicate by circling the appropriate number on the following scale from 1 to 5, where:

1	2	3	4	5
Never (N)	Seldom (S)	Sometimes (ST)	Usually(U)	Always(A)

Earnings Management Techniques	N	S	ST	U	A
2. Accelerating recognition of income.	1	2	3	4	5
2. Deferring recognition of income.	1	2	3	4	5
3. Accelerating recognition of expenses.	1	2	3	4	5
4. Deferring recognition of expenses.	1	2	3	4	5
5. Incorrect use of expenses on asset acquisition.	1	2	3	4	5
6. Incorrect capitalising rather than expensing expenditures.	1	2	3	4	5
7. Manipulation of bad debts provision.	1	2	3	4	5
8. Manipulation of the value of inventory.	1	2	3	4	5
9. Manipulation of impairment of assets.	1	2	3	4	5

Earnings Management Techniques (Continued)	N	S	ST	U	A
10. Manipulation of depreciation/amortisation figures.	1	2	3	4	5
11. Manipulation of deferred tax.	1	2	3	4	5
12. Manipulation of investment classification between trading and available-for-sales investment to present unrealised gain or loss from valuation.	1	2	3	4	5
13. Manipulation of accrual estimation.	1	2	3	4	5
14. Manipulation of finance lease contract to operating lease contract to avoid recording assets and liabilities.	1	2	3	4	5
15. Making inadequate provisions.	1	2	3	4	5
16. Improper assets revaluation.	1	2	3	4	5
17. Related-party transactions.	1	2	3	4	5
18. Sale-and-lease buy back transactions.	1	2	3	4	5
19. Changing accounting policy.	1	2	3	4	5
20. Classification in financial statements.	1	2	3	4	5
21. Other (please specify)	1	2	3	4	5

Section 4: Earnings Management Constraints

In your opinion, which of the following procedures might constrain earnings management and improve the quality of financial reports in Libya?

4.1 Accounting Standards

Please indicate your answer by circling the appropriate number on the following scale from 1 to 5, where:

1	2	3	4	5
Strongly Disagree (SD)	Disagree (D)	No View (NV)	Agree (A)	Strongly Agree (SA)

Accounting Standards Issues	SD	D	NV	A	SA
1. Issuing more detailed accounting legislation.	1	2	3	4	5
2. Issuing accounting standards which fit with Libyan environment.	1	2	3	4	5
3. Issuing standards aimed at specific problems.	1	2	3	4	5

Accounting Standards Issues (Continued)	SD	D	NV	A	SA
4. Increasing the level of disclosure.	1	2	3	4	5
5. Quarterly disclosure.	1	2	3	4	5

4.2 Greater reliance on internal corporate governance mechanisms

The following questions ask about the impact of adopting internal corporate governance mechanisms, in three main sections.

4.2.1 In your view, which of the following internal corporate governance procedures might constrain earnings management and improve the quality of financial reports in Libya?

corporate governance mechanisms	SD	D	NV	A	SA
1. The existence of an effective audit committee.	1	2	3	4	5
2. The existence of an effective internal audit function.	1	2	3	4	5
3. The existence of an independent and competent board of directors.	1	2	3	4	5
4. Other (s), please specify..	1	2	3	4	5

4.2.2 *Audit Committee*

4.2.2.1 Audit committee has several functions as listed in the table below. Please indicate the importance of each of these functions by choosing the answer from the following scale, where:

1	2	3	4	5
Not Important at all (NIAA)	**Not Important (NI)**	**Little of importance (LI)**	**Important (I)**	**Extremely Important(EI)**

Audit Committee Function	NIAA	NI	LI	I	EI
1. Reviewing the corporation's accounting policies and practices.	1	2	3	4	5
2. Reviewing significant changes in accounting policies and practices.	1	2	3	4	5
3. Reviewing the audited financial statement.	1	2	3	4	5
4. Reviewing the interim reports.	1	2	3	4	5
5. Reviewing the internal control system.	1	2	3	4	5
6. Reviewing significant transactions outside the corporation's normal business.	1	2	3	4	5
7- Reviewing related party transactions.	1	2	3	4	5
8. Monitoring compliance with accounting standards.	1	2	3	4	5

