Investigation into Earnings Management Practices and the Role of Corporate Governance and External Audit in Emerging Markets: Empirical Evidence from Saudi Listed Companies

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Investigation into Earnings Management Practices and the Role of Corporate Governance and External Audit in Emerging Markets: Empirical Evidence from Saudi Listed Companies

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Abstract

Agency theory predicts that corporate governance mechanisms and external audit play an important role in enhancing financial reporting, while institutional theory views these mechanisms as practices or regulations which result from coercion by legislators who impose certain practices in order to improve organizational effectiveness, or as a result of imitation. In terms of earnings management practices, both theories provide an appropriate theoretical framework. Taking agency theory and institutional theory as points of departure, the primary purpose of this study is to: (1) investigate the motivations and techniques of earnings management and; (2) to what extent corporate governance and external audit can affect earnings management practices in Saudi Arabia.

To achieve this aim, the questionnaire survey is mainly used to explore the motivations and techniques of earnings management in Saudi Arabia by obtaining the different perceptions of respondents. In terms of the role of corporate governance and external audit in reducing earnings management practices, two models are constructed and a set of hypotheses are formulated. These models are examined, by a logistic regression, using a sample consisting of all companies listed on the Saudi Stock Exchange with the exception of financial and insurance companies which have different practices. In addition, semi-structured interviews are employed in order to provide a better understanding of the research questions, confirming and elaborating on the questionnaire survey and models' findings and supporting the development of the hypotheses. They were subsequently undertaken, after the questionnaire survey, with 15 individuals including board members, audit committee members, external auditors and academic staff.

Although there were significant differences among respondents, the findings reveal that the four main incentives for Saudi managers to manage earnings are 'to increase the amount of remuneration', 'to report a reasonable profit and avoid loss', 'to obtain a bank loan' and 'to increase share prices'. The findings also indicate that only seven statements relating to earnings management that received support from respondents were techniques of earnings management in Saudi companies. Agency and institutional theory may provide a sensible explanation for previous earnings management practices in Saudi Arabia.

Moreover, the expectation of beneficial corporate governance practices and external audit constraining opportunistic earnings management activities was, to a large extent, found to be inaccurate in Saudi Arabia. That is, no internal corporate governance variables, apart from outside director, board size and board meetings, examined in this research are shown to have any significant effect on earnings management. With the exception of auditor opinion, none of the external audit factors and ownership structure affects earnings management. Moreover, the interview survey shows many issues and interesting findings related to previous investigation such as nepotism, illegal competition, and lack of independence. Generally, the findings are not consistent with agency theory that ownership concentration, audit committee, and external audit might mitigate agency problems leading to reduced agency cost by aligning the interests of controlling owners with those of the company. However, previous finding can be interpreted by Institutional theory which views these mechanisms as practices or regulations resulting from coercion by legislators who impose certain practices in order to improve organizational effectiveness, or as a result of imitation.

It should be noted that the findings established in this study could be useful to external auditors and regulators and legislators in their attempts to constrain the incidence of earnings management and enhance the quality of monitoring mechanisms.

DECLARATION

I hereby declare that the content of this thesis, including all materials, has not been previously used for a degree in this or any other university apart from where otherwise stated and other sources are acknowledged by explicit references. I further declare that this thesis is available for photocopying and inter-line library, for the title and summary to be made available for all researchers.

SALIM A. AL-GHAMDI
30-01-2012
Signed………Salim……………

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IN THE NAME OF GOD, THE MERCIFUL, THE COMPASSIONATE

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DEDICATION

This effort is dedicated to the memory of my father who passed away when I was a child, my beloved mother whose dream it was to see me happy in life, my family Arwa and my daughters Rimas and Lara who have struggled to share in my success.

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ABBREVIATIONS

Name of Item	symbol
Earnings Management	EM
Corporate Governance	CG
Saudi Capital Market Authority	CMA
World Trade Organization	WTO
The Ministry of Commerce and Industry	MCI
The Saudi Organization for Certified Public Accountants	SOCPA
The Saudi Stock Exchange	Tadawul
General Accepted Accounting Principles	GAAP
Sarbanes–Oxley Act	SOX
External Auditing	EA
Transaction Cost Economics Theory	TCE
New Institutional Sociology	NIS
Discretionary accruals	DAC
Outside directors	OUTSIDE
Board size	BRDSIZE
Board meetings	BRDMEET
Royal family members	RFAMILY
Remuneration and nomination existence	RNEXIST
Remuneration and nomination independence	RNIDP
Family ownership	FAMOWN
Institutional ownership	INSOWN
State-owned	STATEOWN
Managerial ownership	MANGOWN
Blockholder ownership	BLOCKOWN
Royal family members	RNEXIST
Auditor size	BIG4
Performance	ROA
Leverage	LEV
Cash flow	CFO
Company size	SIZE
Complexity	COMPLEX
Audit committee independence	ACINDEP
Audit committee size	ACSIZE
Audit committee meetings	ACMEET
Financial expertise	ACEXPERT
Cash flow	CFO
Company size	SIZE
Complexity	COMPLEX

Auditor opinion	AUDOPIN
Specialist auditor	AUDSPEC
Audit report delay	TIMELINESS
Auditor change	AUDSWITCH
Audit Quality	AQ
Chief Executive Officer	CEO

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Chapter One:
INTRODUCTION

1.1 PREAMBLE

During the last ten years, the financial scandals in developed countries, such as the UK and the USA, have brought about a major awareness of the need for more transparency and credibility in order to protect shareholders and stakeholders alike (Glaum *et al*, 2004; Fearnley *et al*., 2005). Earnings management (EM), as a phenomenon of previous scandals (Goncharov, 2005) which has received considerable attention, is one of the most important challenges confronting corporate governance (CG) mechanisms which endeavour to resolve the negative impact of earnings management on financial reporting (Jaggi and Tsui, 2007). Academic research has concluded that managers engage in earnings management to accomplish certain objectives such as avoiding loss, meeting market expectations, avoiding debt covenant violations etc. Whatever the motivation, it is documented that earnings management harms earnings quality (Jaggi and Tsui, 2007) and misleads financial reporting users. Even in developed countries the practice of adopting international accounting and auditing standards has failed to provide sufficient assurances that financial reports are free from earnings management (Pornupatham, 2006). According to Al-Khabash and Al-Thuneibat (2009), based on Lo's (2007) argument, EM has many victims such as equity investors, creditors, suppliers, regulators and customers.

Investors' confidence depends mainly on the strength of the capital market associated with different monitoring mechanisms (Chang and Sun, 2009) such as internal corporate governance (CG) which has recently received significant attention in numerous developing countries. The significance of internal CG ensues from the vital role it can play in helping firms and economies to attract investment and provide reasonable credibility in financial reporting. Accordingly, prior studies have concluded that internal CG mechanisms have a substantial effect on earnings management practices (Cornett *et al*., 2008). However, some of the literature shows that the impact of internal CG varies from country to country according to the nature of the ownership structure and various factors. In other words, concentrated ownership may offer extra monitoring mechanisms by affecting the formation of the board of directors and its committees. For example, Wei (2007) and Fledmann and Schwarzkopf (2003) attribute the differences in CG practices between countries to different ownership structures playing a pivotal role in enhancing CG practices. In Saudi Arabia, the Capital Market Authority (CMA) has issued CG guidelines to regulate and develop the Saudi capital market and to respond to rapid economic growth. However, the market crisis in Saudi Arabia has exposed a worryingly serious weakness in terms of non-compliance with regulations and a lack of transparency, disclosure and accountability (Saudi Accountancy Journal, 2008).

On the other hand, external auditing, as external monitoring mechanism, has become a fundamental requirement in the business environment and has been established as a regulated activity in most industrialized countries (Piot, 2001) due to its important role in offering more confidence and transparency in financial reporting. Recent financial scandals have increased the question of whether an external audit is effective in constraining earnings management and the wave of audit failure in the capital market has also increased concerns about audit quality (Velury, 2005).

However, few investigations have been conducted on CG, EM and external audit attributes in the context of a developing country; therefore, the current research may help to fill the gap by illustrating findings from Saudi Arabia which is a developing country with an emerging capital market. Unlike dispersed shareholding of the Anglo-Saxon world, the Saudi market is characterized by having concentrated shareholding such as family ownership and state ownership. The purpose of this research is twofold: firstly, due to the lack of studies regarding EM in developing countries and notably in Saudi Arabia, this thesis aims to present evidence concerning EM motivations and techniques by adopting a questionnaire survey and semi-structured interviews together. Secondly, it attempts to investigate the effectiveness of corporate governance and external audit attributes on constraining earnings management by using mainly database survey on the one side and questionnaires and semi-structured interviews survey as collaboration tools on the other. Generally, this study will contribute to the literature by using combined methods (quantitative and qualitative) which may not have been adopted previously and will attempt to examine new characteristics of monitoring mechanisms.

1.2 RESEARCH MOTIVATION AND PROBLEM

Post-2006, perceptible changes have been witnessed in the Saudi business environment with the issuing of more rules and standards to regulate and develop the Saudi Stock Exchange. Moreover, some guidelines, in terms of professional ethics and accounting and auditing, aimed at increasing performance, have been introduced to all corporations. Therefore, the reformation of the auditing and accounting profession and implementation of corporate governance mechanisms are expected to enhance the monitoring mechanisms and reduce the issues related to information asymmetry and opacity. There is, however, no evidence to date as to whether or not such mechanisms and reforms have influenced the Saudi Stock Exchange. Financial crises and companies scandals which occurred between 2006 and 2008 and damaged investors' trust, have evidently raised questions and increased concerns about the role of such mechanisms and to what extent they can be accommodated in the Saudi environment (Alrehaily, 2008). Furthermore, the last five years has seen a strong emergence of insider trading in Saudi Arabia which occurs when a buyer with inside information attempts to buy some shares, knowing that the stock price is likely to rise as soon as inside information becomes public. Jaggi and Tsui, (2007) found a positive relationship between insider trading and earnings management; thus, it may be that Saudi managers have maximized their benefit from insider trading. A study conducted by Al-Moghaiwli (2010) argues that Saudi listed companies are largely dominated by a high percentage of foreign employees who may tend to manage earnings for their own private benefit. The increased incidences of such issues and questions have generated considerable calls for review and for the assessment of monitoring mechanisms to develop other professional regulations and has put pressure on legislators and academics to find a means of enhancing monitoring mechanisms (Saudi Accountancy Journal, 2009). Consequently, investigation into earning management practices on the one hand and the role of monitoring mechanisms in constraining aggressive earnings management on the other is worthwhile and will contribute to the existing literature, particularly when the evidence comes from a developing country such as Saudi Arabia which has different aspects of regulations and culture.

Fundamentally, this research is motivated by several considerations in addition to the above-mentioned. First, in spite of the effects of internal corporate governance in developing countries, Saudi corporate governance mechanisms may be less effective due to several factors which characterise the Saudi environment, such as insufficient independence of directors and duality of Chief Executive Officer (CEO) and ownership concentration. Second, Saudi Arabia also has similar factors to other developing countries as classified by Leuz *et al.* (2003) who concluded that developing countries that have weakening economies show low investor rights, inactive regulations and opacity of higher-level earnings management. Finally, previous studies have investigated earnings management practices and examined monitoring mechanisms in different legal environments and economies; however, despite Saudi Arabia's vital role in the global economy as the largest exporter of petroleum in the world, the Saudi environment has not yet been the subject of academic studies which would inevitably play a significant role in improving internal and external monitoring mechanisms. Thus, the main interest of this research is to explore the main motivations and techniques for manipulation as well as to indicate whether internal and external monitoring mechanisms can protect shareholders' rights in Saudi Arabia.

1.3 RESEARCH AIM AND OBJECTIVES

The main aim of the current research is to explore and identify empirically earnings management practices including motivations and techniques as well as to determine to what extent corporate governance mechanisms and external auditing can safeguard firms from aggressive earnings management in Saudi Arabia.

To fulfil these aims, the following objectives are determined:

- To identify common motivations and techniques for the use of earnings management from different perspectives in Saudi Arabia.
- To examine the role of corporate governance mechanisms and external audit in constraining earnings management in Saudi Arabia.

Primarily, this study will consider the indications of the findings for enhancing monitoring mechanisms and mitigating aggressive earnings management; thus, in order to achieve that, primary objectives are addressed to provide clearer information.

1.4 RESEARCH QUESTIONS AND HYPOTHESES

From the defined aims and objectives, the main research questions this study sets out to answer are:

- What are the common motivations and techniques for earnings management in Saudi Arabia?
- Do corporate governance mechanisms and external audit constrain earnings management practices in Saudi Arabia?

Since this study follows a deductive methodology, primary hypotheses are formulated to answer the research questions as follows:

H1: ***There is a significant difference among respondents according to earnings management motivations in Saudi Arabia***.

H2: ***There is a significant difference among respondents according to earnings management techniques in Saudi Arabia.***

H3*: Corporate governance mechanisms and external audit attributes are expected to constrain earnings management practices in Saudi Arabia.*

1.5 RESEARCH METHODOLOGY

This study was undertaken in two phases: (1) a self-administrated questionnaire survey combined with semi-structured interviews, and (2) secondary analysis of data. The questionnaire survey is mainly used to explore the motivations and techniques of earnings management in Saudi Arabia by obtaining the different perceptions of respondents. Of the 280 distributed questionnaires only 124 were used in the analysis, with a response rate of 44.2%. Most of the questionnaires were delivered by hand to each respondent and collected later: a number of them were emailed to respondents and returned by email. Since some respondents may not have understood how to answer the questions or may not have been certain of the meaning of some of the questions or been unfamiliar with the questionnaire tool, this method enabled the researcher to ensure that each question was answered correctly by clarifying any points of confusion and explaining the questionnaire to respondents. Semi-structured interviews were employed in order to provide better understanding of the research questions, confirming and elaborating on the questionnaire survey and models findings and supporting the hypotheses development. They were subsequently undertaken with 15 individuals including board members, audit committee members, external auditors and academic staff. Interviews were undertaken after the questionnaire survey to reinforce the research findings.

Second, to obtain an overview of the role of corporate governance and external audit in reducing earnings management practices, two models were constructed and a set of hypotheses formulated. These models were examined, by logistic regression, employing a sample including of all firms listed on the Saudi Stock Exchange, with the exception of financial and insurance companies that have different practices. Earnings management is measured using the magnitude of discretionary accruals as estimated by the Modified Jones model (Dechow *et al.*, 1995). The corporate governance attributes were organized into three categories: 1) Board Characteristics; 2) Audit Committee Characteristics; 3) Ownership Structures. The external audit factors comprise audit quality and auditor independence. (See table 1.1)

Table: (1.1) The Link between Research Questions, Objectives and Methods

Research questions	**Objective**	**Methods**
1-What are the common motivations and techniques for earnings management in Saudi Arabia?	To ***identify*** the common incentives and techniques for the use of earnings management practices.	**Main**: questionnaire survey **Support**: interviews survey
2-Do corporate governance mechanisms and external audit factors reduce earnings management in Saudi Arabia?	To ***examine*** the role of corporate governance and external audit factors in constraining earnings management practices.	**Main**: Database analysis **Support**: questionnaire and interviews survey

1.6 SIGNIFICANCE OF THE RESEARCH AND EXPECTED CONTRIBUTION

This research attempts to explore earnings management practices and investigate the role of monitoring mechanisms in constraining manipulation in Saudi Arabia. A large number of studies concerned with earnings management and corporate governance have been conducted using US and UK data; however, studies based on data from Middle Eastern countries, are relatively limited in comparison with those in developed and Asian countries. Moreover, to the best of my knowledge, Saudi Arabia has not yet been the focus of any study regarding earnings management practices or the role of monitoring mechanisms; thus, a different perspective could be obtained from developing countries such as Saudi Arabia, which in numerous respects are different, and this might enhance the concept of corporate governance and earnings management practices. Therefore, the current study could provide interesting, new primary evidence from a country that has a different business environment and regulations and is considered to be representative of Middle Eastern and Arabic countries.

Furthermore, corporate governance mechanisms are in an early, transitional phase in the country as it begins to develop seriously after the financial crisis. A comprehension of monitoring mechanisms and earnings management in Saudi Arabia could elucidate issues and potential implications of external and internal monitoring in prior research. Additionally, the research will improve awareness of the significant role of internal corporate governance and auditing in monitoring the transparency and credibility of financial reporting. Accordingly, the findings of the current study could be fruitful for external auditors, regulators and legislators in their attempts to constrain the incidence of earnings management and enhance the quality of monitoring mechanisms.

A number of studies such as Geiger and Smith (2010) encourage modern research to use various research methods to examine earnings management practices. Thus, this study will use multiple empirical research methods (quantitative and qualitative) in order to answer the research questions. Employing mixed methods will provide reliable findings and help the researcher to interpret the results obtained mainly from logistic regression by providing logical reasons rather than theoretical reasons.

To the best of my knowledge, the uniqueness of this research over other studies is that remuneration and nomination committee characteristics in relation to earnings management have not been examined in the past by prior research. Moreover, this study will examine a new variable - members of the royal family on the board - and use modern characteristics for external audit, such as timeliness and auditor change. This research is also interested in examining the existence of CEO on remuneration and nomination committees, which has only been paid scant attention in previous literature.

Finally, most of the literature has selected only one or two years to explain the effect and this has not provided a beneficial explanation. However, using a longer period of time, as this research will, may help to provide a more in-depth explanation which could lead to more accurate findings.

1.7 RESEARCH SCOPE

As discussed above, this study aims to investigate the motivations and techniques of earnings management and to what extent corporate governance and external audit can affect earnings management practices in Saudi Arabia. The rationale behind selecting the board of directors and its sub-committees from internal corporate regulations is that boards of directors and their committees are both considered as the first line of defence against incompetent management. Secondly, the effect of concentrated ownership is considered as an extra internal or external monitoring mechanism which can protect shareholders and stakeholders alike. External auditing is one of the most important external mechanisms in the protection of shareholders' rights.

Moreover, this study selects boards of directors, sub-committee members and external auditors in order to obtain their perceptions since they are considered to be at the core of monitoring mechanisms and to have sufficient experience and knowledge in the current study objectives. Furthermore, they might be less inclined toward earnings management than the firms' managers. Academics also play a significant role in developing monitoring mechanisms and mitigating earnings management by providing astute thoughts and productive investigation via their research.

This study will not involve non-listed companies, financial companies and insurance companies because they have different practices and operations from other companies. Also, this study covers the period from 2006 to 2009 which was the beginning of the implementation of corporate governance and reforms in Saudi Arabia.

1.8 THESIS STRUCTURE

This thesis consists of nine chapters. The current chapter has presented an overview of the study as well as summarising the other chapters. Chapter Two provides a background of different aspects of Saudi Arabia such as historical background, the legal system, monitoring bodies, important regulations and laws, the development of corporate governance, ownership structure, the accounting and auditing profession and potential earnings management practices. An understanding of these domains offers an insight into the research background, research objectives, research questions and development of hypotheses.

Chapter Three provides a summary of the literature in relation to earnings management practices. It focuses mainly on the definition of earnings management, earnings management incentives and earnings management techniques. Moreover, it discusses models for detecting earnings management using discretionary accruals, such as the Jones model and the modified Jones model, which are employed in the current study since they are more powerful than others since it gives rise to all change in credit sales in the event period as manipulation of credit sales recognition might be more straightforward than that of cash flow

Chapter Four highlights the literature concerning monitoring mechanisms in relation to earnings management including internal corporate governance, ownership structure, and external auditing. The proxies for each mechanism are presented with professional attributes and characteristics and the gap in the literature is discussed.

Chapter Five sets out the theoretical framework. It comprises the theories of corporate governance and attempts to provide justifiable reasons for employing agency theory and institutional theory as the primary and alternative theories for the current study.

Chapter Six details and justifies the research methodology, conducted employing two approaches (quantitative as the primary tool and qualitative as the support tool). Moreover, this study adopts a hypothetico-deductive methodological approach which fits with examining the employed theory by establishing a set of research hypotheses. Data collection methods and the process of data analysis for each approach are discussed.

Chapters Seven and Eight report the survey findings and secondary analysis of the data respectively. Chapter Seven presents the findings concerned primarily with answering the first and second research questions and also illustrates the significant results obtained from the semi-structured interviews and both tools attempt to clarify the role of monitoring mechanisms in constraining earnings management. Chapter Eight provides the findings regarding the role of internal corporate governance and ownership structure, and external audit factors in constraining EM by using logistic regression.

Chapter Nine reveals the findings of the study, its limitations, conclusions, interpretations and identifies areas for future studies.

Chapter Two:

OVERVIEW OF SAUDI ARABIA

2.1 INTRODUCTION

The previous chapter discussed the overall structure of this study including the research problem, research objectives, research questions, and the importance of the study, scope of study, brief methodology, and thesis structure. This chapter aims to present an overview of Saudi Arabia in order to reveal insight into (1) Saudi's background, the country's legal system, corporate governance practices, the accounting and auditing profession, and earnings management practices. An understanding of the fundamental underlying issues in Saudi Arabia helps the research to employ some determinants and measurements; then the focus of this research is to obtain an understanding regarding earnings management practices and the role of monitoring mechanisms in mitigating manipulation. After this introductory section, Section 2.2 presents a simple background of Saudi Arabia, while Section 2.3 provides a clear vision of the development of the country's legal system. Section 2.4 sheds light on important monitoring bodies. Section 2.5 reveals the development of regulations in Saudi Arabia including corporate governance mechanisms. Section 2.6 offers a brief historical view of the accounting and auditing profession, while Section 2.7 depicts the nature of ownership structure. Section 2.8 sheds light on earnings management practices in Saudi Arabia while Section 2.9 provides a brief summary of the chapter.