Audit Committee Function (Continued)	NIAA	NI	LI	I	EI
9. Overseeing the scope of internal and external audit activities.	1	2	3	4	5
10. Holding frequent meetings with internal and external auditors to discuss any problems arising.	1	2	3	4	5
11. Reviewing the independence of the internal audit department.	1	2	3	4	5
12- Reviewing and approves audit fee.	1	2	3	4	5
13- Reviewing and approves types and fee of non-audit services by external auditors.	1	2	3	4	5
14- Reviewing the independence and objectivity of the external auditor.	1	2	3	4	5
15. Ascertaining whether proper action is taken to deal with the recommendations made by the internal auditor.	1	2	3	4	5
16. Other, (please specify)......................................	1	2	3	4	5

4.2.2.2 The following are attributes of audit committee members' that may affect effectiveness of an audit committee's work, which might constrain earnings management and improve the quality of financial reports. Please indicate the extent to which you agree or disagree with the effectiveness of the following attributes by circling the answer on the following scale of 1 to 5 where

1	2	3	4	5
Strongly Disagree (SD)	**Disagree (D)**	**No View (NV)**	**Agree (A)**	**Strongly Agree (SA)**

Attributes Of Audit Committee Members	SD	D	NV	A	SA
1. The existence of accounting and auditing experts in the audit committee will:					
A- Help in constraining earnings management and improve the quality of financial reports.	1	2	3	4	5
B- Help in increasing the communication with external and internal auditors.	1	2	3	4	5
2. Independence from the executive directors will help in reducing the opportunity to manipulate financial reports.	1	2	3	4	5
3. Knowledge about the corporation's activities.	1	2	3	4	5
4. Integrity and sound judgment and Personal qualities.	1	2	3	4	5

4.2.3 *Internal Audit*

The accounting literature suggests several functions to be preformed by internal auditor in order to assist the audit committee in its work. Please specify the importance of functions by circling the answer on following scale of 1 to 5, where:

1	2	3	4	5
Not Important at all (NIAA)	**Not Important (NI)**	**Little of importance (LI)**	**Important (I)**	**Extremely Important(EI)**

Internal Auditor Functions	NIAA	NI	LI	I	EI
1. Evaluating and monitoring the effectiveness of the internal control system.	1	2	3	4	5

Internal Auditor Functions (Continued)	NIAA	NI	LI	I	EI
2. Reviewing whether or not management has consistent treatment for similar transactions.	1	2	3	4	5
3. Providing assistance to external auditors.	1	2	3	4	5
4. Discussing the findings of internal audits with the audit committee members and management.	1	2	3	4	5
5. Providing the audit committee with an opinion on the credibility of information contained in interim reports.	1	2	3	4	5
6. Others, (please specify)	1	2	3	4	5

4.2.4 Independent and Competent Board of Directors

Please indicate the extent to which you agree or disagree with the following statements by choosing the answer from the following scale, where:

1	2	3	4	5
Strongly Disagree (SD)	Disagree (D)	No View (NV)	Agree (A)	Strongly Agree (SA)

Independent and Competent Board of Directors	SD	D	NV	A	SA
1. Corporations with a greater proportion of non-executive directors on the board are less likely to engage in earnings management practices than those whose boards are staffed primarily with executive directors.	1	2	3	4	5
2. Boardroom members with a financial background are more likely to detect any activities of earnings management.	1	2	3	4	5
3. In order to improve the effectiveness of the board of directors in preventing any fraudulent practices, companies should: A. prohibit the Chief Executive Officer (CEO) from acting as Chairman of the Board of Directors	1	2	3	4	5
B. Prohibit the (CEO) from being responsible for setting the board's agenda and meeting requirements.	1	2	3	4	5
C. hold frequent seminars and workshops for boardroom members to familiarize them with recent developments in accounting issues.	1	2	3	4	5
D. Other (please specify)...................................	1	2	3	4	5

4.3 External Audit Quality

4.3.1 The impact of external auditors on earnings management

Please indicate the extent to which you agree or disagree with the following statements concerning the impact of external auditors on earnings management by choosing the answer from the following scale, where:

The Impact of External Auditors on Earnings Management	SD	D	NV	A	SA
1. External auditors are trained to detect earnings management.	1	2	3	4	5
2. External auditors constrain corporation's management to practise earnings management.	1	2	3	4	5

The Impact of External Auditors on Earnings Management (Continued)	SD	D	NV	A	SA
3. External auditors can detect earnings management effectively.	1	2	3	4	5
4. External auditors would not like to lose their reputation because they cannot detect earnings management.	1	2	3	4	5

4.3.2 Lengthy tenure

Please indicate the extent to which you agree or disagree with the following statements that lengthy tenure may have the following results by circling the answer on following scale of 1 to 5, where:

1	2	3	4	5
Strongly Disagree (SD)	Disagree (D)	No View (NV)	Agree (A)	Strongly Agree (SA)

The Results of lengthy tenure	SD	D	NV	A	SA
1. More expertise.	1	2	3	4	5
2. Better identification of client's risk.	1	2	3	4	5
3. Better understanding of client's business.	1	2	3	4	5
4. Less skepticism.	1	2	3	4	5
5. Less innovation.	1	2	3	4	5
6. Less independence.	1	2	3	4	5
7. Others, (please specify)………………………………… …………………………………………………………...	1	2	3	4	5

4.3.3 Non-auditing services

Please indicate the extent to which you agree or disagree with the following statements that non-auditing services may have the following results by circling the answer on following scale of 1 to 5, where:

1	2	3	4	5
Strongly Disagree (SD)	Disagree (D)	No View (NV)	Agree (A)	Strongly Agree (SA)

The Results of non-auditing services	SD	D	NV	A	SA
1. More expertise.	1	2	3	4	5
2. Better identification of client's risk.	1	2	3	4	5
3. Better understanding of client's business.	1	2	3	4	5
4. Less skepticism.	1	2	3	4	5
5. Less innovation.	1	2	3	4	5

The Results (Continued)	SD	D	NV	A	SA
6. Less independence.	1	2	3	4	5
7. Others, (please specify)……………………………… …………………………………………………………...	1	2	3	4	5

4.3.4 Other factors

Please state the extent to which you agree or disagree that the following components affect audit quality. Please indicate by circling the answer on the following scale from 1 to 5, where:

factors	SD	D	NV	A	SA
1. The large the firm size, the higher the audit quality.	1	2	3	4	5
2. High audit fees helps in getting high audit quality.	1	2	3	4	5
3. Strong competition helps in getting high audit quality.	1	2	3	4	5
4. More lawsuits result high audit quality.	1	2	3	4	5
5. Using more technology helps in getting high audit quality.	1	2	3	4	5
6. Strong accounting education of auditors helps in getting high audit quality.	1	2	3	4	5
7. Strong accounting and auditing standards helps in getting high audit quality.	1	2	3	4	5
8. Others, (please specify)……………………………… …………………………………………………………...	1	2	3	4	5

Section 5: any more comments

If you have any other comments about the issue of earnings management, please provide them here.

....

Thank you very much for your cooperation.

If you would like to receive a summary of the final results, please complete the following details:

Name:..

E-mail:..

Address:..

Please fell the following if you are agree to participate in the interview stage:

I am agree: ☐ Phone number:..............................

APPENDIX (2)
Interview Questions (English)

- Interviewer:
- Date: - Place of interview:
- Starting Time: - Finishing Time:
- Position: - Number of years in this position:

1-What are your impressions of corporations' financial reports in Libya?

2- Do you agree that these reports represent the real corporation financial performance?

- If not, Please explain why not?

3- Do you agree that some Libyan managers manipulate earnings reports to achieve certain aims?

- If yes, what are their motivations?

- What are the techniques used?

4- What are the procedures that should be taken to constrain earnings management and improve the quality of financial reporting in Libya?

5 – How can accounting standards be improved to constrain earnings management and improve the quality of financial reporting in Libya?

6- Do you think internal corporate governance mechanisms (Audit Committee, Internal Audit, and Board of Directors) can help to constrain earnings management and improve the quality of financial reporting in Libya?

7- What are the factors which affect the quality of external auditing in Libya?

8- How can we improve the quality of external auditors in Libya to constrain earnings management and improve the quality of financial reporting in Libya?