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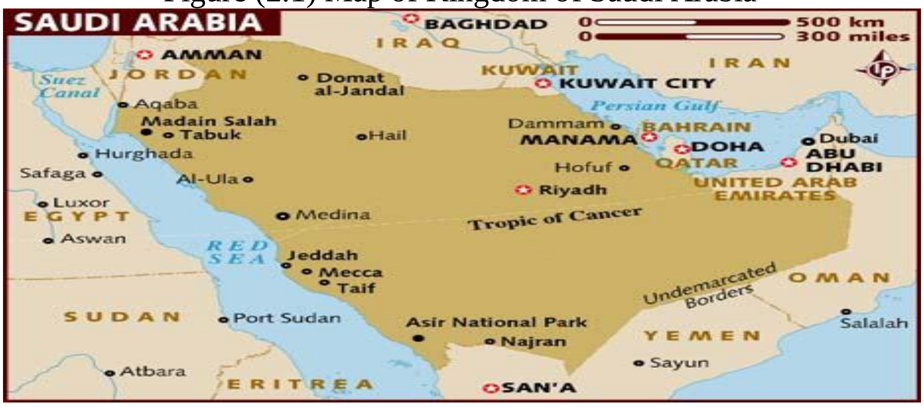
2.2 BACKGROUND OF SAUDI ARABIA

Saudi Arabia is a developing country in Asia, and Riyadh is the capital city. The modern state of Saudi Arabia dates back to 1932 when King AbdulAziz (1880-1953) announced the foundation of the Kingdom of Saudi Arabia (Al-Angari, 2004; Al-Turaiqi, 2008). The country constitutes the largest country in the Middle East. It is 95% desert, including the *Rub' Al Khali*, the biggest mass of sand on the planet (Ministry of Economy and Planning , 2007)

Figure (2.1) Map of Kingdom of Saudi Arabia



Source: Ministry of Economy and Planning (2007)

As Figure 2.1 shows, Saudi Arabia is situated in the South West of Asia, having an area of about 2,100,000 SKM (868,730 SM), with a population estimated at more than 25 million (Ministry of Economy and Planning , 2007). The local currency is the Saudi Riyal and 6.1 Riyals is equivalent to one UK Pound (2011- December). Arabic is the official language, while English is used as the business language.

Saudi Arabia is governed by a monarchy that is restricted to the male descendants of King Abdulaziz. The monarchy system in Saudi Arabia is centralized which gives the King wide-reaching authority, including the management of internal and external affairs. Moreover, all important positions, such as internal affairs, foreign affairs, and the defence ministry are limited to male descendants of King Abdulaziz. The Consultative Council, established in 1991, has a limited role in the legislative system of Saudi Arabia. It acts as an advisory body to the King and any decisions can only be applied once final approval has been received from him.

Saudi Arabia has never been invaded by another country and it has therefore developed its own culture, language, society and economy. Before 1937, Saudi Arabia was a poor country which mainly relied on agriculture. In 1937, a large quantity of oil was discovered and today the country is the world's largest producer and exporter of oil. The discovery of oil has brought about gradual changes to the social and economic life and the political position of the country in the Middle East. Saudi’s economy, which is primarily based on petroleum exports, is considered as the main source of national income and constitutes roughly 90-95% of the total national income and 35-40% of GDP. According to the Ministry of Economy and Planning (2007), Saudi Arabia is thought to hold approximately one quarter of the world's proven petroleum reserves and will continue to be the largest producer of petroleum for the foreseeable future (Falgi, 2009, P:45). Furthermore, it dominates a large percentage of petroleum production among OPEC members with 34% of the total output which gives it a leading role in affecting petroleum prices in the world (OPEC, 2009). According to the Ministry of Petroleum and Mineral Resources, Saudi Arabia has huge reserves estimated at 260 billion barrels and is capable of producing petroleum for more than 100 years to come (Cordesman, 2003). (See table 2.1).

Saudi Arabia has recently witnessed many reforms, including its political systems, social life and business. For example, after long negotiations, it became a member of the World Trade

Organization (WTO) after adopting numerous regulations to its legal system in 2005 (Ministry of Commerce and Industry, 2006).

Table (2.1): Saudi Proven Crude Oil and Natural Gas Reserves

	CRUDE OIL (Billion Barrels)			NATURAL GAS (Billion Cubic Feet)		
Year	ARAMCO CO.	Others	TOTAL	ARAMCO CO.	Others	TOTAL
2001	259.27	3.43	262.70	224179	3767	227,946
2002	259.40	3.39	262.79	230623	4050	234,673
2003	259.43	3.30	262.73	234470	4022	238,492
2004	259.70	4.61	264.31	237010	4313	241,323
2005	259.78	4.43	264.21	239475	4173	243,648
2006	259.92	4.33	264.25	248452	4155	252,607
2007	259.94	4.27	264.21	253789	4165	257,954
2008	259.96	4.10	264.06	262969	4342	267311
2009	260.07	4.52	264.59	275177	4493	279670

Sources: Ministry of Petroleum & Mineral Resources, Saudi Aramco annual reports and ASB,OPEC.

In addition, one of these reforms established the Saudi Arabian General Investment Authority (2000) which aims to enhance the investment environment and attract local and foreign investors by eliminating obstacles and tackling shortcomings (Falgi, 2009). Overall, the Saudi business environment has recently witnessed gradual development which has contributed to reinforcing Saudi's economy, such as enhancement of regulations including the Saudi Stock Exchange and the accounting and auditing profession. However, many consider the reforms to be very slow and believe it cannot cope with the changes being witnessed in the international business environment (Saudi Journal of Accountancy, 2009, p.13).

2.3 THE LEGAL SYSTEM

A country's legal system plays an important role in effecting its regulations and practices. The Saudi Arabian constitution is based on the Holy Quran and the guidelines laid down in the Traditions of the Prophet Mohammed (*Sunnah*) and other sources associated with Islamic law (*Sharīah*) which is the code of conduct or religious law. Accordingly, Saudi Arabia is an Islamic state in terms of its legal system and in general terms, and adheres to Islamic regulations (Al-Harkan, 2005). Saudi Arabia holds a special position among Arabic and Islamic countries since it is the home of the holiest Muslim sites of Mecca (the direction of prayer and pilgrimage for more than one billion Muslims) and Medina, where the Prophet Mohammed emigrated and was buried (Falgi, 2009). All aspects of life in Saudi Arabia are influenced by Islam, including the constitution and social behaviour. In other words, Islam affects business life and operations, placing huge emphasis on high ethical standards, strong belief, and human equality (Moustafa, 1985). Thus, when Saudi Arabia adopts particular standards, such as accounting and auditing standards, or corporate governance practices, it always attempts to alter these standards or practices in accordance with the Saudi environment and Islamic law (Al-Harkan, 2005). In terms of social behaviour, Saudi Arabia is a tribal society based on Arabic traditions and this maintains a considerable degree of impact over local and national events.

Equally, the legitimate Saudi framework has mainly been affected by Islam, upon which the country's constitution is based. Since Saudi Arabia has a strong historical relationship with the US and Britain, the business environment has been greatly influenced by a large number of those countries' legislations in terms of accounting practices, such as company law systems, accounting standards, auditing standards and auditor independence standards (Al-Angari, 2004). Although these regulations are national standards, they were originally borrowed from the US and Britain.

All banks and financial companies are subject to international accounting standards; however, companies listed on the Saudi Stock Market are required to follow and apply the national accounting standards (IFRSs, 2011). King Saud University has played an important role in developing accounting standards by holding a series of symposiums on accounting development methods in Saudi Arabia, in order to reach appropriate recommendations for resolving any obstacles that could hinder the development of accounting standards. Moreover, it established an Academic Board in order to develop accountancy thoughts, exchange of ideas and academic productions, consultation and to carry out research.

Overall, the aspect of the Saudi legal system that relates to the business environment is a mixture of rules and regulations from American, British and other countries' legislations, controlled and influenced by an Islamic framework. In other words, derived or borrowed regulations have to be in accordance with Islamic regulations and the character of the Saudi environment.

2.4 MONITORING BODIES

2.4.1 The Ministry of Commerce and Industry (MCI)

The Ministry of Commerce and Industry, which was known as the Ministry of Commerce before its integration with the Ministry of Industry, is considered as the main body monitoring Saudi companies. Regulating, supervising and registering are some of the most important responsibilities of the Ministry of Commerce and Industry to ensure that Saudi companies comply with national regulations. Moreover, the Ministry indirectly performs a supervisory role to many monitoring devices such as the Saudi Capital Market Authority, the Saudi Stock Exchange, and the Saudi Organization for Certified Public Accountants**.**

2.4.2 The Saudi Capital Market Authority (CMA)

The Capital Market Authority is newly founded in Saudi Arabia and reports directly to the Prime Minister. It began as an unofficial organization in 1950s and proceeded to perform successfully until the Saudi government founded its basic regulations in the Eighties (CMA, 2007). However, it did not officially come into existence until 2004 when it obtained full independence with a direct link to the Prime Minister. The role of the CMA is to regulate and develop Saudi companies by providing appropriate rules and regulations that contribute to increasing investment and enhancing transparency and disclosure standards, and furthermore to protect investors and dealers from illegal activities in the market (CMA, 2007). Since the Capital Market Authority has a legal and financial aspect and administrative autonomy, it is managed by a board that includes five members appointed by the Prime Minister. Moreover, these members are not allowed to engage in any commercial activities or have special interests in any profitable projects. Corporate governance practice is one of the most important regulations to have been issued by the board of the Capital Market Authority in 2006, beginning as a recommended regulation and became a compulsory regulation in 2010.

The Saudi Capital Market authority is the agency in charge of issuing regulations and instructions and ensuring that all regulations and instructions are implemented properly. To accomplish these objectives, the duties of the CMA can be summarised as follows:

- To develop and regulate the Saudi Stock Market (*Tadawul*) and enhance appropriate standards and transactions.
- To create greater security by protecting investors and the public from unfair and unsound practices which include fraud and manipulation, or which violate Saudi Law.
- To increase the efficiency of the market and transparency in transactions of securities.
- To reduce the risks of transactions by developing suitable measures and standards.
- To monitor the commitment of Saudi listed companies to required disclosure of information.
- To monitor all activities and transactions on the Saudi Market.
- To enhance and monitor the issuance of securities and under-trading transactions.

Overall, the Saudi Capital Market plays a pivotal role in developing and regulating the Saudi Stock Exchange by issuing the necessary regulations and instructions to enable companies to improve their performance. Moreover, protecting investors is one of the most important priorities for the Authority and leads to the creation of stability and security in the Saudi market. However, a large number of investors view that the role of this device was negative particularly in financial crises that occurred recently in Saudi market and this raised the question of its power in protecting investors and constraining illegal activates.

2.4.3 The Saudi Stock Exchange (*Tadawul*)

Tadawul is an Arabic term that refers to exchange of stocks in the market. The Saudi Stock Exchange (*Tadawul*) is deemed to be a necessary prerequisite for the accomplishment of a significant growth rate in the Saudi economy and it needs to be well-established and well-organized in order to play its required pivotal role. The Stock Exchange (*Tadawul*) is currently a self-regulated authority and is governed by a board which includes nine members nominated by the Saudi Capital Authority and appointed by the Prime Minister. The board comprises members who are representative of different governmental organizations such as the Ministry of Finance, the Ministry of Commerce and Industry and the Saudi Arabian Monetary Agency. Moreover, the board also consists of two members from listed companies and four representatives of licensed brokerage firms (Saudi Stock Exchange Law, 2009).

Saudi listed companies commenced their operations in the mid-1930s when the Arab Automobile Company was the first joint stock company on the Saudi Stock Exchange (Saudi Stock Exchange Law, 2009). In 1975 the rapid growth of Saudi's economy coincided with an increase in oil price and Saudisation (buying shares from foreign investors) of a part of foreign banks' capital contributed to an increase in the number of large companies and joint stock banks. At that time, although there was a perceptible improvement the Saudi Market remained informal and unorganized. During the 1980s, the Saudi government launched trading regulations, together with the required systems. In 1984, they attempted to regulate the market by forming a committee that included the Ministry of Commerce and the Saudi Arabian Monetary Agency. This committee was a government body charged with regulating and controlling market activities until the Capital Market Authority emerged in 2004 with the responsibility of issuing the required regulations and rules.

Over the last few years, privatization has increased rapidly in the Saudi market because of the Saudi government's announcement of a scheme to privatize many of its vital economic sectors which led to a large number of private and family companies going public. Thus, Saudi listed companies increased dramatically from 81 companies in 2005 to 144 in 2010 (Saudi Stock Exchange Law, 2009). Nowadays, there are 144 more listed companies distributed among different industries in the Saudi market with various percentages of ownership. The Saudi market has become more attractive to many foreign investors since it has become more stable and secure. The Stock Market is considered to be the sole entity authorized to conduct trading in securities in the Kingdom. Thus, the Stock Market has many duties and objectives as follows:

- To increase and ensure fair and efficient activities in the market.
- To ensure market integrity, quality, and fairness
- To support investor education and awareness efforts
- To develop and enhance excellence of service for customers including brokers, issuers, investors, vendors, etc.
- To improve the exchange's capabilities and competencies.
- To issue and enforce professional standards for brokers and their agents

Table (2.2): Share Market Indicators for last 10 years

End of Period	Number of Companies	Number of Shares Traded	Value of Shares Traded	Market Value of Shares	Number of Transactions	General Index
2001	64	692	83,602	275	605,035	2,430.11
2002	68	1,736	133,787	281	1,033,669	2,518.08
2003	70	5,566	596,510	590	3,763,403	4,437.58
2004	73	10,298	1,773,858	1,149	13,319,523	8,206.23
2005	77	12,281	4,138,695	2,438	46,607,951	16,712.64
2006	86	68,515*	5,261,851	1,226	96,095,920	7,933.29
2007	111	57,829	2,557,712	1,946	65,665,500	11,038.66
2008	117	58,727	1,962,945	925	52,135,929	4,802.99
2009	144	56,685	1,264,012	1,196	36,458,326	6,121.76

Source: Saudi Arabian Monetary Agency

2.4.4 The Saudi Organization for Certified Public Accountants (SOCPA)

The Saudi Organization for Certified Public Accountants (SOCPA) is a professional organization set up in 1991 under the supervision of the Ministry of Commerce**.** It is managed by a number of members and is responsible for promoting and enhancing the accounting and auditing profession's practices and all matters that may reinforce the development of the profession and upgrade its status (SOCPA, 2006). Generally, SOCPA plays a pivotal role in developing the accounting and auditing profession in many ways as follows:

- Reviewing and developing accounting and auditing standards.
- Monitoring the performance of certified public accountants to ensure compliance with CPA regulations and standards.
- Preparing and establishing SOCPA fellowship examination rules and managing CPE courses.
- Undertaking research regarding the accounting and auditing profession and other related subjects.
- Holding and managing accounting conferences and attracting professional expertise and academics.
- Encouraging accounting researchers to carry out studies in the accounting and auditing profession by funding or reward incentives.
- Publishing accounting and auditing standards and hot topics by releasing journals and books.

2.5 IMPORTANT REGULATIONS AND LAWS IN THE SAUDI BUSINESS ENVIRONMENT

Saudi Arabia has an emerging market as a developing country that has grown in recent decades. Accordingly, the Saudi market may not be active in corporate control and may suffer from greater information deficits in comparison with established markets such as the US and the UK. The Saudi government is endeavouring to develop and enhance regulations that could contribute to increasing corporate control and the transparency of information. Although there are many regulations in Saudi Arabia, this section will attempt to shed light on the important regulations and laws that play a significant role in regulating Saudi companies' operations and structures and are related to the current study.

2.5.1 Companies Law (1965) and Company Structure.

The Companies Law is considered to be the most important regulation and the first organised attempt to regulate Saudi companies. It was derived from the British Companies Law. This law was issued by Royal Decree in 1965 as a basic system at that time for all Saudi companies which were required to comply with its instructions and rules. Although the law has been modified in order to keep up with the rapid development in Saudi companies, many consider it to be quite ancient and believe it does not fulfil modern requirements (Al-ghamdi and Alangri, 2005).

On the other hand, company structure plays a key role in determining the legal shape and organisational system of a company. Generally, each company in its foundation stage sets out a number of simple regulations such as the appointment of directors to the board, termination, and the rights of shareholders. However, company structure should be in accordance with the Saudi Companies Law.

2.5.2 Accounting and Auditing Standards

Saudi Arabia issued national accounting and auditing standards in 1986 that were originally derived from American standards. Although the banking sector and financial companies apply international accounting standards, most Saudi listed companies adopt Saudi national accounting standards (IFRSs, 2010). As mentioned earlier, the Accounting Standards Committee of the Saudi Organization for Certified Public Accountants (SOCPA) is responsible for developing and reviewing accounting and auditing standards in Saudi Arabia. Recently, there has been an attempt by SOCPA to converge the national standards with international financial reporting standards (IFRSs). As a result, most banks and financial companies have begun to apply international financial reporting standards. The last report issued by SOCPA contends that "ongoing efforts to identify hindrances to the convergence process, as well as in identifying opportunities to further enable the implementation of IFRSs" SOCPA, 2010, P:7). However, SOCPA may face some obstacles that constrain the application, although there has been no real statement by SOCPA to identify the potential hindrances.

Overall, national accounting standards play a pivotal role in the Saudi environment in developing disclosure and financial transaction treatments. National accounting standards consist of 23 standards such as disclosure requirements, revenues standard, inventory standard, etc. In addition, national auditing standards play a key role in increasing the competence of external auditors and enhancing audit quality. These standards also consist of 17 standards that are often associated with auditor competence, independence, audit plan, audit report etc.

2.5.3 The Development of CG in Saudi Arabia

Corporate governance issues are quite important in emerging markets because these markets do not have features such as long-established financial institution infrastructures to cope with corporate governance issues (McGee, 2010). Corporate governance as a framework should ensure that timely and specific disclosures have been made of all material matters concerning the company, including performance, financial position, ownership and management.

For a long time corporate governance mechanisms were ignored as a matter of significance for Saudi Arabia. This remained the case until 2005 when the Saudi Capital Market Authority drew attention to the problems regarding companies' performance. Moreover, the 2006 market crisis in Saudi Arabia indicated serious issues and revealed significant weaknesses in financial reporting, namely a lack of transparency, disclosure, and accountability (Saudi Journal of Accountancy, 2006). As a consequence, corporate governance has received substantial support from the Saudi government and academics. Nowadays, however, corporate governance is becoming a pivotal subject in the Saudi business environment, and the debate on the enhancement of the corporate governance system is of significant interest. In Saudi Arabia, corporate governance mechanisms have included essential rules and standards such as the rights of shareholders, disclosure, transparency, and board composition, which regulate the management of joint stock companies listed on the Exchange. This ensures compliance with the best practices that protect the rights of the shareholders and stakeholders.

The prime laws governing the legal framework which affects the notion of corporate governance in Saudi Arabia can be divided into three groups: Firstly, the company law system, which was derived from British Companies Law, as regulator of the Saudi market, which regulates joint stock companies; Secondly, the Saudi Organization for Certified Public Accountants and the Saudi Capital Market Authority.

Corporate governance was established by the Board of Capital Market Authority in 2006 and amended in 2010 in order to regulate and develop the Saudi capital market and increase the credibility and transparency of financial reporting. Despite the fact that the most Code was a guideline and did not become a mandatory regulation until the beginning of 2010, Saudi listed companies were required to disclose, in the annual report, the provisions that had been implemented and those which had not been implemented and to explain the reasons for non-compliance. The Code includes five main parts: The first part is preliminary provisions and explains and defines some terms associated with regulation such as 'independent member', 'non-executive' and 'shareholders'. The second part highlights the rights of shareholders and the General Assembly. The third part reveals the disclosure and transparency related to a company's policy such as the board's report. The fourth part introduces the board of director's functions and responsibilities. The final part includes publication and coming into force and involves implementation (the Code of Corporate Governance, 2006).

Among corporate governance regulations, the board of directors and its committees are both considered as the first line of defence against incompetent management. Thus, this study attempts to investigate the role of the board of directors and its committees as the core of corporate governance mechanisms. The following section will demonstrate the role of the board of directors and sub-committees according to the Saudi Code of Corporate Governance.

2.5.3.1 Board of directors:

Functions

According to the Code, the board of directors should carry out many functions as follows: approving the strategic scheme and the main aim of the firm and supervising their implementation, this includes: comprehensive strategy, plans, policies, capital structure, financial objectives, annual budget, performance, risks, organizational and functional structure, settling any possible cases of conflict, ensuring the integrity of financial transactions, reviewing the effectiveness of internal control systems and monitoring. Moreover, it ensures the implementation of regulations, such as full disclosure and corporate governance.

Responsibilities of the Board

The board of directors represents the shareholders, so the ultimate responsibility for the firm rests with the board of directors, even if a company sets up committees or delegates some of its powers to a third party such committees. The Code of corporate governance attempts to explain the main responsibilities of the board of directors; however, the company system plays an important role in determining the board’s responsibilities toward shareholders and others investors. Generally, the board of directors is responsible for the integrity of financial reporting and the company’s performance.

Formation of the board

Formation of the board of directors is subject to the following criteria:

1- The board of directors should contain at least three members and no more than eleven members.
2- The majority of the board of directors (one-third) should be non-executive.
3- It is not allowed for the position of the Chairman of the board of directors to be conjoined with any executive position such as Chief Executive Officer (CEO).
4- One-third of the members should be fully independent.

5- A member of the board of directors should not act as a member of the board of directors of more than five joint stock companies at the same time.

Moreover, the code introduces some articles related to termination of membership regarding members. Moreover, the Code only focuses on the importance of board meetings without specifying the annual number of meetings.

2.5.3.2 Board committees

A suitable number of committees should be formed in accordance with the company's requirements and circumstances in order to help the board of directors to perform its duties in an effective manner. Recently, the Code of corporate governance has mandated the formation of an audit committee and nomination and remuneration committee. These committees are subject to certain criteria as follows:

Audit Committee

According to the Code, the board of directors should form an audit committee which includes at least three non-executive members, with at least one of them having expertise in financial and accounting affairs. This committee has several important roles: to supervise and review the firm's internal and external audit procedure, control system, accounting policy, the integrity of financial reporting, disclosure, monitoring management, the recommendation of auditor selection and to remedy conflicts between management and external auditor.

A few years ago, because no other committees such as remuneration and nomination committees and executive committees existed in firms, the audit committee was the only committee delegated by the board of directors to perform certain duties (Al-Moataz, 2003). This meant that it had to perform a large number of functions which led to an impairment of its performance of those functions. In 2007, SOCPA formed a committee to evaluate the role of audit committees in Saudi Arabia and concluded that there was a lack of clarity regarding the functions and duties of audit committees and that their members were not aware of the purpose of such committees (Falgi, 2009).

Nomination and Remuneration Committee

Although this committee was initially not a mandatory committee, most Saudi listed companies took the initiative to set one up. By 2010, Saudi listed companies were mandated to establish a nomination and remuneration committee responsible for: providing recommendations to the board concerning the appointment of members to the board and reviewing and ensuring the requirements of appropriate skills for membership of the board including qualifications, experience, and independence and, finally, to establish clear policies regarding indemnities and remunerations of board members and top executives.

This committee could play a vital role in developing the structure of the board of directors and enhance the board's performance in Saudi listed companies by drawing up clear policies in the future. However, the Saudi legislator has ignored the legal formation of this committee, such as its independence, which may lead to impairing its role in developing and enhancing board structure. Moreover, the CEO may take a part of its role by using his power in decisions, making the committee useless.

Since corporate governance is a modern concept, a number of studies have attempted to evaluate its role in Saudi Arabia; for example, a study conducted by Al-Harkan (2005) explores the perceptions regarding the role of corporate governance and finds that corporate governance is a useful mechanism for protecting shareholders and stakeholder alike. Moreover, Al-Rehaily (2008) highlights the fact that the corporate governance mechanisms will contribute to enhancing the integrity of financial reporting and reinforcing companies' performance. However, the case of collapse of the Saudi Market have brought about more concerns and fears regarding the potential failure of the role of corporate governance and low audit quality in Saudi Arabia. For example, a study conducted by Falgi (2009) using semi-structured interviews, concluded that corporate governance in Saudi Arabia suffers from a lack of accountability, a weak legal framework, and poor protection of shareholders. In addition, based on a questionnaire survey, Al-Moataz and Basfar (2010) reveal that audit committees play an ineffective role in corporate governance. Alghamdi and Alangari (2005) show that there are serious violations of accounting standards in the professional environment which raises questions regarding the role of external auditing. Generally, many consider internal corporate governance to be less effective in developing countries as a result of insufficient independence regarding directors (Pornupatham, 2006). This thesis differs from previous Saudi studies in that it provides statistical findings based on regression combined with perceptions obtained from specific participants conceived to be a core of corporate governance mechanisms, which will lead to more reliable findings.

2.6 THE ACCOUNTING AND AUDITING PROFESSION IN SAUDI ARABIA

The accounting and auditing profession in Saudi Arabia is relatively young in comparison with those of developed countries that have a rich history of professional application and practice (Falgi, 2009). The accounting and auditing profession has witnessed various transitional phases in Saudi Arabia. It was known for its simple practices based on the income tax law issued in 1950 (Jad Alha, 1993). Since no audit firms existed at that time, this attempt was the first to regulate the accounting and auditing profession.

In 1965, the emergence of the Companies Law gave the profession a legal set of regulations and instructions concerning the organization of accounting and auditing profession practices. For example, according to this law companies were required to have audited financial statements; however, the law was unable to meet the minimum criteria regarding the profession such as accounting standards and the exercise of due professional care (Alangri, 2004). Although the period from 1950 to 1965 suffered from a lack of domestic auditors and professionals and the absence of accounting education (Falgi, 2009), it could be seen as the time of the birth of the profession in Saudi Arabia which witnessed the issuing of a number of licences in Saudi Arabia (Alghamdi and Alangari, 2005).

Until 1991 there were feeble attempts to develop accounting and auditing profession practices which did not exceed a set of decisions issued by the Minister of Commerce. On the other hand, there were beneficial attempts made by King Saud University which played an important role in developing accounting and auditing profession practices by holding a series of symposiums that contributed to enhancing practices in the profession. These attempts resulted in the foundation of the Saudi Accounting Association which contributed to its development and prompted accounting studies concerning the profession's practices.

The year 1991 was a significant transitional time in accounting and auditing profession practices which coincided with the establishment of the Saudi Organization for Certified Public Accountants (SOCPA). This organization has played a significant role in developing accounting and auditing standards and developing the profession by hosting international conferences, attracting experts and academic researchers and conducting necessary studies.

Nowadays SOCPA has significantly contributed to the recovery of the profession by developing educational and professional standards that reinforce the practices in Saudi Arabia. It is composed of more than 127 audit firms that are allowed to practise accounting and auditing. Of these firms, many of them are affiliated to international audit firms such as Doloitt, Pricewaterhouse, Ernst and Young, and KPMG. Moreover, more than 188 Saudi auditors are allowed to practise accounting and auditing profession.

Despite the previous achievements, the accounting and auditing profession in Saudi Arabia still suffers from serious issues such as the reduction of audit fees, illegal competence, and monopoly of services. These issues threaten the accounting and auditing profession and impair the audit quality. For example, Alghamdi and Alangari (2005) show that there are serious violations of accounting standards in the professional environment which raises questions regarding the role of external auditing. Moreover, the role of audit committees that are linked directly to external auditing is still absent in the shadow of difficult circumstances and challenges facing the accounting and auditing profession (Al-Moataz, and Basfar, 2010).

2.7 OWNERSHIP STRUCTURE IN SAUDI ARABIA

Ownership structure is an important determinant of corporate governance practices. Shleifer and Vishny (1997) state that ownership structure plays a key role in reducing agency costs by aligning the interests of managers with those of shareholders. Prior to 2005 only two investigations attempted to explore the nature of ownership structure in Saudi Arabia. The first study, conducted by Al-Tonsi (2003), revealed that although Saudi Arabia had a free market economy the Saudi market was dominated by family ownership (approximately 75%) and the Saudi government dominated the primary public utilities and services. The second investigation was by the Saudi Arabian Monetary Agency and concluded that the Saudi market was dominated by family ownership and state-ownership (Al-Harkan, 2005).

However, since 2005 Saudi Arabia has witnessed many reforms such as becoming a member of the (WTO), the implementation of corporate governance practices in 2006, globalization of the world market and the privatization programme. During the last five years Saudi listed companies have increased dramatically from 81 to 144 companies, therefore these actions may have contributed considerably to enhancing the distribution of ownership structure in Saudi Arabia that was previously confined to governmental and family sectors.

Prior to 2005 there had been no attempt to explore the nature of ownership structure in Saudi Arabia following its many reforms. Most listed companies in Saudi Arabia usually have four groups of shareholders, the state, institutional, family, and blockholders. The regulations in Saudi Arabia mandate the disclosure of ownership that is more than 5% in a company as well as board ownership. This study aims to investigate the relationship between ownership structure and earnings management; therefore, the descriptive analysis will provide information regarding ownership structure in Saudi Arabia that can be useful for future research.

2.8 EARNINGS MANAGEMENT IN SAUDI ARABIA

Aggressive earnings management is quite a modern topic in accounting research, which attempts to investigate the incentives of this practice and how the role of monitoring mechanisms can affect it. The Middle East, and particularly Saudi Arabia, has not received attention from prior studies on earnings management which may explore important findings contributing to enhancing monitoring mechanisms. However, some studies have investigated earnings management in developing countries; for example, Leuz *et al* (2003) divided a number of countries into three groups and attempted to make a comparative study regarding investor protection and earnings management. The first group consisted of countries with a large stock market, dispersed ownership, and strong investor rights. The second group included countries with less-developed stock markets, concentrated ownership, weak investor rights, but strong legal enforcement. The third group included insider economies with weak legal enforcement. The third group contained some developing countries such as Indonesia and the Philippines which have concentrated ownership and weak legal enforcement. They found that the third group showed less investor protection and a higher level of aggressive earnings management.

Saudi Arabia, as a developing country, has concentrated ownership, less investor protection, and weak legal enforcement; therefore, the potential incidence of earnings management is higher. Moreover, a study conducted by Alghamdi and Alangri (2005) investigating external auditors' perceptions, revealed that there is serious violation of national accounting standards and less commitment of required disclosure by Saudi companies. The importance of internal corporate governance stems from the 2006 market crisis in Saudi Arabia which revealed serious weaknesses in financial reporting, namely a lack of transparency, disclosure, and accountability. Moreover, the great pressure by monitoring devices that coincided with the implementation of many regulations may have motivated Saudi companies to manage their earnings.

Furthermore, over the last five years there has been a strong emergence of insider trading in Saudi Arabia which occurs when a buyer with inside information attempts to buys shares, knowing that the stock price is likely to rise as soon as the information becomes public. Some studies, such as McGee, (2010), consider this issue an agency problem which was harmful for a large number of Saudi investors who expressed their concerns regarding the credibility of financial reporting in Saudi Arabia. This study will contribute to the literature by eliciting perceptions regarding the motivations and techniques of earnings management in Saudi

Arabia as well as the role of monitoring mechanisms in mitigating earnings management mechanisms by employing different approaches.

2.9 SUMMARY

Saudi Arabia has quite a short history compared to other countries, and its society and economy developed from agriculture to become a powerful country in the Middle East with a free economy after the discovery of its petroleum. Islam, as a framework, plays a key role in its social life and its business environment. Saudi Arabia is governed by a monarchy system that restricts the ruler to male descendants of King Abdulaziz. Although the legal system is managed by Islamic law (*Sharia*), Saudi Arabia has adopted many regulations and rules that have been derived from developed countries such as British Companies Law and American Accounting Standards.

Recently, privatization has played a vital role in the re-distribution of the structure of ownership in Saudi Arabia. For example, state-owned and family-owned companies dominated the ownership structure in Saudi Arabia by a higher percentage (75%) (Al-Harkan, 2005). Nowadays, although state-owned and family-owned companies exist in the Saudi market, the percentage is not as high as in previous times.

Moreover, this chapter has shed light on the main monitoring devices which play a significant role in regulating and developing the Saudi business environment. In addition, important regulations, such as Companies Law and Accounting and Auditing Standards are discussed and their roles revealed. Although these reforms are helpful and useful to the Saudi market, they have been borrowed from the U.S. and other capitalist nations. In other words, these reforms did not stem from a need but from a form of imitation of developed countries. Moreover, monitoring devices cannot effectively play a key role unless they are given more independence and authority.

In terms of the development of corporate governance, this chapter has attempted to provide information regarding regulation and to present Saudi studies which have paid attention to the development. Their findings indicate that corporate governance in Saudi Arabia is in its early phase and suffers from a lack of accountability, a weak legal framework and poor protection of shareholders. Moreover, audit committees and boards of directors play an ineffective role in corporate governance.

In relation to external auditing, this chapter has also attempted to offer an historical view of the development of the accounting and auditing profession and the important events it has undergone. Some attempts by Saudi researchers indicate that the profession of accounting and auditing faces serious inherited issues such as reduction of audit fees, illegal competition, and monopoly of audit services by a few audit firms.

As a result of previous issues and a weak protection of investors, earning management practices may high likely exist in Saudi Arabia for different reasons and various techniques. For example, there are many indications such as insider trading imply that Saudi companies may manipulate earnings in order to obtain a higher share price

Overall, this chapter has aimed to provide a concise view of the background of Saudi Arabia's, legal system, important regulations and monitoring devices related to research and the important events in the Saudi environment. The following chapter will discuss the literature in relation to earnings management practices concerning the first and second research questions.

Chapter Three:
A REVIEW OF THE LITERATURE ON EARNINGS MANAGEMENT PRACTICES

3.1 INTRODUCTION

The previous chapter illustrated a brief background of the Saudi Arabia environment, regarding the legal system, regulations and development of corporate governance mechanisms, and provided precise information in respect of the nature of ownership structure and the audit profession market. As noted, the aim of this thesis is to understand the practise of earnings management, and the role of monitoring mechanisms in reducing the manipulation of financial reporting in Saudi Arabia. Based on these objectives, this chapter is allocated to reviewing the literature related to earnings management practises, while the role of internal and external corporate governance in mitigating earnings management will be discussed in the next chapter. Thus, this chapter is organised as follows: Section 3.2 presents the definition of earnings management. Section 3.3 illustrates earnings management motivations. Section 3.4 presents earnings management techniques. Section 3.5 provides accounting literature concerned with the earnings management measurement. Section 3.6 provides a summary and identifies the gap in the literature.

3.2 DEFINITION OF EARNINGS MANAGEMENT

Financial reporting plays a significant role in communicating financial information to users in a right time and credible conduct (Xiong, 2006). Based on agency theory, the issues related to the separation between ownership and management might lead managers to collude against owners to increase their own personal wealth (Abdul Rahman and Ali, 2006). Institutional theory (North, 1990) also provides an appropriate theoretical framework for managerial behaviour. Institutions in a society provide the rules of the game that monitor the interplay between organizations, which are the players in the game, who attempt to exploit the opportunities created by the institutions to increase their welfare (Li, 2004). In other words, society may create many formal constraints, such as public laws and government regulations, or informal ones, such as social customs and conventions collectively known as culture (Li *et al*, 2008). These constraints may create incentives for managers to manipulate earnings.

Thus, opportunities are given for managers to practise their discretion regarding business in order to enhance the effectiveness of financial reporting as a means of communicating with investors and creditors. In other words, current accounting standards offer management a wide choice of alternative ways to treat the same financial transaction or event (Al-Khabash and Al-Thuneibat, 2009). Different accounting methods may be chosen according to their objectives.

Earnings management has been considered as one of the most crucial ethical financial reporting issues, which accountants confront in everyday practices around the world (Armstrong, 1993). In general, since earnings management is a difficult concept to define and measure, it seems that there is no universally-accepted definition. However, earnings management is generally attributed to the process by which financial information is manipulated to provide a firm's financial stance and performance. This may involve numerous accounting treatments that are not accommodated within Generally Accepted Accounting Principles (GAAP) and are considered as either aggressive or conservative accounting treatments which mislead users of financial reporting (Xiong, 2006).

Generally, the distinctions of the definitions provided by prior studies rely on their own assumptions, the motivations behind earnings management and their perceptions in respect of behaviour, which can vary from one researcher to another since depending on numerous factors such as culture. For example, Louis and Sun (2008) support the theory that cultural differences play a vital role in defining types of earnings management and motivations. Similarly, Geiger *et al*. (2006) argue that motivation for and practice of earnings management is not perceived similarly in all countries due to a numbers of factors, one of the most important being culture, which is divided into a number of dimensions. A study conducted by Noronha *et al* (2008) showed that another factor, the nature of earnings management motivations or techniques, might be affected by the size and ownership of companies; in China, for example public ownership companies have a strong motive for manipulating earnings management.

For the above reasons, accounting literature cannot accomplish consensus on the definition of earnings management; however, numerous attempts have been made by current studies to understand earnings management practices. For example, Healy and Wahlen (1999, P:7) suggest that "earnings management takes place when management (executives) use their discretion in financial reporting and in structuring transactions to change financial reports in order to mislead some stakeholders regarding underlying economic performance of a firm or to affect contractual outcomes relying on reported accounting practices". Davidson *et al*. (1987) cited in Noronha *et al*, (2008, p. 369) define earnings management as "the process of taking deliberate steps within the constraints of generally accepted accounting principles to bring about a desired level of reported earnings". In the same vein, Roychowdhury (2006) defines earnings management as "departures from normal operational practice, motivated by managers' desire to mislead at least some stakeholders into believing certain financial reporting goals have been met in the normal course of operations". In addition, Schipper (1989) defines earnings management as a way of using opportunities provided by the accounting system to engage earnings by adopting accounting methods for a specific purpose. Likewise, Smith (1993) defines earnings management as techniques that comprise financial reporting decisions, such as the selecting of accounting methods and timing of expenses and revenue reporting.

Under GAAP, managers have discretion in reporting earnings (Othman and Zeghal, 2006) therefore, they might employ various methods to report earnings for different incentives. Generally, the National Commission on Fraudulent Financial Reporting categorises earnings management practices as an illegal activity and a serious action, which will mislead financial-statement users (Merchant and Rockness, 1994). Moreover, many concerns have been raised by the chairman of SEC who comments that "management abuses of 'big bath' restructuring charge, premature revenue recognition, 'cookie jar' reserves, writeoffs of purchases in process are threatening the credibility of financial reporting" (Healy and Wahlen, 1999, p:7).

Providing numerous definitions of EM may help this study to employ some determinants and measurements, as the focus of this research is to obtain an understanding regarding earnings management practices. From the preceding definitions, it is observed that earnings may be manipulated in two main ways: accounting choices and discretionary accruals. In other words, managers may exploit or abuse the flexibility of accounting standards by choosing specific methods such as revenue recognition methods or FIFO to LIFO in inventory to manipulate earnings or violating accounting standards. Thus, this study attempts to define earnings management as a way of using various methods of violating accounting methods by managers who employ their experience and knowledge in business to alter the figures of financial reporting with various motivations.

Although most previous studies suggest that earnings management is considered a type of fraud when these practices are managed beyond GAAP boundaries, there is no full agreement on this concept. For example, Jiraporn *et al*. (2008) adopt agency theory as a framework to distinguish between the opportunistic and beneficial uses of earnings management, argue that earnings management play a superior role in enhancing the information value interested the users of financial reporting. In other words, earnings management may be used as a tool for attracting new investors and reinforcing the confidence of the market. On the other hand, Lo (2007) claims that there are many victims of earnings management practices, such as equity investors, creditors, regulators, unions, suppliers and customers. Therefore, the answer to the question of whether earnings management practices are opportunistic or beneficial is still contentious.

3.3 EARNINGS MANAGEMENT MOTIVATIONS

According to positive theory developed by Watts and Zimmerman (1986), there are three primary hypotheses regarding earnings management motivations: the bonus plan hypothesis, the debt covenant hypothesis, and the political cost hypothesis. Current research of earnings management has, however, shifted its focus away from positive theory and back again to capital market motivations as interpretations of the opportunistic behaviour of managers (Xiong, 2006). On the other hand, agency theory, as an economic model of behaviour, expects that, as long as the objectives of the principal and agent are aligned, the agent will attempt to maximize the objectives of the principal; however, when their objectives are conflicted, the view of agency theory is that the agent will attempt to maximize his/her self-interest over the principal's interests. Accordingly, the motivation for manipulating earnings begins when alignment is conflicted. According to institutional theory, earnings management incentives may be effected by formal or informal pressure, and change may be created by an organisation in order to model itself on other organisations. Kury (2007) views that institutional theory provides the best perspective for examining earnings management practices. He offers the institutional argument for explaining earnings management, which is helpful to complete the view of agency theory and suggests that insights for earnings management comprise the blending of agency and institutional theory perspectives to obtain a more complete understanding of the behaviour and the positing of a continuum of earnings management.

Overall, a large body of literature has spawned different evidence investigating various aspects of managers' motivations to manipulate earnings management. For example, Gaa and Dunmore (2007) suggest that earnings management is engaged in order to affect stakeholders' beliefs and behaviour or to affect how contracts are carried out. Accordingly, this section provides different motivations for manipulation which are grouped into five categories according to prior studies (**1**) Capital market motivations (**2**) Management compensation contract motivations (**3**) Lending contract motivations (**4**) Regulatory motivations (**5**) Political cost motivations.

3.3.1 *Capital Market Expectations*

Capital market expectations are the investor's expectations regarding the risk and return related to firm's performance. The usage of financial information in affecting stock prices inspired a number of studies to argue that the affecting of stock prices may be one reason for manipulating earnings that can be opportunistic behaviour. Accordingly, a number of studies have been conducted in this domain, investigating the practice of earnings management in different cultures. For example, a study undertaken by Burgstahler and Dichcv (1997) using data from Zacks Investment Research and overall population of firms expected managers to engage in earnings to avoid possible losses and decrease in earnings. Their results show that an earnings decrease is an incentive for manipulating; however, avoiding possible losses was not.

Furthermore, using a sample of 15,00 firms over the period 1992-2005, research conducted by Daniel *et al*. (2007) indicates that firms employ earnings management to meet expected dividends levels. Their findings suggest that this incentive is explicit only in companies with positive debt and was more aggressive prior to the Sarbanes-Oxley Act.

Detailed examination of earnings management practices by Peek (2004) shows that Dutch managers use their discretion for manipulating in order to engage in big bath behaviour, conditional to their anticipation of next year's earnings. He uses a sample of 134 non-financial firms listed on the Amsterdam Stock Exchange between 1989 and 2000, and finds that Dutch firms engage in earnings management before extraordinary items in order to reveal superior performance.

Moreover, a comparative study by Glaum *et al.* (2004), which identifies earnings management motivations by using a sample of 38,714 of U.S firms and a sample of 3.524 of German firms, suggests that both American and German companies manipulate earnings to avoid losses and decrease in earnings. However, the most surprising matter in this study is that avoiding losses and decrease in earnings is more prevalent in U.S. firms than in German firms. Moreover, they find that capital market pressure and management-compensation are also incentives for manipulation.