APPENDIX (3)
Mann-Whitney test results

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:11. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.	External Auditor	65	33.30	2164.50
	Financial Manager/Senior Accounting	58	94.16	5461.50
	Total	123		

Test Statistics[a]

	E M motivations:11. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.
Mann-Whitney U	19.500
Wilcoxon W	2164.500
Z	-10.047
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:11. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.	Financial Manager/Senior Accounting	58	58.97	3420.50
	Lender	38	32.51	1235.50
	Total	96		

Test Statistics[a]

	E M motivation s:11. To mitigate the threat of displacem ent (i.e safeguard job position) and/or enhance their reputation.
Mann-Whitney U	494.500
Wilcoxon W	1235.500
Z	-4.915
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:11. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.	Financial Manager/Senior Accounting	58	52.91	3068.50
	Tax Officer	30	28.25	847.50
	Total	88		

Test Statistics[a]

	E M motivation s:11. To mitigate the threat of displacem ent (i.e safeguard job position) and/or enhance their reputation.
Mann-Whitney U	382.500
Wilcoxon W	847.500
Z	-4.622
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:11. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.	Financial Manager/Senior Accounting	58	87.05	5049.00
	Accounting Academic	59	31.42	1854.00
	Total	117		

Test Statistics[a]

	E M motivations:11. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.
Mann-Whitney U	84.000
Wilcoxon W	1854.000
Z	-9.166
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:11. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.	External Auditor	65	33.47	2175.50
	Internal Auditor	52	90.91	4727.50
	Total	117		

Test Statistics[a]

	E M motivations:11. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.
Mann-Whitney U	30.500
Wilcoxon W	2175.500
Z	-9.718
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:11. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.	Internal Auditor	52	51.82	2694.50
	Lender	38	36.86	1400.50
	Total	90		

Test Statistics[a]

	E M motivations:11. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.
Mann-Whitney U	659.500
Wilcoxon W	1400.500
Z	-2.942
Asymp. Sig. (2-tailed)	.003

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:11. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.	Internal Auditor	52	47.57	2473.50
	Tax Officer	30	30.98	929.50
	Total	82		

Test Statistics[a]

	E M motivations:11. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.
Mann-Whitney U	464.500
Wilcoxon W	929.500
Z	-3.260
Asymp. Sig. (2-tailed)	.001

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:11. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.	Internal Auditor	52	82.95	4313.50
	Accounting Academic	59	32.25	1902.50
	Total	111		

Test Statistics[a]

	E M motivations:11. To mitigate the threat of displacement (i.e safeguard job position) and/or enhance their reputation.
Mann-Whitney U	132.500
Wilcoxon W	1902.500
Z	-8.565
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:3. To report profits.	External Auditor	65	57.45	3734.00
	Lender	38	42.68	1622.00
	Total	103		

Test Statistics[a]

	E M motivations:3. To report profits.
Mann-Whitney U	881.000
Wilcoxon W	1622.000
Z	-2.604
Asymp. Sig. (2-tailed)	.009

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:3. To report profits.	Financial Manager/Senior Accounting	58	58.97	3420.50
	Lender	38	32.51	1235.50
	Total	96		

Test Statistics[a]

	E M motivations:3. To report profits.
Mann-Whitney U	494.500
Wilcoxon W	1235.500
Z	-4.915
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:3. To report profits.	Internal Auditor	52	51.82	2694.50
	Lender	38	36.86	1400.50
	Total	90		

Test Statistics[a]

	E M motivations:3. To report profits.
Mann-Whitney U	659.500
Wilcoxon W	1400.500
Z	-2.942
Asymp. Sig. (2-tailed)	.003

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:3. To report profits.	Lender	38	40.47	1538.00
	Accounting Academic	59	54.49	3215.00
	Total	97		

Test Statistics[a]

	E M motivations:3. To report profits.
Mann-Whitney U	797.000
Wilcoxon W	1538.000
Z	-2.594
Asymp. Sig. (2-tailed)	.009

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:3. To report profits.	External Auditor	65	52.98	3444.00
	Tax Officer	30	37.20	1116.00
	Total	95		

Test Statistics[a]

	E M motivations:3. To report profits.
Mann-Whitney U	651.000
Wilcoxon W	1116.000
Z	-2.762
Asymp. Sig. (2-tailed)	.006

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:3. To report profits.	Financial Manager/Senior Accounting	58	52.91	3068.50
	Tax Officer	30	28.25	847.50
	Total	88		

Test Statistics[a]

	E M motivations:3. To report profits.
Mann-Whitney U	382.500
Wilcoxon W	847.500
Z	-4.622
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:3. To report profits.	Internal Auditor	52	47.15	2452.00
	Tax Officer	30	31.70	951.00
	Total	82		