According to another study conducted by Nelson *et al*. (2003) which was based on a questionnaire survey and included 253 external auditors from USA offices, managers are motivated to manage earnings by numerous incentives such as meeting analysts' estimates, affecting the stock market, meeting objectives regarding management-compensation, enhancing future income for various goals. Moreover, Athanasakou *et al.* (2009) found that, based on data collected for all UK (dead and live) listed companies from Datastream for the period 1994 to 2002, UK companies are more likely to manipulate their earnings in order to meet analyst earnings expectations and avoid negative earnings surprises.

By using an in-depth interviews survey which includes financial executives from public companies in US firms, and using descriptive statistics and correlation analysis, Graham *et al.* (2005) stress that managers are concerned with meeting earnings benchmarks and engage in earnings management to maintain or increase share prices, to enhance managers' reputations and to secure future growth prospects. In other words, 82.2% and 86.3% of respondents agree that meeting earnings benchmarks enables them to 'improve credibility with the capital market' and 'enhances or maintains share price' respectively.

Based on a sample of US firms from 1990 to 2001, Madhogarhia *et al.* (2009) examine the earnings management practices of upturn versus value firms. They found that upturn firms have a tendency to engage their earnings, both upward and downward, more aggressively than value firms.

Using a sample of real estate investment trusts (REITs) from the database during 1990-2006, Ambrose and Bian (2010) discovered a link between stock price movement and REIT earnings management. They found that share price can be a motivation for manipulating earnings management.

Martinez (2005) provides evidence from Brazilian public companies investigating earnings management practices. He uses a multiple regression model to estimate discretionary accruals documents to show that Brazilian companies are likely to manage earnings in order to avoid reporting losses, sustain recent performance and maintain stable earnings.

Evidence based on data collected via questionnaires (464) and interview surveys (16) in Egypt (Kamel and Elbanna 2010) highlights that the main incentives for managing earnings are: to increase the prospect of obtaining a loan, to sustain the previous year's profit performance, to report a good income and avoid reporting losses and to accomplish high-stock valuation.

3.3.2 Management compensation contract

An agent attempts to transfer wealth from the principal to their own benefit; thus, a compensation contract between principal and agent, may motivate managers to manipulate earnings. In other words, managers are motivated to employ earnings management in order to enhance or increase their own compensation or bonus plan which is often associated with a firm's performance. Aljifri (2007) argues that the majority of new managers would take positive action to criticise previous managers and at the same time reinforce their own position for the future. A number of studies have examined the impact of accounting choices on compensation which attempt to elicit the perceptions in this way. For example, Dye (1988) suggests that employing accounting numbers in compensation contracts is one of most important internal motivations for manipulating earnings. Likewise, Healy (1985) who used the first model for detecting earnings management highlights that increasing a bonus plan can be a motivation for earnings management. In other words, he finds a strong relationship between discretionary accruals and bonus plans

Based on an examination of 138 Australian firms announcing on-market buybacks over the period 1996–2003, Balachandran *et al*. (2008) investigated the relationship between earnings management and exercisable option holdings for buyback firms to determine whether earnings management in the pre-buyback period is a motivation for companies with equity to increase stock prices. They found that Australian firms tend to use buyback policy in order to increase share price and enhance compensation.

According to a sample from the Wall Street Journal annual compensation survey, Baker *et al*. (2003) note that the compensation option produces opportunistic motivations for managers to time the release of good and bad news to the market. In other words, managers who obtain large option awards seem to report income-decreasing accrual choices as a means of decreasing the exercise price of their awards.

Moreover, DeAngelo (1988) posits that managers systematically tend to manage reported earnings during proxy contests to obtain the approval of shareholders in order to keep their jobs. In other words, reported earnings are used as an indication of managerial efficiency, so inferior performance may cost a manager their job. This is consistent with the common notion that managers are motivated to manage earnings in order to retain their job by convincing shareholders that they are performing efficiently.

3.3.3 Lending contracts motivations

The third strand of previous research related to debt covenant hypothesis is that restrictions are often imposed by creditors regarding payment of dividends, share buybacks and the issuing of additional debt in respect of reported accounting numbers and ratios, in order to ensure the repayment of the firm's borrowings.

A sample was drawn from Spanish firms; Perez and Hemmen (2010) employed the panel-estimation method to estimate discretionary accruals (DAC) and to present a better understanding of the nature of the relation between debt and earnings management. They indicate that marginal increases in debt produce the motivations for managers to manage earnings.

Kanagaretnam *et al*. (2003) investigated the incentives of American bank managers in making judgment over loan loss provisions to manipulate earnings selecting a sample of 4,166. They found that managers tend to save income in case a good performance is followed by a future bad performance, by reducing current income through loan loss provisions as well as reducing the cost of borrowing.

Based on a sample of 92 firms determined by the SEC to overstate earnings adopting parametric test (t-test), Dechow *et al*. (1996) found that managers tend to manipulate earnings in order to raise external financing at a low cost as well as to avoid debt covenant restrictions. However, they do not support the notion that the desire for manipulation stems from obtaining high bonuses or that managers may manage earnings to sell their stockholdings at inflated prices.

Likewise, Jaggi and Lee (2000) highlight that managers of companies which are in financial distress manipulate earnings if they are able to gain waivers for debt covenant violations and debt restructuring takes place or debts are renegotiated because waivers are denied.

Othman and Zeghal (2006) who attempted to develop a model based on panel-estimation techniques of 1,674 Canadian and 1,470 French firm-year observations which show that earnings management practices in both countries are notably associated with contractual debt and influential tax rates motivations. Interestingly, they also find that market-related motivations such as initial and subsequent public equity offer strong motivations in Canada reflecting a dynamic capital market.

3.3.4 Regulatory motivations

Listed companies are usually monitored for compliance with regulations, and at the same time are subjected to numerous regulations linked to accounting figures and ratios. This creates pressure for managers to manipulate earnings to show their compliance with regulations. A good example of this is presented by Lim and Matolcsy (1999) who found that Australian companies tend to manipulate earnings management when they are going public as well as to control share price. However, their findings are limited by the small sample that includes only 32 firms.

Chrisensen and Hoyr (1999) claim that one incentive for managers to manipulate earnings management is to meet regulatory standards and the informativeness of earnings. Their study overcomes the limitation of Collins and DeAngelo's study and responds to one conducted by Imhoff and Lobo (1992) that calls for an examination of the effects of managers' incentives to engage in earnings management on the informativeness of earnings while controlling for ex ante uncertainty about earnings prospects.

Another study conducted by Navissi (1999) shows that New Zealand manufacturing firms are likely to engage in earnings management in order to present evidence of financial hardship caused by the introduction of a price freeze regulation. In other words, since price freeze regulations (PFR) were established by the New Zealand government in 1970, the motivation for manipulating earnings increased due to the introduction of the 1971 and 1972 regulatory changes that allowed companies to gain price-increasing approval if they provide evidence of financial hardship.

Using a sample of American companies, Vafeas *et al.* (2003) found no evidence to support the notion that management uses share repurchases in order to exploit shareholders via earnings management; however, they suggest that earnings are manipulated upward when a company is going public in order to attract investors to the firm.

3.4.5 Political cost motivations

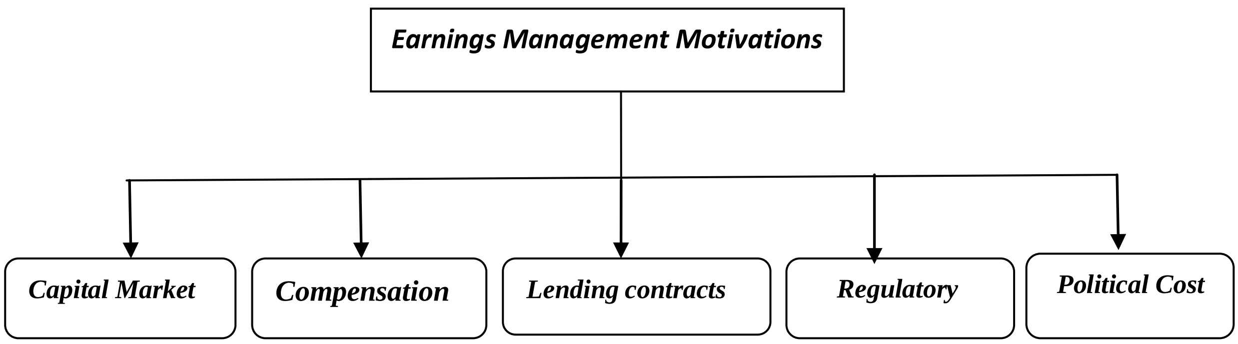
Companies may also manage earnings to show less profit in order to diminish political risk. In other words, the political cost that is proposed by Watts and Zimmerman (1986) predicts that incentives for firms to manage earnings result from political pressure to decrease prices or face the penalties that may arise from the investigation of firms which are suspected of breaching anti-trust rules or otherwise taking advantage of the general public.

Interestingly, Hang and Wang (1998) who examined the situation after Iraq's attack on Kuwait in 1991 (Gulf Crisis) suggest that oil companies are motivated to decrease their reported earnings for the third and fourth quarters in order to reduce political costs generated by potential adverse political actions such as regulations, antitrust and government. More evidence in an Australian study by Monem (2003) using a variant of the modified Jones model, reveals that Australian firms were motivated to engage in earnings management in order to reduce political costs during the period from June 1985 to May 1988.

Another incentive comes from Russian firms studied by Gonchanalyze and Zimmermann (2006) who investigated the effects of tax legislation on earnings management. Using a sample of 197 firms including both private and public, they conclude that Russian firms tend to manipulate earnings management by reporting small profits. Their findings are consistent with the common notion that companies engage in earnings management in order to reduce tax expenses.

Coppens and Peek (2005), who focused on eight European countries, *i.e.*, Belgium, Denmark, France, Germany, Italy, the Netherlands, Spain, and the U.K, investigated whether private European firms manage earnings or not. They found that, in the absence of capital market pressures, firms are still motivated to engage in earnings management, as they document that private firms avoid reporting small losses and that tax incentives affect earnings management practices.

Figure (3.1) Earnings Management Motivations



3.4 EARNINGS MANAGEMENT TECHNIQUES

The previous section presented a review of the literature in relation to earnings management motivations. This section attempts to provide information on how earnings management can be manipulated, also in relation to the previous literature. The technique of earnings management can be defined as a method or a way of selecting or violating accounting standards in order to affect financial events. Previous studies suggest that earnings may be manipulated in two main ways: accounting choices and discretionary accruals (Aljifri 2007). As mentioned earlier, managers may exploit or abuse the flexibility of accounting standards by selecting appropriate methods such as revenue recognition methods or FIFO to LIFO in inventory to manipulate earnings or violating accounting standards.

Various techniques have been illustrated to explain the methods of manipulation. Hang and Wang (1998) conclude that oil companies use inventory and special items to manipulate earnings management. For example, there is an incentive for American companies to manipulate earnings in order to reduce political costs by using inventory and special items as techniques of manipulation.

An interesting examination was made by Burgstahler and Dichcv (1997) using data from Zacks Investment Research between 1986 and 1996; they concluded that managers manipulate earnings before extraordinary, nonrecurring, and special items. Likewise, Chen *et al* (2005) presented evidence based on data collected on reversal information from annual reports over four years from 2003 to 2006 which showed that Chinese firms reverse asset impairments to decrease or avoid the potentiality of trading suspension or de-listing due to profitability- based regulation. Moreover, they found that the firms motivated by regulatory incentives provided larger amounts of other nonrecurring items, and they seemed to use impairment reversals as the main earnings management instrument in comparison with other nonrecurring earnings or accruals.

On the other hand, numerous prior studies have attempted to join hypotheses that are involved in empirical testing of whether assets sales are an incentive for earnings manipulation. For example, Poitras *et al*. (2002), who examined Singaporean companies using a sample of 44 public firms, demonstrate that some companies use flexibility of accounting methods to manipulate earnings via sales and depreciation of assets as a way of manipulation

Based on interview surveys including financial executives from public companies in US firms and using descriptive statistics and correlation analysis, Graham *et al*. (2005) document that earnings is manipulated via real economic actions: for example, delaying advertising expenditures, as opposed to manipulation by adopting accounting discretion within GAAP as employing accrual management.
Interestingly, a study conducted by Roychowdhury (2006) comprising a sample of 4,252 US firms demonstrates that firms change reported earnings by employing price discounts to temporarily improve sales, by managing overproduction to report lower costs of goods sold, and by decreasing discretionary expenditures to enhance margins.

Employing case study and using a sample of 50 of the largest British companies, Breton and Taffler (1995) claim that earnings management is practised via taxation, pension contribution, holidays, extraordinary items, creating profit via asset disposals, merger accounting, subsidiaries, non-capitalization of leased assets, concealed interest charges, and non-consolidated subsidiaries.

According to data collected adopting the quantitative method (questionnaire survey) including 100 auditors and 100 senior auditors in Greece, Baralexis (2004) suggests that most respondents confirm that earnings management is not only committed by using features of the flexibility of the GAAP, but also by contravening it. Moreover, large firms were found to have overstated profit as a motive for raising external financing, while small firms attempted to understate the profit to avoid paying more tax.

Amat *et al*. (2003) who examined audit reports of 35 listed companies in the Spanish Stock Exchange, conclude that numerous techniques are used by Spanish managers in order to practise earnings management. These techniques include expenses charged to reserves instead of including them in the income statement, expense capitalization, altering the inventory, accelerated depreciation methods, extraordinary fees for pension plans, and reduction of earnings because of future losses.

Aljifri (2007) divides the managing of earnings management into two approaches: (1) accruals accounting choices including the timing of expenses and revenue recognition, which is easier to manage, cheaper, and difficult to detect by external auditors. (2) accounting method changes (FIFO to LIFO) which are expensive, observable, and easier to detect by external auditors. Both methods may be employed to decrease or increase earnings management; however, most previous studies focus on the former approach, while the latter is still not evident. Defond and Park (1997) highlight that managers tend to shift earnings from good years to bad years; for example, if present earnings are "good" and expected earnings are "bad", managers would transfer some earnings from the good year to the bad year in order to even them out.

FIFO and LIFO are the most commonly-used methods for manipulating inventory. For example, when a company adopts or selects FIFO and LIFO, it might lead to a change in the firm’s cash flow because of the effect of such inventory cost methods on taxable earnings; however, which one they choose depends on their motivation or objective. In other words, when a firm wishes to increase reported earnings, it may use FIFO when prices go up (Aljifri, 2007).

Gunny (2010) carried out a study, consisting of all firms with available financial data from COMPUSTAT industrial covering the years from 1988 to 2002. He found that firms manage earnings to meet benchmarks by cutting discretionary investment of R&D and SG&A to decrease expenses.

Based on a questionnaire survey and data collected from Jordanian auditors, Al-Khabash and Al-Thuneibat (2009) found that perceptions are different between external and internal auditors. They concluded that external auditors believe that both income decreasing and income increasing are used in order to manipulate earnings; however, internal auditors believe that income increasing is only used for manipulating. Moreover, based on data collected via questionnaires (464) and interview survey (16) in Egypt, Kamel and Elbanna (2010) found that the main techniques for manipulating earnings involved making inadequate provision; capitalising rather than expensing expenditure; and evaluating inventory.

Based on a sample of Italian listed companies for the year 2003 with all firms whose data was collected from Datastream, Markarian *et al* (2008) investigated the relationship between the choice of R&D cost accounting and earnings management motivations. Their findings indicate that Italian firms use research development costs as a tool of manipulation. In other words, firms with low performance tend to capitalize R&D cost expenditures, while firms with superior performance are more likely to expense.

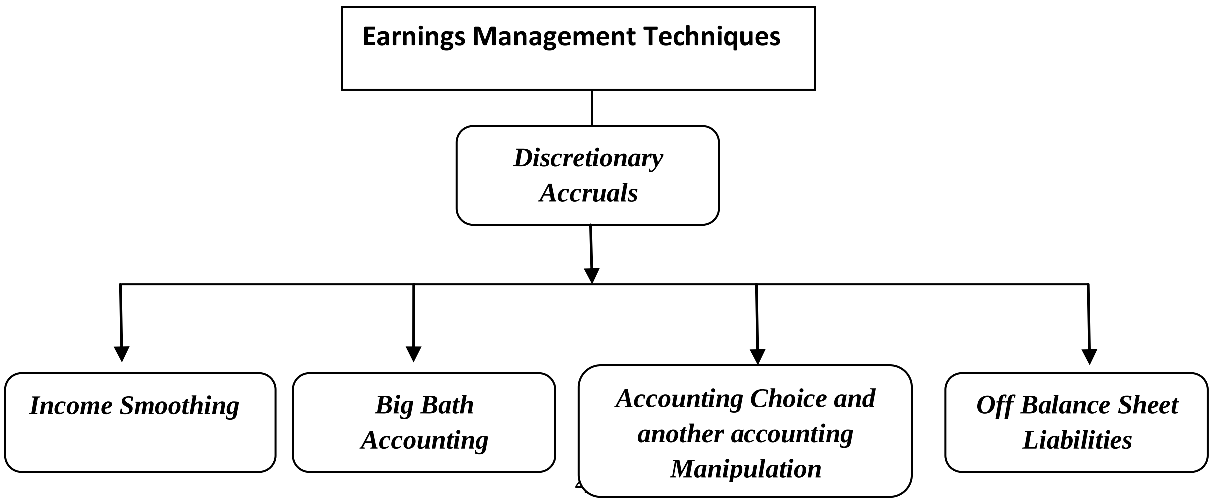
A study conducted by Nigrini *et al* (2005) indicates that Enron's report was reviewed to show a manipulation of revenue and a strong tendency toward making financial thresholds. In others words, earnings reports announced in 2001 and 2002 were analysed and show that revenue numbers were used to manipulate earnings management upwards. One accounting method used as a technique for earnings management practices provided by Rutledge (1995) found that after foreign currency translation issued in 1981 by FASB was applied to USA firms, a number of companies manipulated earnings by abusing the resolution.

Bergstresser and Philippon (2006) confirm that cash flow can be manipulated by assuming a higher or lower rate of depreciation which affects reported earnings. In addition, they state that another technique for manipulating earnings is to abuse expenses that are not reasonably expected to generate future cash flow and label them as investment expenditure.

A study conducted by Nelson *et al*. (2003) whose data is based on a questionnaire survey including 253 external auditors from USA offices indicates that earnings manipulation is managed by numerous techniques such as revenue recognition, business combinations, intangibles, fixed assets, investments, and leases and a frequently-employed technique was reserves.

Overall, the techniques of earnings management can be categorized into different groups, such as smoothing income, big bath, financial slack, big bet on the future, flushing, throw out (a problem child), change GAAP, amortization, depreciation, sale, asset exchange, operating versus non-operating income, early retirement of debt, use of derivatives, shrink the ship. There is also another division according to Pornupatham (2006) presented below.

Figure (3.2) Earnings Management Techniques



3.5 EARNINGS MANAGEMENT MEASUREMENT

Earnings management is characterized as being intangible or invisible and can be deemed successful solely if it goes undiscovered. Accordingly, studies of earnings management endeavour to find a simple way of measuring earnings management employing statistical methods. As a result, a number of techniques have emerged in accounting literature such as specific accruals or single accruals (McNichols and Wilson, 1988), aggregate accruals (Jones, 1991; Dechow *et al*., 1995), statistical distribution of earnings changes and earnings (Burgstahler and Dichev, 1997), comprising determination of thresholds (Degeorge *et al*., 1999). On the other hand, some studies have attempted to employ different methodology such as using questionnaire surveys or interviews.

McNichols (2000) presents and argues the research designs of the three main commonly-used approaches in the earnings management literature: specific accruals, total accruals, and the distribution of earnings. Specific accruals assume that profit includes cash flow and total accruals and the manipulation of profit numbers may point to manipulation of accruals. However, specific accruals are very limited in their concentration since they only detect the relationship with other accruals in business transactions and the accounting process. Total accruals include across-time and across-firms and provide the opportunity to seek other explanatory variables such as auditors and corporate governance mechanisms. The third method developed by Burgstahler and Dichev (1997) and Degeorge *et al*. (1999), attempts to test the statistical properties of earnings to explore behaviour that influences earnings. In addition to the discussion presented by McNichols (2000), another approach of earnings management investigation has emerged in order to elicit the professionals' perceptions on earnings management. For example, Nelson *et al*. (2003); Kamel and Elbanna (2010); Baralexis (2004); Al-Khabash and Al-Thuneibat (2009) and Graham *et al*. (2005) provide evidence as to how and why managers attempt to manipulate earnings management.

3.5.1 Total Accruals Models

The usual starting technique for the measurement of discretionary accruals is aggregate accruals which is the most common approach employed by the accounting literature to measure earnings management (Dechow *et al*.1995). Total accruals consist of discretionary accruals, which are representative of earnings management, and non-discretionary accruals, which managers cannot determine since they are economically determined. In other words, managers find a way to use discretionary accruals in order to exercise their discretion over accounting choices and estimates that enable them to practise earnings management and this way is supported by prior studies, such as Bartov *et al*. (2001), Dechow *et al*. (1995), Holthausen *et al*. (1995), Warfield *et al*. (1995) and Jones (1991).

As noted previously, discretionary accruals as a representative of earnings manipulation may be either positive (income-increasing) or negative (income-decreasing) based on the underlying motivation of each companies. Positive earnings management reflects numerous types of motivation such as raising stock prices for seasoned equity offering or attempting to meet analysts' forecasts; however, negative earnings management implies other motivations such as avoiding regulatory costs. Thus, most prior studies such as Becker *et al*. (1998); Jiambalvo *et al*. (2002); and Warfield *et al.* (1995) propose the use of the absolute number of discretionary accruals since manipulation can be either income-increasing or income-decreasing. In Saudi Arabia, the discretionary accruals of firms may also be positive or negative, depending on the underlying motivations of each company.

Total accruals should first be collocated in order to estimate discretionary accruals. Therefore, previous studies have presented two approaches for estimating total accruals. The first approach represents the balance sheet method employed by a large number of studies such as Healy (1985), Jones (1991), Dechow *et al*. (1995) and Kothari (2005). The balance sheet approach is computed as follows:

$TAC_t = \Delta CA_t - \Delta Cash_t - \Delta CL_t + \Delta DCL_t - DEP_t$

where:

ΔCA_t = Change in current assets in year t

$\Delta Cash_t$ = Change in cash and cash equivalents in year t

ΔCL_t = Change in current liabilities in year t

ΔDCL_t = Change in debt included in current liabilities in year t.

DEP_t = Depreciation and amortization expense in year t

The second approach is the cash flow method used by other studies such as DeFond and Subramanyam (1998), Becker *et al*. (1998), Klein (2002), Xie *et al*. (2003), Abdul Rahman (2006); Huang *et al*. (2007) and Jaggi *et al*. (2009). Under the cash flow approach, total accruals are measured as follows:

$TAC_t = Income_t – Cash\ Flow_t$

Where:

Income = Earnings before extraordinary and abnormal items in year t
Cash Flow $_t$ = Operating cash flow in year t

The differential aspects between the two approaches are investigated by Collins and Hribar (2002) who find that the cash flow approach is better than the balance sheet approach when companies experience mergers or acquisitions. In other words, some non-articulation events, such as mergers and acquisitions, may break down the association between changes in balance sheet working capital accounts and accrued revenues and expenses on the income statement (Habbash, 2010). In addition, the balance sheet approach is biased in estimating accruals for firms with discontinuing operations that may be deemed discretionary items. As a result, the study employ Cash flow method to compute TA.

3.5.2 Models for Capturing Earnings Management

Numerous accrual-based models for detecting earnings management are proposed by different studies such as the Healy Model (1985), the DeAngelo Model (1986), the Industry Model, the Jones Model (1991), the modified Jones Model (1995), and the Margin Model, Kothari *et al*. Model (2005) and recently the Stubben Model (2010) . Among these models, the Jones Model (1991) and the modified Jones Model still attract attention in studies of earnings management, since they are the most powerful test of earnings management and the best in terms of robustness according to most of the prior studies. On the other hand, the Kothari *et al*. Model (2005) has recently become the focus of accounting researchers and is characterized by controlling for the prior performance of the company. The development of measuring earnings management began with total accruals, then others models were presented in the accounting literature as follows:

3.5.2.1 The Healy Model (1985)

The Healy Model (1985) attempts to measure earnings management by employing mean aggregate accruals (measured by lagged total assets) in the computing period as the measure of nondiscretionary accruals. This model was the first attempt to measure manipulation. Healy's argument was that systematic earnings management takes place in every period; thus, accruals were defined as the difference between reported earnings and cash flow from operations. Measuring discretionary accruals as total accruals for the period as follows:

$$\mathbf{EDA_{it} = TA_{it} / A_{it-1}}$$

Where:

EDA_{it} = Measured discretionary accruals for the period;
TA_{it} = Aggregate accruals for the period;
A_{it-1} = Overall assets at the beginning of the period

3.5.2.2 The DeAngelo Model (1986)

The second attempt was provided by DeAngelo (1986) who avoided the shortcomings of the Healy Model (1995) by ignoring a benchmark for what expected accruals may be (Aljifri, 2007). According to this model, discretionary accruals are measured by calculating the difference between total accruals in the current period and total accruals in the previous period. This model is presented below:

$$\mathbf{EDA_{it} = (TA_{it} - TA_{it-1}) / A_{it-1}}$$

Where:
EDA_{it} = Estimated discretionary accruals for the period;
TA_{it} = Total accruals for the current period;
TA_{it-1} = Total accruals for the prior period;
A_{it-1} = Total assets for the prior period.

However, this model was criticized for misclassifying non-discretionary accruals as discretionary accruals, and the prior year, which could be employed as a benchmark for what anticipated accruals should be, could comprise earnings manipulation (Aljifri, 2007).

3.5.2.3 The Jones Model (1991)

A more influential model was presented by Jones (1991) and measures non-discretionary accruals including plant, property and equipment variables in order to control any change in non-discretionary accruals stemming from depreciation and arising from changes in business activities of the company.

$$TAC_{it} = \alpha\,(1 / TA_{it-1}) + \beta_1\,(\Delta REV_{it} / TA_{it-1}) + \beta_2\,(PPE_{it} / TA_{it-1}) + \varepsilon_{it}$$

Where:

TAC_{it} = aggregate accruals.

TA_{it-1} = the book value of total assets of firm i at the end of year t -1,

$\Delta REVit / TA_{it-1}$ = sales revenues of firm i in year t less revenues in year t – 1 scaled by TA_{it-1},

$PPE\ it / TA_{it-1}$ = gross property, plant and equipment of firm i at the end of year t scaled by TA_{it-1},

$\alpha\ \beta1\ \beta\ 2$ = estimated parameters.

ε_{it} = the residual

The Jones model has attracted a large number of studies such as Subramanyam (1996) and Guay *et al*. (1996) which suggest that the Jones Model is more powerful than others models (the DeAngelo Model and the Healy Model) since they produce discretionary accruals that are consistent with the opportunistic accruals and measure performance hypotheses. Moreover, it has been found that using the Jones Model with cross-section provides more control than using it with time series. In addition Dechow *et al* (1995) find that the Jones Model is considered the most effective model for detecting earnings management. However, Aljifri (2007) claims that this model ignores the manipulation of sales because it assumes that all sales in the period are nondiscretionary and estimates are stationary and, over time, may generate a survivorship bias.

3.5.2.4 The Modified Jones Model (1995)

The shortcomings of the Jones Model (1991) was a focus of Dechow *et al.* (1995) who presented a more effective model than the Jones Model for detecting earnings management. Dechow *et al.* (1995) believe that the Jones Model (1995) disregards the potentiality of revenues manipulation, which is considered as non-discretionary according to the Jones Model. Therefore, the modified Jones Model takes into consideration property, plant, and equipment and the change in revenues are adjusted for changes in receivables. In other words, the modified Jones Model regresses aggregate accruals on gross property, plant, and equipment and changes in cash revenues to present coefficients that are then employed to measure unmanaged accruals as follows:

$$\mathbf{TAC_{it} / A_{it} = \gamma 0\ (1/A_{it-1}) + \gamma 1\ ((\Delta REV_{it} - \Delta REC_{it})/A_{it-1}) + \gamma\ 2\ (PPE_{it} / A_{it-1}) + \varepsilon_{it}}$$

Where:

TAC_{it} = Aggregate accruals.

TA_{it-1} = the book value of total assets of firm i at the end of year t -1,

$\Delta REV_{it} / TA_{it-1}$ = sales revenues of firm i in year t less revenues in year t – 1 scaled by TA_{it-1},

ΔREC_{it} = the change in accounts receivables.

PPE_{it} / TA_{it-1} = gross property, plant and equipment of firm i at the end of year t scaled by TA_{it-1},

$\alpha\ \beta 1\ \beta 2$ = estimated parameters.

ε_{it} =The residual

Numerous studies have investigated the performance of discretionary accrual models and suggest that the Jones Model and the modified Jones Model are the most effective models for detecting earnings management (Habbash, 2010). Although the two models were presented as time series, many studies such as Subramanyam (1996) and Bartov *et al*. (2001) who compare these models in terms of cross-sectional and time series, document that the Jones and modified Jones Models are more powerful in cross-sectional than in time-series at detecting earnings management. In other words, the cross-sectional Jones Model controls for year- and industry-specific influence; thus, the cross-sectional model is estimated by year and industry. Moreover, the cross-sectional model is characterized by having larger samples and more observations and does not presume the stationarity of the discretionary accrual models (Subramanyam 1996; Peasnell *et al.* 2000b). One drawback is the suggestion made by the cross-sectional model that the discretionary accrual model is similar for every firm in an industry, regardless of its operating strategy or the phase in its product life cycle. This is, if companies in an industry are not homogeneous, the measured discretionary accrual model may involve measurement errors (Dechow *et al.* (1995).

3.5.2.5 Performance Matched Discretionary Accruals

Numerous studies have raised the importance of performance when earnings management is computed. For example, Dechow *et al.* (1995) and Kasznik (1999) suggest that the findings estimated by the Jones Model imply that discretionary accruals are significantly positively associated with the return on assets (ROA). To solve this issue of performance associated with misspecification, a number of studies conducted by Kasznik (1999), Bartov *et al.* (2001) and Kothari *et al.* (2005) exclude the possible influences of this correlation between discretionary accruals and earnings performance by using a matched-firm or portfolio method to adjust the discretionary accruals.

The pioneer study among accounting literature which discusses this issue is that of Kothari *et al.* (2005) who argue that discretionary accruals, as measured by both the Jones and the modified Jones Models, might involve severe measurement error in discretionary accruals since these models disregard the performance of the firm. Thus, the discretionary accruals are measured by the residuals of the following cross-sectional model:

$$\mathbf{TAC}_{it} = \acute{\alpha}\,(1 / \mathbf{TA}_{it-1}) + \beta_1 (\Delta\,\mathbf{REV}_{it} - \Delta\,\mathbf{REC}_{it}) / \mathbf{TA}_{it-1} + \beta_2\ (\mathbf{PPE}_{it} / \mathbf{TA}_{it-1}) + \beta_3\ \mathbf{ROA}_{it-1} + \varepsilon_{it}$$

3.5.2.6 Discretionary Revenues Model (2010)

Stubben (2010) presented the discretionary revenues model which tests the capability of revenue and accrual models to reveal simulated and actual earnings management. He claims that revenue models are, well-developed, less biased, and better than the commonly-used accrual models, since the estimates from revenue models can be appropriate as an estimate of revenue management or as a proxy for earnings management. However, one disadvantage of this model is that it cannot detect the manipulation of expenses.

3.6 SUMMARY AND GAP IN LITERATURE

A review of the literature shows that most studies identify the motivations and techniques of earnings management in one way. In other words, they often attempt to test an appropriate sample of firms, and so tend to adopt statistical methods of earnings management that may not be very effective in identifying earnings management practices in all cases. For example, Choi *et al*. (1999) use different methods of discretionary accruals and samples (re-examining studies by different methods) to confirm that the motivations to manage earnings are less effective than initially speculated among studies. Interestingly, Geiger and Smith (2010) suggest that there is a need for further studies linking perceptions to reported earnings management practice. In addition, although the measurement of earnings management has been employed by a large number of studies, they still suffer from numerous weaknesses that imply various findings in the same culture and country. Therefore, the current study aims to investigate earnings management practices by obtaining the perceptions of practitioners who observe cases of earnings management on a regular basis and are capable of providing useful information due to their wide knowledge and experience.

It is hoped that this study will present a better understanding of managerial motivations, and earnings management techniques. So far there has been a great deal of research into earnings management motivations and techniques using statistical methods; however, few studies have offered a critical understanding of these problems through a survey such as interviews or questionnaires and understanding the nature and problems of earning management practices is crucial for regulators to put an accurate interpretation on such findings. Moreover, a review of the previous literature shows that the Middle East region has not been given attention regarding the earnings management practices. By doing this, the quality of information available to the public may be improved, and thus, users of financial reporting might be better served. Overall, one of the objectives of this thesis is to increase the understanding of differences in perceptions concerning the practices of earnings management “motivations and techniques” by different national cultures. Thus, this study contributes to the existing literature by eliciting perceptions in Saudi Arabia characterized by its different culture, ownership structure, and regulations.

Chapter Four:
A REVIEW OF THE LITERATURE ON THE ROLE OF CORPORATE GOVERNANCE MECHANISMS AND EXTERNAL AUDIT IN CONSTRAINING EARNINGS MANAGEMNT

4.1 INTRODUCTION

The previous chapter discussed the accounting studies that have looked at earnings management practices. It attempted to provide an overview of the definition of earnings management, earnings management incentives, earnings management techniques, and the attempts at measuring earnings management. This chapter aims to identify how monitoring mechanisms, whether corporate governance and external audit, constrain earnings management by reviewing the findings of previous studies. In other words, this chapter presents the literature concerned with the role of internal corporate governance, ownership structure, and external audit factors on mitigating earnings management. The chapter is structured as follows: Section 4.2 presents studies concerning the role of internal corporate governance on earnings management. Section 4.3 provides studies concerning the role of ownership structure on mitigating earnings management. Section 4.4 illustrates the role of external audit factors on reducing earnings management and Section 4.5 provides a brief summary of the chapter.

4.2 THE ROLE OF INTERNAL CORPORATE GOVERNANCE

Since the financial crisis that occurred in 2008 affecting a large number of countries, corporate governance has been considered a mainstream concern - a staple of debate in companies boardrooms, among academics, legislators, and throughout the business world. In addition, technological progress, liberalization, opening up of financial markets, trade liberalization, and the mobilization of capital have increased the importance of corporate governance as an important framework for corporations (Claessens, 2000).

Although many attempts have been made to define corporate governance, there is no consensus regarding its meaning since it involves numerous factors which can differ from region to region, such as objectives and the mechanisms of implementation. One of the most popular and implicit definitions of corporate governance is that introduced by Adrian Cadbury, who was a pioneer in raising the awareness and presenting the debate on corporate governance reforms, in the Cadbury Report, “Corporate governance is the system by which companies are directed and controlled” (Cadbury Committee, 1992). Moreover, MacAvoy and Millstein (2003) define corporate governance as a set of structures specifying authority and responsibility for the conduct of an organisation and its management. Parkinson (1994) defines corporate governance as the process of supervision and control aimed at ensuring that a firm's managers act for the benefit of shareholders.

The concept of internal corporate governance can be attributed to Berle and Means in 1932 who debated the separation of corporate control and ownership (Colarossi *et al*., 2008). Jensen and Meckling, (1976) highlight that managers (the agent) act on behalf of the shareholders (the principal), who are the real owners of the company. However, based on agency theory, the issues related to the separation of ownership and management might boost executives to collude against owners in order to increase their own personal wealth (Rahman and Ali, 2006). Several factors, including job security, may be a catalyst for managers to manipulate reported earnings. Jiraporn *et al.* (2008) argue that firms that are more informationally complicated might utilise earnings management since a higher degree of asymmetric information makes it more opaque for shareholders to monitor managers. Thus, in the absence of effective monitoring procedures within a company, managers are more likely to take actions that deviate from the benefit of shareholders, such as managing earnings, which leads to increased agency costs.

According to ***agency*** theory, owners can structure monitoring (corporate governance) systems from different perspectives. Fama and Jensen (1983) suggest that a system that can separate decision management from decision control is needed to limit ***agency costs.*** Core *et al*. (1999) suggest that there are greater agency issues in listed US firms with weaker governance mechanisms; therefore, corporate governance can introduce a desirable system that may limit the power of managers to disregard the interests of shareholders, thereby decreasing agency costs. Accordingly, a large number of studies such as Fama, (1980), Fama and Jensen, (1983) and Williamson (1988) argue that corporate governance mechanisms constrain managerial opportunism. According to ***institutional theory***, companies might adopt practices or regulations as a result of coercion from a legislator who imposes some practices by force in order to improve organizational effectiveness. On the other hand, companies may accommodate themselves on similar organizations in their field which they perceive to be more legitimate or successful (DiMaggio and Powell, 1983). However, there is no prediction that the adoption of these regulations will improve organizational effectiveness.

Over the last two decades, more attention has been paid to the role of different corporate governance characteristics as monitoring mechanisms which provide more reassurance, notably for investors and regulators; these include mechanisms such as independent board and sub-committees that are likely to protect the shareholders. For instance, the former SEC chairperson (Levitt, 1998) suggests that corporate governance plays a significant role; thus, the SEC should pay more attention to these mechanisms. The reforms of corporate governance practice have brought about an increase in the appointment of independent or non-executive directors on corporate boards and sub-committees. These reforms include a number of regulations established to enhance the role of corporate governance, mainly that related to disclosure. For instance, the Sarbanes–Oxley Act (2002) was a reform of the disclosure of corporate governance information, which was presented following accounting scandals concerning a number of firms such as Enron, Tyco International, Adelphia, Peregrine Systems and WorldCom. According to Chang and Sun (2009) SOX has had a significant effect on corporate governance practices. They stress that there has been a negative relationship between earnings management and board and audit committee independence after SOX which was not seen in the pre-SOX period. In addition, the Saudi Arabia government has recently issued many reforms regarding corporate governance, such as the mandatory establishment of sub-committees, a majority of non-executives on boards and the disclosure of corporate governance implementation; however, these reforms have not yet been examined by academic researcher.

Agency theory anticipates that boards will enhance the integrity of their financial reporting through monitoring management (Peasnell *et al*, 2005). In terms of audit committee, ***agency theory*** assumes that the role of the audit committee is to monitor and oversee the integrity of financial reporting. Much emphasis has been placed on the fact that the audit committee's role attempts to prevent fraudulent accounting statements (Klein, 2002).

In general, the previous academic literature has reached some significant conclusions about the relationship between earnings management and internal corporate governance. For example, Shen and Chih (2007) and Cornett *et al.* (2008) show that companies with beneficial corporate governance tend to alleviate their earnings management. However, Ali Shah *et al.* (2009) declare a positive relationship between corporate governance and earnings management. Accordingly, this section aims to review the literature that attempts to determine a relationship between internal corporate governance mechanisms and earnings management.

4.2.1 Effectiveness of Board Characteristics

As mentioned above, ***agency theory*** anticipates that boards will enhance the integrity of their financial reporting by monitoring management. Corporate boards are responsible for monitoring managerial actions, notably those related to performance, financial disclosure, and tasks delegated to sub-committees (Vafeas, 2005). The following section presents an overview of the relationship between board characteristics and earnings management.

4.2.1.1 Board independence

According to ***Agency theory***, Zahra and Pearce (1989) suggest that the presence of outside directors may affect the quality of directors' information and the decisions they take, which may lead to enhanced performance. Overall, a large number of studies Peasnell *et al*. (2005); Bedard *et al*. (2004); Klein (2002); Xie *et al*. (2003); Benkel, *et al*. (2006); Niu (2006) and Osma (2008) have documented a negative relationship between the presence of outside directors and earnings management, thereby supporting agency theory.

Based on a sample of US firms collected between 1992 to 1994, and using the Jones 1991 model to measure discretionary accruals, Xie *et al*. (2003) found that where there is a large percentage of independent directors there is less likely to be earnings management. However, this study uses only two control variables (size and year) and disregards other control variables such as managerial ownership, leverage, cash flow that are considered important in the model. a study conducted by Klein (2002) using data from 1991 to 1993 from a sample of 687 U.S. firms, uses many control variables such as firm size, growth, performance, leverage and managerial ownership. She documents a statistically negative association between earnings management (measured by the Jones model) and the percentage of independent directors on the board.

Peasnell *et al*. (2000a) used information from UK firms to investigate the relationship between earnings management and corporate governance. They found that firms with a higher percentage of non-executives is associated with income-increasing accruals when earnings fall beneath the threshold. Interestingly, they also investigate whether the relationship between board characteristics and earnings management differs between the pre- and post-Cadbury periods and reveal that managers only managed earnings downward in the post-Cadbury period; however, both techniques of earnings management (downward and upward) were found in the pre-Cadbury periods.

Park and Shin (2004) investigated the influence of board characteristics on the level of discretionary accruals in a sample of 539 firm-years in Canada. Adopting the modified Jones model, they assert that the presence of non-executives does not reduce earnings management; however, non-executives from financial intermediaries and active institutional shareholders do constrain earnings management. Moreover, manipulation is found to be constrained by officers of financial intermediaries on the board and the tenure of non-executives. Likewise, based on a sample of Canadian firms in the years 2001-2004, Niu (2006) who applied the Kothari *et al*. (2005) model as a measurement of earnings management to investigate the relationship between corporate governance mechanisms and earnings quality, found that the level of independence of board composition is negatively associated with the level of abnormal accruals. The findings of Niu's (2006) study is characterized as having more reliability since it came after reforms presented by the Sarbanes–Oxley Act (2002) which has had a beneficial influence on corporate governance practices.

A sample of 666 Australian firm-year observations for the fiscal years 2001, 2002 and 2003 used the DeAngelo (1986) model as measure of earnings management, Benkel, *et al*. (2006). investigated whether boards of directors and audit committees with a large percentage of independent members are associated with the incidence of earnings management. They conclude that a higher percentage of outside directors on the boards and audit committees is related to low levels of earnings management.

A study undertaken by Abdul Rahman and Ali (2006) which employed the cross-sectional modified version of the Jones model, based on a sample of 97 Malaysian listed firms over the period 2002-2003, claims that there is insignificant relationship between board independence and the incidence of earnings management. Their explanation for the insignificant association is that the role of the board of directors is conceived as inefficient in performing their monitoring duties due to management dominance over board matters. Likewise, based on a sample of 144 Indonesian firms using various measures of earnings management, Siregar and Utama (2008) examined the influence of ownership structure, firm size and corporate governance practices on earnings management, using firms listed on the Jakarta Stock Exchange. Their findings do not provide evidence that a firm with a high proportion of outside directors on the board is less likely to engage in informative earnings management. Unlike previous Asian studies, using evidence from Hong Kong, Jaggi *et al*. (2009) relying on a sample of 770 firm-year observations and employing the Kothari *et al*. model (2005) as a measure of earnings management, found that the presence of outside directors on the board provides influential monitoring of earnings management. However, their findings are moderated in family-controlled companies, as it was seen that increasing the percentage of outside directors to raise board monitoring is unlikely to be inefficient in family-controlled firms. A discrepancy in the findings can be observed among Asian studies, which may be due to a number of reasons, notably the size of sample, control variables used, earnings management proxies, and ownership structure.