Test Statistics[a]

	E M motivations:3. To report profits.
Mann-Whitney U	486.000
Wilcoxon W	951.000
Z	-3.053
Asymp. Sig. (2-tailed)	.002

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:3. To report profits.	Tax Officer	30	35.07	1052.00
	Accounting Academic	59	50.05	2953.00
	Total	89		

Test Statistics[a]

	E M motivations:3. To report profits.
Mann-Whitney U	587.000
Wilcoxon W	1052.000
Z	-2.765
Asymp. Sig. (2-tailed)	.006

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:8. To enhance the chances of obtaining bank loans.	External Auditor	65	53.83	3499.00
	Tax Officer	30	35.37	1061.00
	Total	95		

Test Statistics[a]

	E M motivation s:8. To enhance the chances of obtaining bank loans.
Mann-Whitney U	596.000
Wilcoxon W	1061.000
Z	-3.246
Asymp. Sig. (2-tailed)	.001

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:8. To enhance the chances of obtaining bank loans.	Financial Manager/Senior Accounting	58	48.78	2829.00
	Tax Officer	30	36.23	1087.00
	Total	88		

Test Statistics[a]

	E M motivations:8. To enhance the chances of obtaining bank loans.
Mann-Whitney U	622.000
Wilcoxon W	1087.000
Z	-2.312
Asymp. Sig. (2-tailed)	.021

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:8. To enhance the chances of obtaining bank loans.	Internal Auditor	52	49.32	2564.50
	Tax Officer	30	27.95	838.50
	Total	82		

Test Statistics[a]

	E M motivation s:8. To enhance the chances of obtaining bank loans.
Mann-Whitney U	373.500
Wilcoxon W	838.500
Z	-4.273
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:8. To enhance the chances of obtaining bank loans.	Lender	38	44.39	1687.00
	Tax Officer	30	21.97	659.00
	Total	68		

Test Statistics[a]

	E M motivation s:8. To enhance the chances of obtaining bank loans.
Mann-Whitney U	194.000
Wilcoxon W	659.000
Z	-5.353
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:8. To enhance the chances of obtaining bank loans.	Tax Officer	30	29.32	879.50
	Accounting Academic	59	52.97	3125.50
	Total	89		

Test Statistics[a]

	E M motivations:8. To enhance the chances of obtaining bank loans.
Mann-Whitney U	414.500
Wilcoxon W	879.500
Z	-4.509
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:1. To avoid reporting losses.	External Auditor	65	45.98	2989.00
	Lender	38	62.29	2367.00
	Total	103		

Test Statistics[a]

	E M motivations:1. To avoid reporting losses.
Mann-Whitney U	844.000
Wilcoxon W	2989.000
Z	-2.865
Asymp. Sig. (2-tailed)	.004

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:1. To avoid reporting losses.	Financial Manager/Senior Accounting	58	43.57	2527.00
	Lender	38	56.03	2129.00
	Total	96		

Test Statistics[a]

	E M motivations:1. To avoid reporting losses.
Mann-Whitney U	816.000
Wilcoxon W	2527.000
Z	-2.316
Asymp. Sig. (2-tailed)	.021

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:1. To avoid reporting losses.	Internal Auditor	52	40.94	2129.00
	Lender	38	51.74	1966.00
	Total	90		

Test Statistics[a]

	E M motivations:1. To avoid reporting losses.
Mann-Whitney U	751.000
Wilcoxon W	2129.000
Z	-2.068
Asymp. Sig. (2-tailed)	.039

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:1. To avoid reporting losses.	Lender	38	40.36	1533.50
	Tax Officer	30	27.08	812.50
	Total	68		

Test Statistics[a]

	E M motivations:1. To avoid reporting losses.
Mann-Whitney U	347.500
Wilcoxon W	812.500
Z	-2.893
Asymp. Sig. (2-tailed)	.004

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M motivations:1. To avoid reporting losses.	Lender	38	56.12	2132.50
	Accounting Academic	59	44.42	2620.50
	Total	97		

Test Statistics[a]

	E M motivations:1. To avoid reporting losses.
Mann-Whitney U	850.500
Wilcoxon W	2620.500
Z	-2.119
Asymp. Sig. (2-tailed)	.034