Based on a sample of 155 Spanish listed firms during the period 1999–2001, a study by Osma and Noguer (2007) investigated whether board characteristics are effective in reducing earnings management. They employed the Jones (1991) model and the Marginal model (Peasnell *et al*. 2000b) concluding that the appointment of institutional directors is important for restraining earnings management. However, their investigation covered the period prior to the reforms in corporate governance. Moreover, Dimitropoulos and Asteriou (2010) who investigated the impact of board independence on earnings management using a sample of 97 non-financial firms listed on the Athens Stock Exchange in Greece, show that board independence is negatively associated with earnings management practices.

Overall, a large number of previous empirical results have concluded that boards with a high percentage of independent outside directors reinforce the integrity of the financial reporting process and provide greater assurance to shareholders on the quality of reported earnings. However, a few studies have shown peculiar findings, such as that conducted in Asian countries, declaring that board independence may not be effective in mitigating earnings management. Their findings may be due to their sample, control variables used, and the nature of ownership structure and the corporate governance practices. This study argues that more outside directors on the board is more likely to constrain earnings management in Saudi Arabia.

4.2.1.2 Board size (number of board members)

Board size is deemed another pivotal element in board characteristics which may influence earnings management practice. According to the Saudi Code of corporate governance, the number of board members should be no less than three and no more than eleven members. There is disagreement regarding the effect of board size. For example, Goodstein *et al.* (1994); Jensen (1993) and Yermack (1996) claim that smaller boards, between four to six members, may have the ability to make beneficial decisions and monitor CEO’s behaviour. The other view argues that small boards may not be effective in monitoring the behaviour of top management (Zahra and Pearce, 1989). However, the majority of prior studies argue that larger boards with varied expertise are capable of developing the synergetic monitoring of the board to mitigate the incidence of earnings management (Xie *et al*. 2003; Peasnell *et al*. 2005). A plausible explanation of this view is that smaller boards are expected to be dominated by blockholders or executives while larger boards have a variety of members from different positions.

Based on a sample collected from 282 US firms for the years 1992, 1994 and 1996, and employing the Jones model (1991), Xie *et al*. (2003) investigated the effect of board size on earnings management. They found that earnings management practices may not occur with firms that have larger boards. Likewise, Yu (2008) suggests that small boards are less likely to be helpful in detecting earnings management. A study conducted by Habbash (2010) who used a sample of 471 UK firms covering the period between 2003 and 2006 confirmed that a large board is more likely to constrain earnings management. His findings reinforce the argument of John and Senbet (1998) that an increase in board size increases the board's monitoring capacity.

Opponents of large boards argue that they provide a lack of coordination and communication between members. For example, based on samples of 97 and 1,097 Malaysian firms respectively, Abdul Rahman and Ali (2006) and Kao and Chen (2004) examined the effectiveness of board size on the level of earnings management. Both studies found that there is a positive relationship between board size and level of earnings management.

The various findings found regarding board size, whether positive or negative association with earnings management, do not need to be criticised since both effects are justified by the previous studies and are logically acceptable. However, the second view that argues that larger board are more effective may be more appropriate than the first because this view assumes that a large board has diversity of experience and more independent members. Moreover, a large board is expected to reach more astute decisions than a small one. Accordingly, this study argues that large Saudi boards may constrain earnings management.

4.2.1.3 Board Meetings

While no specific number of meetings is mandated by the Saudi Code of corporate governance, members of boards of directors should meet at least four times a year in order to endorse the quarterly financial statements. The number of meetings has been employed in prior studies as an indicator of a board's diligence, since inactive boards are less likely to monitor management effectively. It is argued that directors on boards that meet frequently are more likely to discharge their duties in line with shareholders' interests since more time can be devoted to controlling issues such as earnings management, conflicts of interest and monitoring management (Habbash, 2010).

A study undertaken by Xie *et al*. (2003), employing a sample of 282 firm-year observations, highlights that a board that meets frequently may have time to look at issues such as earnings management. Their findings conclude that earnings management is significantly negatively associated with the number of board meetings. Moreover, Vafeas (1999) found a positive relationship between board meetings and performance.

However, most studies found an insignificant relationship between board meetings and earnings management. For example, Ebrahim (2007) and Habbash (2010) who used a different sample and period found that the number of meetings may not restrict earnings management practices. Habbash (2010) justified his finding by stating that frequent meetings may not always be a characteristic of an active board of directors. Adams *et al*. (2009) carried out a large survey to determine the roles of outside directors as advisors and monitors of management. He claims that directors who mainly control management perceive that they participate less in boardroom discussions than other directors and that the CEO often asks them for advice.

It is worth pointing out that the studies conducted to investigate board meetings and earnings management have been low-key, thus their claims cannot to be generalised. Therefore, further investigation is needed in order to determine whether this element is effective or not. This study aims to conduct an investigation into the effect of board meetings on earnings management practices. Accordingly, this study argues that fewer meetings by board members may provide an incentive for managers to act opportunistically in order to increase their wealth.

4.2.1.4 CEO Duality

The Saudi Code of Corporate Governance mandates the separation of the role of chairman of board of directors and any executive position in a company. This may be helpful in ensuring that the CEO will not hold excessive power to handle daily business operations. In other words, CEO duality is an opportunity for concentration of executive power that can lead to management indiscretion; thus, a separate CEO may provide more effective monitoring (Cornett *et al.*, 2008). Under ***agency theory***, the chair of the board should be independent, since a CEO with excessive power can easily manipulate earnings management (Abdul Rahman and Ali, 2006).

In Saudi Arabia, most companies are family companies which grow and become public companies; thus, the separation may exist in accordance with the Saudi Code of corporate governance; however, a blood relationship between the CEO and the chairman is often a trait in some companies which leads to an impairment of the power of the chairman toward accountability. This issue is often found in countries that have weak investor protection. For example, Rashid (2009) states that in Bangladesh outside directors have a close relationship with inside board members which leads to an impairment of their independence.

Prior studies have documented that firms with duality function may not be able to discharge their operations properly and are expected to be subjected to accounting enforcement actions by the SEC for infringement of GAAP (Abdul Rahman and Ali, 2006). Klein (2002) using a sample of 687 U.S firms and the Jones model (1991) found that the aggregate of discretionary accruals is positively associated with a CEO who holds a position on the board’s nominating and compensation committee. His findings suggest that a CEO with too much power over board responsibilities can easily manage earnings. Furthermore, based on a sample of 27 Turkish banks operating in the market in the period 2001-2004, Kaymak and Bektas (2008) found that duality and board tenure are negatively associated with performance. Their findings support the view of ***agency theory*** that the board chair should be independent, since a CEO with excessive power can easily manipulate earnings management (Abdul Rahman and Ali, 2006).

Using a sample of 384 listed companies in the manufacturing sector in the Indonesia Stock Exchange over the period 2005-2007, Murhadi (2009) investigated the role of good corporate governance in reducing earnings management. He highlights only two variables as having a significant effect on earnings management and one of them is duality. In other words, his findings indicate that a higher rate of duality is associated with high earnings management practices. Abdul Rahman and Ali (2006) used a sample of 97 Malaysian firms employing the cross-sectional modified Jones model to determine the effectiveness of monitoring functions of boards of directors, audit committees and concentrated ownership in constraining earnings management. They found that there is an insignificant relationship between duality and earnings management.

The examination of the effect of duality on earnings management may be limited since most companies in the USA and the UK separate the role of the two positions which causes studies to pay less attention to this than to other characteristics. According to agency theory, this study argues that the separation of the positions of CEO and chairman will lead to constraining earnings management in Saudi companies.

4.2.1.5 The number of Saudi royal family members on the board of directors:

Accounting literature has for many years concentrated on the effect of cultural factors on the development of accounting practices. Of course, culture, environment and political system are huge factors in accounting practices and corporate governance. Abdul Rahman and Ali (2006) assert that previous studies have shown evidence confirming that accounting practices and disclosure are a function of the nation's cultural values and cultural heritage which influence attitudes towards business-related fraud. Although Abdul Rahman and Ali (2006) did not find any effect of Malay directors' characteristics on earnings management, they argue that the existence of Malay directors on the board of a company and on audit committees may restrain opportunistic earnings management.

This study argues that there may be situations where several people are more powerful than others, so that people who have a greater power influence the behaviour of others to get things done as Clark (2004) argued. Many members of the royal family are appointed as directors of boards and serve on boards as managerial members; therefore, they may monitor the management closely, thereby decreasing possible mismanagement and wrongdoing. ***Agency theory*** suggests that high ownership on the board provides a better corporate governance structure, which leads to high quality financial reporting (Sanchez and Meca, 2005; Muth and Donaldson 1998). Thus, it is argued that the presence of royal family directors on the board of a company may deter opportunistic earnings management.

4.2.1.6 Nomination and remuneration committees

Nomination and remuneration committees have not been given as much attention by prior studies as audit committees because most studies consider them to have no direct effect on the quality of financial reporting or performance. However, the principal cause of earnings manipulation ensues from the fact that managers seek to increase their compensation and private benefits from disclosing false earnings by manipulating expenses of shareholders. On the other hand, serious problems may arise when insiders serve on remuneration or nomination committees as this can lead to more interventions in the design of committee structure.

For example, Xie *et al.* (2003) found that compensation committees may affect the market perception of golden parachute adoption. Also, concerns increased in particular when CEOs or executives served on remuneration committees as this led to ***agency problems*** between management and shareholders (Anderson and Bizjak, 2003). In Saudi Arabia, nomination and remuneration committees are integrated and designed to review the terms and conditions of employment of managers and boards of directors. Perhaps the existence of a CEO or executive serving on nomination and remuneration committees might be an incentive to act opportunistically by obtaining high levels of compensation or exploit his position to make the decisions for the management's benefit. Some prior studies have mentioned the role of such committees; for example, Xi *et al*. (2003) also observe that executive committees might not play a direct role, whereas audit or finance committees might have a more direct impact on controlling earnings management. Laux's (2008) implication is that there is a relationship between the structure of board committees and earnings management. In addition, Sun *et al*. (2009) suggest that intelligent compensation committees are capable of generating strong monitoring which leads to preventing management from controlling earnings management. Petra and Dorata (2008) suggest that independent directors of remuneration committees are better able to accomplish their duties objectively. Moreover, Dahya and McConnell (2007) also found that more outside directors sitting on committees leads to better performance as a result of independence.

Based on prior results by Klein (1998, 2000) that there is a negative association between board independence and whether the CEO sits on the board's nomination committee; a study also conducted by Klein (2002), who employs a dummy variable, found a positive relationship between the presence of the CEO on the nomination committee and earnings management. In other words, the independence of this committee is measured by the presence of the CEO which leads to an impairment of its role due to less independence. Based on a sample of 155 Spanish firms, contradicting agency theory, Osma and Noguer (2007) investigated the role of boards' committees in constraining earnings management and found that an independent nomination committee has a positive significant association with earnings management.

Indeed, to date there has been little research into the role of remuneration and nomination committees in general and only one study explores the effect of the presence of the CEO on the remuneration committee on the incidence of earnings management. Accordingly, this thesis aims to extend the literature regarding the impact of remuneration and nomination committees on earnings management.

4.2.2 Effectiveness of Audit Committee Characteristics

The recent financial crises of many companies resulting notably from accounting manipulation has raised questions about the role of audit committees which are expected to protect investors' interests and monitor opportunistic managerial behaviour (Ebrahim, 2007). Audit committees might be responsible for alleviating the ***agency problem*** between the firm and the outside shareholders by monitoring its financial reporting. In other words, ***agency theory*** expects the audit committee to monitor and oversee the integrity of financial reporting. Thus, much emphasis has been placed on the fact that the audit committee's role is to prevent irregular fraudulent accounting statements (Klein, 2002). In Saudi Arabia, the audit committee is a committee appointed by a company which includes three members or more, at least one of whom should be a specialist in financial affairs. The pivotal role of the audit committee is to enhance communication and mitigate the conflict between the external auditor and management. Moreover, it is expected to constrain potential manipulation by monitoring managerial behaviour and providing the external auditor with the necessary information. The following section discusses how existing studies view the effectiveness of audit committees in reducing earnings management practices.

4.2.2.1 Audit committee independence

Independence of audit committee members has been the focus of most previous studies since the popular theme is that independent audit committee members would provide better financial reporting and this is generally confirmed by existing empirical studies (Lin *et al*. 2006). Specifically, a study conducted by Klein (2002) using a sample of 692 US firms showed a negative association between earnings management and the proportion of independent directors on the audit committee. Moreover, using a sample of 300 US firms for the year 1996, Bedard *et al*. (2004) studied the role of audit committee characteristics, namely expertise, independence and activity, on the extent of earnings management. They employed signed earnings management which includes the level of income-increasing and income-decreasing discretionary accruals using the modified Jones (1995) cross-sectional model. Their findings reveal that aggressive earnings management is negatively associated with fully independent audit committees. However, they only adopt one measure of earnings management and use signed earnings management which would make their result quite biased.

Despite selecting a sample of 106 publicly-held corporations in the USA, Lin *et al.* (2006), who examined the relationship between certain characteristics of audit committees that were recommended by the BRC in 1999, such as independence, failed to find evidence supporting the theory that independent audit committees can reduce earnings management. Their findings could be criticized as their measure of earnings management was not underlined in discretionary accruals as a measure for earnings quality and their sample only included one year, which cannot be reliable. Likewise, using a sample of 282 US firms for the years 1992, 1994 and 1996, Xie *et al.* (2003) investigated the effectiveness of a number of characteristics of the audit committee on constraining aggressive earnings management. They adopted the Jones (1991) model to estimate earnings management and their findings indicate that audit committee independence is not significantly associated with reduced levels of earnings management.

European countries, such as the UK and France, have also been given attention in this investigation; for example, a study conducted by Piot and Janin (2007) examined the SBF 120 Index of French firms between 1999 and 2001 and found that the existence of audit committees and their independence have a great effect on constraining the level of earnings management. On the other hand, a study by Peasnell, *et al.* (2005) showed no strong evidence to reinforce the view that the existence of an audit committee influences the extent of income-increasing manipulations to meet or exceed earnings management thresholds. Likewise, evidence by Osma and Noguer (2007) investigating the influence of the presence of an audit committee in reducing earnings manipulation for Spanish firms suggest that the presence of an audit committee does not play a vital role in constraining earnings management.

Evidence from Asian countries provided by Bradbury (2006) who investigated the relationship between audit committee composition and accounting quality, as estimated by discretionary accruals, selected a sample of 139 firms from Singapore and 113 firms from Malaysia. His findings reveal that audit committee independence is associated with higher earnings quality; however, the association showed only when the discretionary accruals were income-increasing, indicating that audit committees are influential in the financial reporting process by constraining the level of income-increasing earnings management. Furthermore, Abdul Rahman and Ali (2006) examined the effectiveness of audit committees in constraining earnings management using a sample of 97 Malaysian firms and found an insignificant relationship between independent audit committees and earnings management. Likewise, Siregar and Utama (2008) explored the effectiveness of many corporate governance practices on earnings management selecting Indonesian firms on the Jakarta Stock Exchange. Although their sample included 144 firms and covered the periods 1995–1996, and 1999–2002, they failed to detect a relationship between audit committees' independence and earnings management.

From another region, using a sample of 666 Australian firms covering the period 2001, 2002 and 2003, Benkel, *et al*. (2006) confirmed that the level of aggressive earnings management can be reduced by a high proportion of audit committee independence. Likewise, Davidson *et al*. (2005) examined the effectiveness of governance structure in restraining the level of earnings management by employing a cross-sectional sample of 434 listed Australian firms. Their findings are consistent and reinforce the expectation that independent audit committees are capable of constraining earnings management.

The contradictory findings of previous studies are not surprising since there are many factors which may affect the audit committees' role, such as ownership structure or the existence of an audit committee, which, without taking into account its independence and competence, cannot ensure the competence of the monitoring process or its efficiency to detect and constrain manipulation. This study argues that an independent audit committee is capable of constraining earnings management in Saudi companies.

4.2.2.2 Audit committee size

Saudi listed companies have been required to establish an audit committee that should include at least three members. The size of audit committee is employed as an indication of resources available (Habbash, 2010) which may reflect the importance of better communication and coordination. Previous studies have investigated the effect of size of the audit committee on mitigating earnings management. For example, based on a sample of 106 US firms, Lin *at al*. (2006) investigated the relationship between certain characteristics of audit committees that were recommended by the BRC in 1999, such as size, independence, financial expertise, activity, and stock ownership. They found a negative association between audit committee size and earnings restatement.

However, using a sample of 282 US firms covering the period between 1992 and 1994 Xie *et al*. (2003) found no potential effect or relationship between audit committee size and the level of earnings management. Likewise, Bedard *et al*. (2004), using a sample of 300 US firms in the year 1996, found no significant relationship between audit committee size and aggressive earnings management. Moreover, Baxter and Cotter (2009) using a sample collected from Australian listed companies in 2001, studied whether the size of audit committees is related to earnings quality. Their findings maintain that there is no relationship between audit committee size and earnings quality in either measure. By also using financial restatements and a small sample (41 firms), a study conducted by Abbott *et al*. (2004) which investigated the relationship between audit committee size and financial reporting quality, contended that audit committee size had no significant impact on financial reporting quality.

Up to now there has been no study investigating the relationship between audit committee size and earnings management in Asian countries other than one undertaken by Abdul Rahman and Ali (2006) to examine the competence of audit committee members in constraining aggressive earnings management among 97 Malaysian listed firms over the period 2002-2003. They found no significant relationship between the competence of audit committee members and earnings management. Therefore, this study may be the first to examine audit committee size and earnings management in Asian countries.

4.2.2.3 Audit committee meetings

An independent and intelligent audit committee will play a more active, effective and efficient monitoring role (Abdul Rahman and Ali, 2006). It is recommended that a minimum of three or four meetings a year, or special meetings when necessary, should be held by audit committees (Yang and Krishnan, 2005) since this would provide crucial monitoring leading to constraining potential manipulation. A study conducted by Song and Windram (2004) assessed the audit committee recommendations of the Cadbury Committee (1992) in the UK and Blue Ribbon Committee (1999) in the US; they investigated the role of the audit committee in enhancing financial reporting. Their findings indicate that the frequency of audit committee meetings increases the quality of financial reporting. Likewise, a sample of 282 US companies collected during the period 1992, 1994 and 1996, by Xie *et al*. (2003) suggests that frequent meetings of audit committees can constrain the levels of discretionary current accruals and anticipated that more diligence audit committees are more effective. Moreover, selecting a sample of US manufacturing firms for the years 1999 and 2000, Ebrahim (2007) studied the association between earnings management and the activity of the audit committee.

He found that audit committees that hold frequent meetings are more active and stronger. Moreover, study undertaken by Abbott *et al*. (2004) using a sample of 78 found a relationship between audit committee activity and EM. They highlight a negative relationship between audit committee meetings and corporate fraud and financial reporting restatements.

Although the previous studies show a relationship between audit committee meetings and aggressive earnings management practices, numerous studies were unable to detect any relation between an active audit committee and earnings quality. For example, a study by Beasley, *et al*. (2000) which investigated the relationship between frequency of audit committee meetings and likelihood of financial statement fraud, found that the manipulation of financial reporting is not necessarily associated with audit committee meetings. Likewise, Lin *et al*. (2006) who examined the effectiveness of audit committee characteristics by selecting a sample of 106 publicly-held corporations covering one year, found no implicit evidence to indicate that frequent audit committee meetings will restrain fraud or earnings restatement. Prior to the mandatory implementation of audit committee requirements in 2003, a study by Baxter and Cotter (2009) attempted to examine the effect of audit committee characteristics on earnings quality during 2001. It found that a greater number of audit committee meetings are not necessary to constrain earnings management or to enhance earnings quality measures. Also, in the Australian context, Davidson *et al*. (2005) used a sample of 434 listed Australian firms and found that diligent audit committees are not associated with lower earnings management.

The fact that previous studies were unable to find a relationship between audit committee meetings and earnings management or earnings quality may be attributed to their small samples (one year) or small size not reflecting reliable results. Moreover, most of them were undertaken before the issuing of the Sarbanes–Oxley Act (SOX) which has played a vital part in enhancing the role of audit committees. This study argues that in Saudi Arabia frequent meetings by audit committee members may be helpful in constraining earnings management in Saudi companies.

4.2.2.4 Audit committee expertise

The Saudi Code of Corporate Governance requires that audit committees appoint at least one member with financial expertise. According to a survey by Raghunandan *et al*. (2001), audit committees that comprise at least one financial expert have greater interplay with their internal and external auditors. Abbott *et al.* (2004), using a sample of 41 firms and covering the period 1991-1999, stress a significant positive relationship between audit committees that lack a member with financial expertise and the incidence of financial reporting restatements.

By evaluating the recommendations of the Cadbury Committee (1992) in the UK and the Blue Ribbon Committee (1999) in the US, Song and Windram (2004) investigated the effect of UK audit committees on controlling financial reporting. Their findings support the theory that audit committees which include a financial expert or financial literacy are able to monitor the quality of financial reporting. They also demonstrate that financial literacy is one of the most important characteristics of the audit committee. Based on a sample of 300 US companies in the year 1996, Bedard *et al*. (2004) studied the influence of audit committee characteristics, notably expertise, independence and activity, on the incidence of earnings management. They employed the level of income-increasing and income-decreasing discretionary accruals using the modified Jones (1995) cross-sectional model. Their findings report statistically that audit committees which include at least financial expertise are negatively associated with discretionary accruals.

A study conducted by Xie *et al*. (2003) was actuated by the SEC Panel Report's recommendation that audit committee members should appoint a financial expert; it investigated the role of audit committee in restraining manipulation. Their findings showed that audit committee members which comprise at least one member with a corporate or financial background are related to fewer earnings management practices.

However, based on data collected from the 97 top firms for the two years 2002-2003, Abdul Rahman and Ali (2006) found insufficient evidence to support the claim that the presence of financial experts on audit committees mitigates earnings management. Their findings may be due to the weak role played by audit committees in Malaysia. Moreover, their sample may be very small in comparison with other studies and make the finding unreliable and biased. Likewise, based on an investigation of the effect of audit committees characteristics, Lin *et al.* (2006) maintain that, based on a sample of 106 publicly-held corporations in the USA (2000), there is no negative relationship between audit committee expertise and earnings restatements. Their findings may also be unreliable since their sample only looks at one year and a small sample. Moreover, as mentioned earlier, Lin’s study selected a sample for 2000 before the passage of SOX which developed and enhanced the role of audit committees. Therefore, this study argues that the presence of financial expertise on an audit committee will enhance its role and the interplay with external auditors will lead to reduced potential manipulation.

4.2.3 Internal Corporate Governance Measurements

Corporate governance is a means of monitoring managerial performance, opportunistic behaviour and financial disclosures. Most studies attempt to adopt underlying statistical methods in regression analysis in order to explore the effective role of internal corporate governance. Therefore, prior studies have suggested several measures, such as numbers, percentage and dummy variables in order to measure the characteristics of internal corporate governance. For example, to measure board size, just calculate the number of members or to measure board independence, just divide the total number of board members by outside directors. When studying internal corporate governance, most studies have focused on board characteristics and sub-committees since they are considered the most powerful characteristics in internal corporate governance.

4.3 THE ROLE OF OWNERSHIP STRUCTURE

Corporate ownership may be a critical instrument in the influence of overseeing mechanisms used to constrain the likelihood of manipulation. Many studies such as Wei (2007) have attributed the differences in corporate governance practices among countries to different ownership structures playing a pivotal role of enhancing corporate governance practices. In other words, concentrated ownership contributes to increasing the quality of corporate governance practices. For example, Fledmann and Schwarzkopf (2003) highlight a positive relationship between the proportion of concentrated institutional ownership and outsiders on a board and audit committee. It is also argued that an effective mechanism for restraining manipulation is the development of an appropriate ownership structure (Habbash, 2010). Prior studies have also argued that agency problems occur in two ways: vertical agency problems that occur between owners and managers, and horizontal agency problems that occur between majority and minority owners (Shliefer and Vishny, 1997).

Most studies in finance and economics have highlighted that corporate ownership structure decisions reflect attempts to reduce agency problems between different stakeholders (Jensen and Meckling, 1976). In other words, corporate ownership is set to increase firm value, accounting for potential conflicts of interest between a controlling shareholder and minority shareholders. Gogineni *et al.* (2010) found that agency costs arises as firms move from a single owner/single manager ownership structure to more complicated ownership structures and suggest that agency costs are significantly higher when firms are not managed by owners. This idea is consistent with Holderness (2007) who argues that as the number and kinds of shareholders increase the motivation for any shareholder to sustain all of the monitoring costs decreases, since the benefits related to monitoring are proportional to the shareholder's ownership stake. Moreover, Li (1994) found that ownership structure has a significant influence over corporate governance practices. Henry (2010) suggests that good internal governance structure lowers the level of agency costs and that internal governance and external shareholding effects are substitute agency-mitigating mechanisms. Pagano and Roell (1998) state that optimal dispersion of share ownership can be accomplished by going public which leads to large external shareholders who may monitor management closely. McKnight and Weir (2009) found that ownership structure helps to reduce agency cost.

Agency theory may be suitable for developed countries; however, ownership structure theory is probably appropriate for developing countries in terms of explaining a firm's agency cost, where family ownership is highly concentrated (Pornuptham, 2006). This theory explains the percentage of equity held among relevant parties (i. e. outside shareholders, debtholders, and managers) and associated with the extent and direction of EM (Dempsey *et al*., 1993).

Overall, ownership structure is considered as an internal or external mechanism which contributes to mitigating agency problems and reducing agency costs; thus, examinations of potential relations between corporate ownership and aggressive earnings management are necessary to provide a more complete view of the role of corporate governance practices. As mentioned earlier, most Saudi companies usually have four groups of shareholders: state, institutional, family and blockholders however, the percentage of each group varies from one company to another. Thus, this section presents various types of ownership that could be effective mechanisms in preventing opportunistic behaviour in Saudi Arabia and each type will be discussed with relevant studies that draw attention to earnings management practices.

4. 3.1 Managerial ownership

The need for board monitoring underlines the extent to which management's interests align with those of shareholders and other investors. Most prior studies presumed that shares owned by managers would lead to appropriate alignment of interests (Peasnell *et al*. 2005). This argument can be explained by agency theory which argues that high managerial ownership provides better corporate governance structure, which leads to a high quality of financial reporting (Sanchez and Meca, 2005). According to Peasnell *et al*. (2005) US studies have found that managerial ownership is related to low earnings management. However, Habbash (2010) claims that the vast majority of the literature detects a positive association between insider ownership and manipulation.

Warfield *et al*. (1995) using a sample of US firms collected from 1988-1990, argue that the informativeness of earnings data and the magnitude of discretionary accounting accrual can be affected by the level of managerial ownership. Their findings were consistent with their assumption and revealed that the amount of accounting accrual adjustments is significantly higher when managerial ownership is low. In other words, the absolute value of accrual adjustments is twice as high when managerial ownership is under five percent than when managerial ownership is above 45 percent. This study could be criticised for not controlling for institutional ownership in its model since Rajgopal *et al*. (1999) emphasise that studies attempting to examine managerial ownership should control for institutional ownership and *vice-versa*. Moreover, Klein (2002) using a sample of 687 US firms, studied the effectiveness of board and audit committee composition on earnings manipulation, controlling for CEO ownership. Although she employed the modified Jones (1995) cross-sectional model, she found a positive relationship between CEO ownership and earnings management.

A study conducted by Peasnell *et al* (2005) studied two aspects of board monitoring: the role of outside directors on the board and audit committees. Based on a sample of UK firms and using the modified Jones model, they found no evidence to support the theory that managerial ownership is associated with the level of earnings management. However, their findings showed that the board of directors plays a pivotal role in the integrity of financial reporting as argued by agency theory.

Based on a sample of 107 firm-year observations from 1993 to 1997, Koh (2003) used Australian data to scrutinize the relationship between managerial ownership and the incidence of earnings management practice. According to the income-decreasing accruals test, their findings imply a positive relationship, with a smaller amount of income-decreasing accruals for all specifications, in line with the theme that high managerial ownership encourages managerial accruals discretion. Using both techniques (short-term and long-term institutional ownership) Hsu and Koh (2005), examined the effect of both on the extent of earnings management in Australia. Based on a sample of 201 firms during 1993 and 1997 and employing signed earnings management (income-increasing and income-decreasing), they suggest that managerial ownership is positively related to income-decreasing discretionary accruals but negatively related to income-increasing accruals. By investigating the influence of managerial ownership on earnings management using discretionary accruals, Teshima and Shuto (2008) using a sample of 18,790 Japanese firms emphasised that there is a positive association between managerial ownership and discretionary accruals.

4.3.2 Family ownership

There is a heated debate among studies concerning the effect of ownership control by family. Two different views emerge as a result of this dichotomy. The first view argues that a founding family that has a long-term interest in the firm will constrain the capability of managers to manipulate earnings. However, opponents of this view argue that family control may lead to expropriation of the minority shareholders' interests (Jaggi *et al*., 2009). In other words, a family-controlled firm is more likely to confront agency problems stemming from the conflict between majority and minority shareholders (Ali *et al*., 2007). The first view can be explained by agency theory which argues that concentrated ownership leads to mitigated agency problems (Tosi and Gomez-Mejia, 1989). Prior studies based on US firms have found that family firms are less likely to manipulate earnings (Ali *et al*., 2007; Wang, 2006). However, some studies indicate that family firms may extract private benefits at the cost of minority shareholders. (Morck *et al*., 1988; Jaggi *et al*., 2009).

Based on a sample consisting of 770 firm-year observations collected from the Hong Kong Stock Exchange, Jaggi *et al*. (2009) found that the monitoring effectiveness of corporate boards is moderated in family-controlled firms, either via ownership concentration or the presence of family members on corporate boards. This study used the Jones (1991) and modified cross-sectional Jones model (1995) to measure earnings management. Using multiple regressions and based on a sample of 144 Indonesian firms for the years 1995 to 1996 and 1999 to 2002, Siregar and Utama (2009) found that family-controlled firms have a significant effect on the level of earnings management. In other words, firms with a high percentage of family ownership and non-business groups are more inclined to select efficient earnings. A study by Claessens *et al*. (1999) found that family control is a vital factor beyond the negative association between control rights and market valuation. Moreover, based on a sample of 249 Italian listed companies, Yosef and Prencipe (2009) suggest that family-controlled firms are more likely, in the long term, to affect both top executives and board members leading to constraining the extent of earnings management.

Based on a sample collected from Malaysian firms in 2001/2002, Nordin and Hussin (2009) examined the association between board corporate transparency by distinguishing between the two kinds of nonexecutive directors: primary independent and affiliated directors. They found that family firms are more likely to disclose all the required items for the primary basis of segment reporting than non-family firms. Likewise, a study by Chau and Gray (2010) investigated the relationship between the extent of voluntary disclosure and levels of family ownership using a sample of 273 listed firms in Hong Kong for the year 2002. They suggest that firms with a high percentage of family ownership (more than 25%) are associated with higher voluntary disclosure.

4.3.3 State-ownership

Although there is a shortage of studies on the effect of state-ownership on earnings management, the current study adapts the theme of agency theory to suggest that lower opportunistic earnings management is associated with the existence of large shareholders (Jensen and Meckling, 1976). The argument is that the proportion of state-ownership is negatively associated with earnings management. A number of studies have investigated the effect of government ownership on earnings management. For example, a study conducted by Xianhui and Liansheng (2009) investigated the corporate governance characteristics of state-owned controlling and institutional investors and their interactive influence from the perspective of manipulation in China. They highlighted the level of upward earnings management as being higher in non-stated companies than in state-owned companies, and upward earnings management as being negatively related to institutional ownership and the negative association with non-stated firms.

Arvind *et al*. (2009), using the modified Jones model to measure the magnitude and direction of earnings management, attempted to detect earnings management patterns in public companies and state--owned enterprises (SOEs) in Fiji. They found that state owned companies have higher negative earnings management while private companies have higher positive earnings management. However, their sample was very small, including just 16 companies on the South Pacific Stock Exchange. In addition, a study carried out by Yen *et al*., (2007) selecting a sample from secondary data of publicly-listed companies, studied the prevalence of earnings management between government-linked companies and Chinese family-linked companies. They found that state owned companies are more likely to manage their earnings upward while family companies seem to manage their earnings management downward.

Furthermore, a study undertaken by Chen *et al*. (2010) using a sample of 3,310 firm-year observations with sufficient data on the China Securities Markets, found that the effect of audit quality on reducing earnings management is greater for non-state-owned enterprises than for state-owned enterprises. Aivazian *et al*. (2005), using a sample of Chinese firms, suggest that corporate governance reform is potentially an effective way of enhancing the performance of state-owned firms.

On the other hand, based on a sample of all published CSRC enforcement actions from 1999 to 2003, Chen *et al*. (2006) investigated whether ownership structure and board characteristics have an influence on corporate financial fraud in China. They suggest that board characteristics are a factor in explaining manipulation, while ownership patterns, even in state-ownership, seem to be unimportant. Moreover, Bozec *et al.* (2002) argue that there is no relationship between state-ownership and performance and suggest that it is not a question of who owns the firm but the goals pursued by the firm. Interestingly, Wei (2007) stresses that state-owned shareholding and corporate performance is not linear. In other words, when state-ownership is relatively small, no relationship is observed, but when the percentage is above 50%, state-owned shareholdings have a significant negative effect on a firm's performance.

4.3.4 Blockholder ownership

Blockholding, owning large number of shares of a company, is another type of ownership structure that comprises different forms, such as individual investors, pension funds, mutual funds, corporations, private equity firms, fund managers, banks and trusts (Habbash, 2010). The United States and the United Kingdom are characterized as having a wide-spread ownership structure that cannot be found in developing countries (Siregar and Utama, 2008). Although there are no sufficient studies regarding the structure of ownership, blockholding may be a common type of ownership structure in Saudi Arabia. Prior studies have found blockholder ownership to be an effective mechanism in monitoring managers' behaviour. In other words, blockholders are characterized as having the ability to monitor closely and influence board composition via their voting rights (Persons, 2006).

However, within the debate of prior studies there are two views: the first idea argues that concentration of ownership may create more monitoring mechanisms leading to the restricting of opportunistic behaviour, while the second suggests that the majority of shareholders may collude with executives against the minority and stakeholders in order to increase their wealth (Shleifer and Vishny, 1997). Moreover, the concentrated ownership may be an incentive for blockholders to employ accounting information to their own advantage, for example via income–decreasing devices, in order to reduce the other shareholders' residual claims (Claessens *et al*. 2000). Indeed, neither view can be generalised. For example, the first view may be a phenomenon in developed countries as a result of rigorous regulation and investors' protection; however, in developing countries the second view may be justified for many reasons such as weak regulation, poor governance practice, poor accounting disclosure and investors protection.

According to agency theory, Zhong *et al*. (2007) divide blockholders into small and large and attempt to explain how they act in different situations. They suggest that small blockholders tend to sell their shares when the performance of a company is not satisfactory. However, blockholders may face difficulties in selling their shares, thus certain forms of monitoring can be adopted such as a long-term strategy to monitor managers and produce more benefits from their equity ownership. In other words, the presence of large blockholders creates more pressure on managers to provide a glowing financial performance and constitutes another threat of intervention for underperforming management (Shleifer and Vishny, 1997).

Based on a sample of 5,475 firms, Zhong *et al*. (2007) used the modified Jones model and pooled cross-sectional data investigating the two themes on the influence of blockholders on earnings management. They found a positive association between blockholder ownership and earnings management. A study by Klein (2002) attempted to determine the influence of corporate governance on earnings management by selecting a sample of 687 U.S. firms and using the modified Jones (1995) cross-sectional model to measure discretionary accruals. They found a negative relationship between 5% blockholders sitting on audit committees and earnings management. Although this result is consistent with the common view they may not have been driven by blockholder ownership; the independence of the directors on the audit committees may have been the main reason.

Cheng and Reitenga (2009) found that, based on data for S&P 500 firms and examining the influence of institutional non-blockholders and active institutional blockholders on earnings management, active institutional blockholders attempt to increase their monitoring only when there is pressure to increase earnings. In other words, active institutional blockholders are able to constrain upward earnings management rather than downward earnings management. Moreover, Dempsey *et al*. (1993) provide evidence, by dividing their sample of owner-controlled firms into two types (owner-managed firms and externally-controlled-firms), that owner-managed firms implement less income-increasing earnings management in comparison with externally-controlled firms, indicating that insider blockholders have more ability to mitigate earnings management than outside or external blockholders. This study is limited by using a type of accounting choice, mainly extraordinary item reporting, which cannot reflect the nature of manipulation that can be shown by diversity of techniques. By using a different percentage of blockholders (10%) Wang (2006) examines the association between the presence of blockholders and the level of fraud. She stresses that larger blockholder ownership is related to a higher likelihood of fraud detection and a tendency to commit fraud.

In the UK context, numerous studies controlled for blockholders in their investigation of corporate governance and earnings management. For example, Dechow *et al*. (1996) highlight a negative relationship between outside blockholders and earnings overstatements that violate GAAP. A study conducted by Peasnell *et al*. (2005) shows that there is no relationship between earnings management and blockholders. Moreover, Yu (2008) and Bethel *et al*. (1998) found a positive relationship between blockholders and the incidence of earnings management.

4.3.5 Institutional ownership

Institutional investors given attention by prior studies can be deemed as knowledgeable shareholders regarding the business, leading to an increase in the monitoring mechanisms and mitigation of opportunistic behaviour. It is argued that institutional investors can play a pivotal role in monitoring managers' behaviour, which is considered as complementary to internal corporate governance. A study undertaken by Ferreira (2007) aimed to determine the role of institutional investors around the world by adopting a comprehensive data set of equity collected from 27 regions. It found that companies with a higher percentage of shares owned by foreign and independent institutions (unlike other institutions) have superior performance, higher firm value, and lower capital expenditures. Institutional investors have been divided into two main groups by recent studies: firstly, long-term institutional investors who invest in companies with the intention of keeping their ownership share over a long period and secondly, short-term oriented institutional shareholders who invest in companies with the intention of keeping their ownership share over a short period (Habbash, 2010). The first group has a strong catalyst for monitoring managers while the second group may be interested mainly in current earnings rather than long-term earnings in determining stock prices (Bushee, 2001).

Acceding to this division, past studies investigated the effectiveness of institutional investors on earnings management and found that short-term and long-term institutional holdings have influence earnings management differently. Long-term institutional holdings have a significant negative influence on the incidence of earnings management, while short-term institutional holdings have a positive influence (Habbash, 2010). Based on a sample of 859 U.S. companies during the period 1986–2004, Charitou *et al*. (2007) looked at the earnings behaviour of managers during bankruptcy. They point out that the management of distressed companies with lower (higher) institutional ownership have greater (lesser) propensity to manipulate earnings downwards. Moreover, differential influences of institutional non-blockholders and active institutional blockholders were investigated by Bushee (2001) who suggests that institutional non-blockholders are more concerned with short-run performance than are institutional blockholders and that this interest may put pressure on management to announce high earnings.

In Australia, a study by Koh (2003) was undertaken to determine the relationship between institutional ownership and aggressive earnings management, based on a sample of 107 firms between 1993 and 1997. He provides evidence that there is a positive relationship between lower levels of institutional ownership and aggressive earnings management, and a negative relationship when the levels of institutional ownership are higher. Furthermore, Hsu and Koh (2005), based on a sample of 201 firm-year observations of years between 1993 and 1997, scrutinized the effectiveness of both short-term and long-term institutional ownership on levels of earnings management. They highlighted the fact that managerial ownership is statistically significant for all linear specifications but insignificant for non-linear models and concluded that short-term institutions are associated with income increasing while long-term institutional investors have a differential effect that restrains this activity.

In the context of Spain, Osma and Noguer (2007) used a sample of 155 firm-year observations over the period 1999–2001 to examine whether corporate governance characteristics are effective in reducing earnings management using the Jones (1991) model to estimate earnings management. Unlike the UK and US where independent directors play an important role, they show that institutional directors play an important role in constraining earnings management.

A study by Chung *et al* (2002) looked at the association between institutional ownership and earnings management practice and showed no relationship between institutional investors and

earnings management. This study used the Jones model (1995) to measure earnings management and this time employed signed earnings management (positive and negative).
Overall, it can be observed that the strength of institutional shareholders underlines the magnitude of ownership stake playing a key role in monitoring and mitigating opportunistic management behaviour such as earnings management practices. In other words, a large percentage of institutional investors may be effective but this is not the case when the institutional ownership stake is low **(**Warfield *et al*, 2005)**.**

4.3.6 Ownership structure measurement

Ownership structure is a type of monitoring mechanism employed by prior studies to investigate its effect on earnings management. The level of ownership structure is measured by different percentage and dummy variables. For example, some studies attempted to divide the percentage of ownership structure into a number of groups such as 3%, 5%, and 10% while other studies used dummy variables as control variables. However, the measurement of ownership structure shows contradictory findings that led some studies to seek another method such as non-linear analysis.

4.4 EXTERNAL AUDITING FACTORS

The previous sections have illustrated internal corporate governance and ownership structure as determinants of earnings management, while this section attempts to shed light on the role of external audit, as another determinant, in earnings management. Agency theory problems are concerned with the separation of ownership and control, along with information asymmetry between management and absentee owners, creating a demand for external auditing (Lin and Hwang, 2010). In other words, the external auditor plays an important role in verifying that financial reporting is fairly stated in conformity with GAAP and that this financial reporting also reflects the 'true' economic condition and operating findings of the entity. However, the quality of external audit is subjected to numerous guidelines and measures, such as the commitment of auditing standards, independence, competence, and exercise of due professional care.

Recent financial scandals have increased the question of whether an external audit is effective in constraining earnings management and the wave of audit failure in the Capital Market has also increased concerns about audit quality (Velury, 2005). An external audit is an important instrument for shareholders, to ensure the transparency and credibility of financial reporting. Audit services may not ensure that falsified materials have been detected; however, the amount of manipulation discovered depends on the quality of audit services. In addition, the quality of audit services depends on the experience of the auditor, their knowledge of the industry, and their independence. Such knowledge and experience will help the auditor to diagnose the complex issues in specific industries. According to agency theory, Gul *et al*. (2009) state that higher quality audits can restrain insiders' from abusing accounting-based contractual constraints and manipulating earnings as a result of the separation of ownership and control. The following sections will provide an overview of the literature that explains how external auditing can affect earnings management by using different factors or dimensions.