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M Techniques:5. Incorrect use of expenses on asset acquisition.	External Auditor	65	40.69	2645.00
	Tax Officer	30	63.83	1915.00
	Total	95		

Test Statistics[a]

	E M Techniques:5. Incorrect use of expenses on asset acquisition.
Mann-Whitney U	500.000
Wilcoxon W	2645.000
Z	-4.030
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M Techniques:5. Incorrect use of expenses on asset acquisition.	Financial Manager/Senior Accounting	58	39.09	2267.50
	Tax Officer	30	54.95	1648.50
	Total	88		

Test Statistics[a]

	E M Techniques:5. Incorrect use of expenses on asset acquisition.
Mann-Whitney U	556.500
Wilcoxon W	2267.500
Z	-2.925
Asymp. Sig. (2-tailed)	.003

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M Techniques:5. Incorrect use of expenses on asset acquisition.	Internal Auditor	52	35.27	1834.00
	Tax Officer	30	52.30	1569.00
	Total	82		

Test Statistics[a]

	E M Techniques:5. Incorrect use of expenses on asset acquisition.
Mann-Whitney U	456.000
Wilcoxon W	1834.000
Z	-3.329
Asymp. Sig. (2-tailed)	.001

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M Techniques:5. Incorrect use of expenses on asset acquisition.	Lender	38	29.13	1107.00
	Tax Officer	30	41.30	1239.00
	Total	68		

Test Statistics[a]

	E M Techniques:5. Incorrect use of expenses on asset acquisition.
Mann-Whitney U	366.000
Wilcoxon W	1107.000
Z	-2.719
Asymp. Sig. (2-tailed)	.007

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
E M Techniques:5. Incorrect use of expenses on asset acquisition.	Tax Officer	30	53.67	1610.00
	Accounting Academic	59	40.59	2395.00
	Total	89		

Test Statistics[a]

	E M Techniques:5. Incorrect use of expenses on asset acquisition.
Mann-Whitney U	625.000
Wilcoxon W	2395.000
Z	-2.617
Asymp. Sig. (2-tailed)	.009

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
Attributes of A C members(C G):1. The existence of accounting and auditing experts in the audit committee will:B- Increase the communication with external and internal auditors.	External Auditor	65	56.75	3689.00
	Financial Manager/Senior Accounting	58	67.88	3937.00
	Total	123		

Test Statistics[a]

	Attributes of A C members (C G):1. The existence of accounting and auditing experts in the audit committee will:B- Increase the communication with external and internal auditors.
Mann-Whitney U	1544.000
Wilcoxon W	3689.000
Z	-2.487
Asymp. Sig. (2-tailed)	.007

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
Attributes of A C members(C G):1. The existence of accounting and auditing experts in the audit committee will:B- Increase the communication with external and internal auditors.	External Auditor	65	47.11	3062.00
	Internal Auditor	52	73.87	3841.00
	Total	117		

Test Statistics[a]

	Attributes of A C members (C G):1. The existence of accounting and auditing experts in the audit committee will:B- Increase the communication with external and internal auditors.
Mann-Whitney U	917.000
Wilcoxon W	3062.000
Z	-4.847
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
Attributes of A C members(C G):1. The existence of accounting and auditing experts in the audit committee will:B- Increase the communication with external and internal auditors.	External Auditor	65	46.58	3027.50
	Lender	38	61.28	2328.50
	Total	103		

Test Statistics[a]

	Attributes of A C members (C G):1. The existence of accounting and auditing experts in the audit committee will:B- Increase the communication with external and internal auditors.
Mann-Whitney U	882.500
Wilcoxon W	3027.500
Z	-2.784
Asymp. Sig. (2-tailed)	.005

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
Attributes of A C members(C G):1. The existence of accounting and auditing experts in the audit committee will:B- Increase the communication with external and internal auditors.	External Auditor	65	44.51	2893.00
	Tax Officer	30	55.57	1667.00
	Total	95		

Test Statistics[a]

	Attributes of A C members (C G):1. The existence of accounting and auditing experts in the audit committee will:B- Increase the communication with external and internal auditors.
Mann-Whitney U	748.000
Wilcoxon W	2893.000
Z	-2.145
Asymp. Sig. (2-tailed)	.032

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
Attributes of A C members(C G):1. The existence of accounting and auditing experts in the audit committee will:B- Increase the communication with external and internal auditors.	External Auditor	65	55.08	3580.00
	Accounting Academic	59	70.68	4170.00
	Total	124		

Test Statistics[a]

	Attributes of A C members (C G):1. The existence of accounting and auditing experts in the audit committee will:B-Increase the communication with external and internal auditors.
Mann-Whitney U	1435.000
Wilcoxon W	3580.000
Z	-2.770
Asymp. Sig. (2-tailed)	.006

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
The impact of external Auditors on E M(CG):1. External auditors are trained to be able to detect earnings management.	External Auditor	65	38.63	2511.00
	Financial Manager/Senior Accounting	58	88.19	5115.00
	Total	123		

Test Statistics[a]

	The impact of external Auditors on E M(CG):1. External auditors are trained to be able to detect earnings managem ent.
Mann-Whitney U	366.000
Wilcoxon W	2511.000
Z	-8.317
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
The impact of external Auditors on E M(CG):1. External auditors are trained to be able to detect earnings management.	External Auditor	65	38.75	2519.00
	Internal Auditor	52	84.31	4384.00
	Total	117		

Test Statistics[a]

	The impact of external Auditors on E M(CG):1. External auditors are trained to be able to detect earnings managem ent.
Mann-Whitney U	374.000
Wilcoxon W	2519.000
Z	-7.880
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
The impact of external Auditors on E M(CG):1. External auditors are trained to be able to detect earnings management.	External Auditor	65	37.00	2405.00
	Lender	38	77.66	2951.00
	Total	103		

Test Statistics[a]

	The impact of external Auditors on E M(CG):1. External auditors are trained to be able to detect earnings management.
Mann-Whitney U	260.000
Wilcoxon W	2405.000
Z	-7.474
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
The impact of external Auditors on E M(CG):1. External auditors are trained to be able to detect earnings management.	External Auditor	65	37.25	2421.50
	Tax Officer	30	71.28	2138.50
	Total	95		

Test Statistics[a]

	The impact of external Auditors on E M(CG):1. External auditors are trained to be able to detect earnings managem ent.
Mann-Whitney U	276.500
Wilcoxon W	2421.500
Z	-6.510
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
The impact of external Auditors on E M(CG):1. External auditors are trained to be able to detect earnings management.	External Auditor	65	41.61	2704.50
	Accounting Academic	59	85.52	5045.50
	Total	124		

Test Statistics[a]

	The impact of external Auditors on E M(CG):1. External auditors are trained to be able to detect earnings managem ent.
Mann-Whitney U	559.500
Wilcoxon W	2704.500
Z	-7.466
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
Non-auditing services(CG):6. Less independence.	External Auditor	65	43.46	2825.00
	Financial Manager/Senior Accounting	58	82.78	4801.00
	Total	123		

Test Statistics[a]

	Non-auditing services(CG):6. Less independence.
Mann-Whitney U	680.000
Wilcoxon W	2825.000
Z	-6.491
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
Non-auditing services(CG):6. Less independence.	External Auditor	65	39.35	2558.00
	Internal Auditor	52	83.56	4345.00
	Total	117		

Test Statistics[a]

	Non-auditing services(CG):6. Less independence.
Mann-Whitney U	413.000
Wilcoxon W	2558.000
Z	-7.437
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
Non-auditing services(CG):6. Less independence.	External Auditor	65	37.72	2451.50
	Lender	38	76.43	2904.50
	Total	103		

Test Statistics[a]

	Non-auditing services(CG):6. Less independence.
Mann-Whitney U	306.500
Wilcoxon W	2451.500
Z	-6.697
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
Non-auditing services(CG):6. Less independence.	External Auditor	65	37.59	2443.50
	Tax Officer	30	70.55	2116.50
	Total	95		

Test Statistics[a]

	Non-auditing services(CG):6. Less independence.
Mann-Whitney U	298.500
Wilcoxon W	2443.500
Z	-5.837
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position

NPar Tests
Mann-Whitney Test

Ranks

	Job position	N	Mean Rank	Sum of Ranks
Non-auditing services(CG):6. Less independence.	External Auditor	65	38.29	2489.00
	Accounting Academic	59	89.17	5261.00
	Total	124		

Test Statistics[a]

	Non-auditing services(CG):6. Less independence.
Mann-Whitney U	344.000
Wilcoxon W	2489.000
Z	-8.249
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Job position