4.4.1 Brand name and earnings management

There is a growing body of research that has provided evidence for the use of auditor size (Big4) as a proxy for audit quality, including DeAngelo (1981**),** Hoitash *et al* (2007), Chen *et al*. (2005) and Dye (1993). More evidence has recently been revealed in the world that Big audit firms constitute a constraint on earnings management. For example, Lin and Hwang (2010) using various factors for audit quality (auditor size, industry specialist auditor, audit fees, auditor tenure), found that only Big4 auditors and industry specialist auditors have a significant negative relationship with earnings management. Moreover, Charles *et al*. (2010) investigated whether audit quality, as proxied by auditor size, can constrain earnings management practices in the US. They stressed that the manipulation of earnings is less likely to be managed with firms audited by Big4 auditors while clients with non-Big4 auditors show signs of manipulation.

A study by Chen *et al*. (2005) adopting Big5 (now Big4) audit firms and industry specialist auditors for audit quality used a sample of Taiwan IPO firms from 1996-1998. They found that high audit quality plays a pivotal role in constraining earnings management and that Big5 auditors provide high audit quality leading to the constraint of earnings management. However, the study could be criticized for not controlling ownership structure. Chan *et al*. (2007) tested agency theory and concluded that ownership structure plays an important role in affecting audit quality.

Becker *et al*. (1998) using the Jones model as proxy for earnings management and Big6 auditors (now Big4) as proxy for audit quality, collected a sample of 10,379 Big6 and 2,179 non-Big6 firm years. They reported that companies audited by non-Big6 audit firms have higher discretionary accruals than companies audited by Big6 audit firms. Moreover, Behn *et* *al*. (2008) looked at whether audit quality is related to the predictability of accounting earnings by concentrating on analyst earnings forecast properties and found that earnings forecast accuracy is more credible and forecast dispersion is smaller for companies audited by Big5 auditors and industry specialist auditors.

Based on a sample consisting of all firms in the 1999 COMPUSTAT PC-Plus Active and research files during the 1983-1998 period, Kim *et al*. (2003) looked at whether, and how, audit effectiveness differentiation between Big6 and non-Big6 auditors is affected by a conflict or convergence of reporting incentives. They found that Big6 auditors are more effective in constraining income increasing than non-Big6 auditors.

However, some studies indicate different findings regarding brand name. For example, using different data from the UK, France, and Germany, Maijoor and Vanstraelen (2006) indicate because of the differences of audit environment regimes across the European countries, the quality of international Big-4 may vary from country to other. Accordingly, this study argues that Saudi companies audited by Big4 are less likely to have higher discretionary accruals.

4.4.2 Industry specialist auditors and earnings management

Most prior studies suggest that industry specialist auditors play a pivotal role in providing high audit quality; therefore, the use of specialist auditors has increased recently in the business environment as a proxy for audit quality, since a specialist auditor should have practical experience acquired from auditing in a particular industry in addition to distinctive knowledge (Lowensohn *et al.* 2007). Healy and Lys (1986), Lennox (1999) and Colbert and Murray (1999) suggest that the variations between Big8 (now Big4) and non-Big8 audit firms lie in differences in specialization of services and in reputation. Moreover, Lim and Tan (2007) suggest that specialist auditors are more likely to be concerned with reputation losses and litigation exposure than non- specialists. Accordingly, the accounting literature attempts to investigate the relationship between industry specialist auditors and earnings management.

Based on a sample of 4,422 clients audited by Big6 auditors from 1989 to 1998, Krishnan (2003) investigated the effect of industry specialist auditors on the level of earnings management. He stresses that absolute discretionary accruals are higher with firms audited by non-specialist audit firms than firms audited by specialist audit firms. A study conducted by Balsam *et al*. (2003) used a sample of 50,000 firm-year observations over the period between 1991 and 1999 and measured earnings management by the modified Jones model. They concluded that firms dealing with industry specialist auditors have lower manipulation than firms dealing with non-specialist auditors. Moreover, Chen *et al.* (2006) used a sample of Taiwan firms and found that industry specialist auditors reduce income-increasing earnings management. Based on a sample of 250 public firms that announced financial statement restatements, Bloomfield and Shackman (2008) investigated the association between industry specialist auditors and the incidence of financial statement restatements. It was observed that industry specialist auditors were associated with low incidences of financial statement restatements. In contrast, a study by Johl *et al*. (2007) found no significant relationship between auditor industry specialisation and abnormal accruals.

It is noteworthy that prior studies have used two approaches to measure industry specialist auditors: the market share approach and the portfolio share approach. The market share approach describes an industry specialist as an audit firm that has a larger market share in comparison with other competitors in a particular industry. Therefore, a firm with the largest market share has enhanced its knowledge in a specific industry as well as reflecting important investment by developing that industry in particular audit technologies (Neal and Riley 2004; Lowensohn, *et al*. 2007). In addition, Mayhew and Wilkins (2003) confirm that large market share firms are capable of enhancing more industry-specific knowledge and expertise which leads to a higher quality service than small market share firms. Audit firms are considered as specialists in industry when they have the largest market share based on clients' sales or the number of clients audited by the firm. The justification for the market share approach is that the largest market share audit firm can develop its knowledge in an industry and enhance its understanding of sensitive issues relating to that industry. The portfolio share approach emerged after market share and is based on the relative distribution of audit services and is related to audit fees; therefore, this approach gives consideration to an audit firm's share of audit fees in an industry (Neal and Riley, 2003). This means that the approach view audit firm specializes in those industries which generate the most fees (revenues) relative to its practices (Lowensohn, *et al*. 2007). Market share is the appropriate approach for this study since the alternative cannot be used because of lack of disclosure in Saudi Arabia regarding audit fees. Thus, this study argues that companies using specialist auditors are less likely to have higher discretionary accruals.

4.4.3 Auditor opinion and earnings management

An auditor report aims to express an independent opinion verifying that financial reporting is fairly stated in conformity with GAAP and that this financial reporting also reflects the 'true' economic condition and operating findings of the entity. Thus, the auditor report is considered as the final phase or outcome of an audit examination that the auditor uses to convey a message regarding a company's stance (Porter *et al.,* 2003). According to Saudi auditing standards, the auditor issues an unqualified report when they consider the audited financial statements to provide a true and fair view in line with the financial reporting framework. However, the auditor will issue a modified report depending on the circumstances and the effect of materiality.

Past studies on auditors' reports have focused on the association between auditor opinion and the incidence of earnings management. In other words, they investigate the effect of unqualified and qualified opinion on discretionary accruals. For example, based on data collected from the Chinese stock market, a study undertaken by Chen *at al*. (2001) concluded that firms with modified auditor opinion have a tendency to manage earnings. Likewise, Bartov *et al*. (2001) suggest that modified auditor opinion is associated with the level of absolute abnormal accruals. Moreover, Bradshaw *et al*. (2001) indicate that there is a relationship between modified auditor opinion and discretionary accruals. Herbohn and Ragunathan (2008) used a sample of all Australian companies over the period 1999-2003 and found a negative relationship between accruals and opinion modifications.

In contrast, a number of studies have shown there to be no association between auditor opinion and level of earnings management. For example, Butler *et al*. (2004) claim that discretionary accruals or earnings management is not associated with modified auditor opinion. His explanation is that the auditor expresses his opinion with modified report according to circumstances such as scope limitation, material uncertainty, and disagreement with managers, rather than the incidence of earnings management. Moreover, they suggest that large negative accruals may stem from financial problems rather than an intention to manipulate earnings. Accordingly, this study argues that companies with an unqualified auditor opinion are less likely to have high discretionary accruals.

4.4.4 Auditor change and earnings management

Change in auditor has been paid considerable attention by both regulators and academics. The regulators' concern has increased since management might change auditors for opportunistic reasons which will enable them to accomplish their objective (Davidson *et al* 2006). Theoretically, Francis and Wilson (1988) argue that agency costs may sometimes lead to a decision to switch auditor and be affected by different factors. According to DeFond and Jiambalvo (1993), most cases of auditor change occur as a result of disagreement when the auditor insists on applying specific accounting methods. Kluger and Shields (1991) state that managers may attempt to change auditor in order to delay or suppress the announcement of unfavourable information. They conclude that most companies that have financial problems have changed auditors to obtain a more cooperative auditor. Accordingly, auditor change has been used as an indicator for audit quality. In other words, previous studies suggest that changing auditors signifies a lower quality audit and a greater likelihood of earnings management (Habbash, 2010).

Based on a sample of 1,132 auditor changes from 1993 to 1997, Davidson *et al* (2006) highlight the fact that incidences of earnings management are greater for firms that switch from Big6 auditors to non-Big 6 auditors following the receipt of a modified audit opinion from their primary auditor. A study conducted by Kluger and Shields (1991) stresses that companies have a propensity to change auditor prior to going bankrupt because they are not able to suppress unfavourable information. Even in cases in which the change can be conceived as a type of improvement of audit quality, Romanus *et al*. (2008) conclude that switching from a non-specialist auditor to a specialist auditor raises the likelihood of restatement and vice versa despite their findings supporting the first prediction that using a specialist auditor is more likely to reduce the likelihood of restatement. Based on a sample collected from 403 firms which changed their auditors during the period from 1990 to 1993, DeFond and Subramanyam (1998) reported that earnings management was higher during the last year with the first auditor.

In general, auditor change is also an effective factor of audit quality and is used as proxy for audit quality. For example, DeAngelo (1981) states that a change of auditor is associated with low audit fees. The current study argues that managers may switch auditors to enable them to manage opportunistic behaviour by abusing the unfamiliarity of the new auditor with the firm's business. Accordingly, auditor change may be associated with high earnings management.

4.4.5 Timeliness and earnings management

Timeliness is measured by the number of days from the end of the fiscal year to the audit report date; an inordinate period, which is defined as audit delay, reflects the quality of financial reporting by not presenting timely information to shareholders. Givoly and Palmon (1982) highlight that audit lag is the single most pivotal determinant of timeliness in earnings announcement, which in turn, determines the market reaction to earnings announcement. Knechel and Payne (2001) assert that lower quality information may stem from an unexpected reporting lag.

Based on a sample of 628 Malaysian companies in 2002, Mohamed-Naimi *et al*. (2010) found that active and large audit committees are able to shorten audit lag, which leads to enhancing communications with auditors and financial reporting. Likewise, a study conducted by Tanyi *et al*. (2010) found that companies that change their auditors have a higher audit report lag. Habib and Bhuiyan (2011) using regression analysis with two different definitions of industry specialization found that audit lag is shorter with firms audited by specialist auditors.. Therefore, this study argues that long audit lag may stem from disagreement or argument between managers and auditors arising from earnings management.

4.4.6 Measurement of external audit factors

As audit quality is unobserved and influenced by a number of factors, it is not surprising that prior studies have employed different measures to proxy for the performance of external audit. Overall, researchers have used different proxies for audit quality such as auditor brand name (auditor size), industry specialization, auditor tenure, audit fees, and provision of services related to auditor’s job such as audit time or related to financial reporting such as audit report (Lin and Hwang, 2010). Since many of the above proxies fail to report findings, many studies attempt to find beneficial proxies for audit quality.

4.5 SUMMARY AND GAP IN LITERATURE

This chapter has provided a brief discussion of the literature on monitoring mechanisms, both external and internal, in relation to earnings management. The agency theory presents a basis for the governance of firms via different internal and external mechanisms. These mechanisms are designed to ensure agent-principal interest alignment, protect shareholder interests and thus reduce agency cost.

Internal corporate governance may be attributed to ownership structure and board and sub-committees composition. In order to understand such mechanisms, previous studies have viewed the board as the main body of monitoring mechanisms because the board of directors is responsible for monitoring managerial actions, particularly those related to performance, financial disclosure, and tasks delegated to sub-committees. Moreover, audit committees and other committees are in charge with ensuring of the integrity of financial reporting, internal control, and external audits. On the other hand, previous studies have depicted ownership as entrenchment of internal corporate governance because it constitutes a proportion of equity held among the relevant parties. Accordingly, a highly-concentrated ownership structure may mitigate the agency problem since ownership structure is proved to have influence over board and sub-committees' composition. Generally, internal corporate governance may be proactive if firms have strong support from regulators and superior accounting standards, but if not corporate governance may be meaningless.

In addition, the external audit constitutes external mechanisms since it is characterized as having expertise and independence to report on companies' status. Since audit quality is unobserved, prior studies have used effective detriments of the external audit to measure audit quality such as Big firm auditors, industry specialization, auditor tenure, audit time, audit fees, audit delay, and auditor change. Evidence has recently been revealed that Big audit firms constitute a constraint on earnings management. Moreover, prior studies have suggested that industry specialist auditors play a pivotal role in providing high audit quality therefore the use of specialist auditors has increased recently in the business environment as a proxy for audit quality since a specialist auditor should have practical experience acquired from auditing in a particular industry, in addition to distinctive knowledge. In terms of audit opinion, prior studies have suggested that firms with modified auditor opinion have a tendency to manage earnings. Change in auditor has been paid considerable attention by both regulators and academics. Regulators are concerned as management might change auditor for opportunistic reasons which will enable them to accomplish their objective. Finally, timeliness is measured by the number of days from the end of the fiscal year to the audit report date; an inordinate period, which is defined as audit delay, reflects the quality of financial reporting by not presenting timely information to shareholders.

In general, a review of the previous literature shows that the Middle East region has not been given attention regarding the effect of internal corporate governance on earnings management. Although prior studies have focused on board and audit committee characteristics, little is known about the effect of remuneration and nomination committees on earnings management. Even less is known about the effects which have not directly been examined. As has been observed, the examination of the role of internal corporate governance shows that quantitative methods, such as the regression method, only provide results in terms of positive or negative relationship but do not provide appropriate solutions that can be obtained from qualitative methods. Moreover, the accuracy of measuring earnings management is still being debated; for example, Butler *et al*. (2004) suggest that large negative accruals may stem from financial problems rather than an intention to manipulate earnings. Thus, this study will also contribute to the literature by providing a perception of the role of internal corporate governance in mitigating earnings management.

Despite extensive studies, there is little consensus on how ownership structure affects earnings management. Moreover, the literature review shows that, to the best of my knowledge, to date no study has attempted to investigate the impact of ownership structure on earnings management in the Middle East. In addition, this thesis is characterized as having a qualitative method that has not been applied by previous research in order to investigate the effect of ownership structure on earnings management.

Furthermore, a large number of studies have examined the effect of using different proxies for audit quality on earnings management. However, from the review of the literature, it is clear that the Middle East region has not received attention. This study will also contribute to the literature by examining the effect of audit lag on earnings management. Some criticism of the use of proxies of audit quality and earnings management has emerged in some of the studies. For example, Balsam *et al*., (2003) stress that audit quality is multidimensional and inherently unobservable and no single auditor characteristic can be used to proxy for it. Moreover, Francis (2004, p.360) who criticizes most proxies for audit quality states that "we do not know if the US evidence on audit quality generalizes to audits in other countries that have different legal systems and particularly to non-common-law countries with weaker investor protection and less ability to sue auditors for negligence and misconduct". In terms of earnings management, Butler *et al*. (2004) suggest that large negative accruals may stem from financial problems rather than an intention to manipulate earnings. Accordingly, in addition to the database, this study will contribute to the literature using questionnaires and interviews to obtain a deep understanding of the role of the external audit on constraining earnings management .

Chapter Five:
THEORETICAL FRAMEWORK

5.1 INTRODUCTION:

Chapter two presented background information about Saudi Arabia and the corporate governance framework in the Kingdom; in addition, it attempted to provide a clear overview of the nature of the professional audit market and the regulations that regulate the stock exchange. Accordingly, it appears that the development of corporate governance is another intricate area associated with several factors such as regulation, culture, religion, ownership structure and as Mallin (2007, p: 263) suggested. Notwithstanding the fact that corporate governance was established to regulate and develop the Saudi capital market in order to increase the credibility and transparency of financial reporting, the interplay between principals and agents is an intricate balance of agency, empowerment, stewardship and responsibilities. Theoretically, agents are motivated by the nature of their relationship with principals and that plays a significant role in improving performance. However, several factors may lead to manipulation, regardless of the kind of relationship between principals and their agents, such as pressure, opportunity and ethics (Albrecht *et al*. 2004). Therefore, the kind of relationship between principals and their agents may reduce manipulation but cannot eradicate it.

The theoretical framework of the current study enables the researcher and the reader to see how the findings are accurately related to the research questions and hypotheses. In other words, it plays a significant role in the explanation or justification of the link between what the researcher expected, and the findings. However, the theory used may be refined, modified or even rejected based on the results produced (Champers, 1996). Corporate governance is considered to be the heart of the current study; thus, this chapter aims to explain potential theories related to corporate governance and earnings management practices. However, this study will rely on the agency theory-institutional theory which fits with the nature and scope of the empirical work. This chapter is organised as follows: Section 5.2 illustrates theories of corporate governance. Section 5.3 explains the positive theory and capital market efficiency. Section 5.4 provides the conclusion.

5.2 THEORIES OF CORPORATE GOVERNANCE

On the subject of corporate governance as an accounting topic, a number of theories have been used in the literature to explain its role. Certain theories offering a relevant framework to explain the effect of corporate governance might be more appropriate and relevant to some environments than others and can vary from country to country (Mallin, 2007). Generally, the prime theories employed by prior studies and dominant theories which have mainly influenced the advancement of corporate governance are: agency theory, stakeholder theory, stewardship theory and institutional theory (Mallin, 2007) and the evident distinction between the perspectives of these theories lies in two elements: property rights and corporations' objectives (Hoque, 2006).

Agency theory concentrates on the relationship between the principal (owners) and agents (management) who are given the authority to manage the principal's interests and make beneficial decisions. Stewardship theory is designed as an alternative theory for researchers to investigate situations where management as stewards are motivated to act in the best interests of owners (Clark, 2004). According to stakeholder theory, society expects corporations to behave in a manner which is beneficial in terms of their social or economic role, while institutional theory is designed to obtain perceptions in organizational change and accounting practices. Moreover, Mallin (2007), who is concerned with corporate governance studies, summarises, according to her view, how the potential theories affect corporate governance, including agency, institutional, stakeholder, class hegemony, and managerial hegemony.

Managerial hegemony contradicts agency theory on the grounds that the board of directors is ineffective in performing its monitoring duties since the management dominates board matters (Abdul Rahman and Ali (2006). Mallin (2007) highlights that "management of a company, with its knowledge of day to day operations, may effectively dominate the directors and hence weaken the influence of directors".

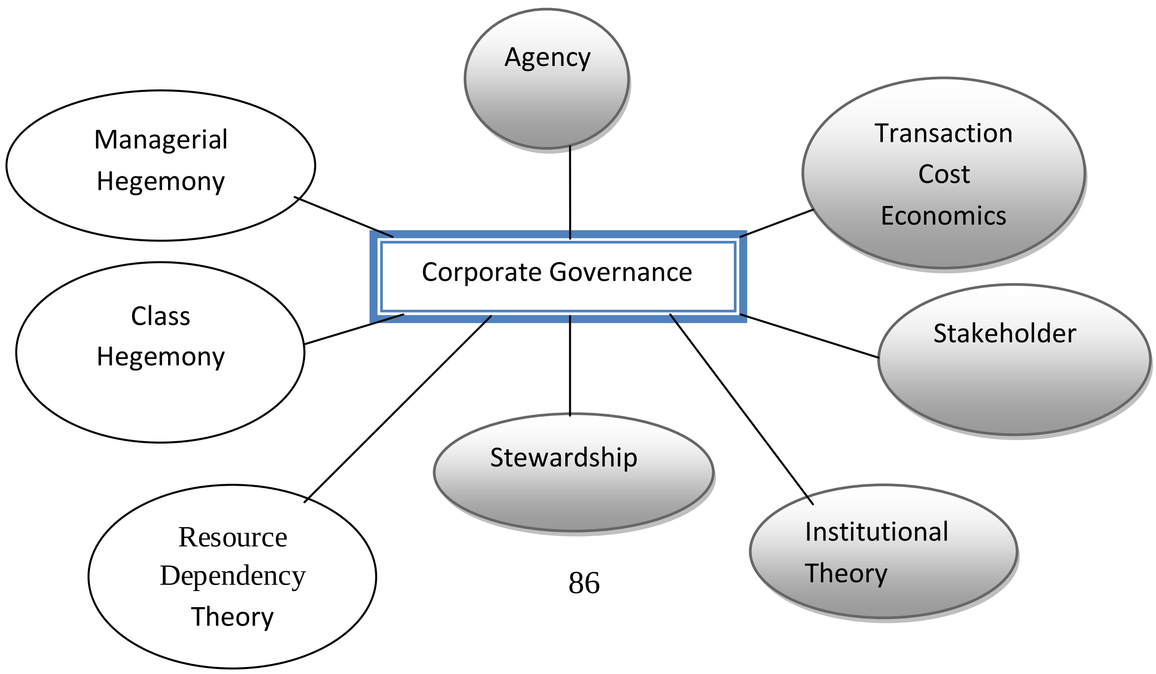
In terms of class hegemony theory, directors see themselves as the elite at the top of the firm and will recruit or promote new directors according to how well new appointments might fit into the elite (Mallin, 2007). Additionally, Corbetta and Salvato (2004) argue that, according to class hegemony "board role will be increasingly to perpetuate elite and class power, rather than to provide genuinely diverse resources and insights".

Resource dependency theory, similar to institutional theory, is concerned with the relationship between an organization and a set of actors in the environment (Sherer and Lee, 2002). In addition, it assumes that organizational choice is limited by multiple external pressures and that organizations are interested in building legitimacy and acceptance *vis-a-vis* external stakeholders (Sherer and Lee, 2002). Moreover, resource dependency theory concentrates on a firm's need to access resources from other actors in the environment and explain how shortages of resources force them to pursue new innovations that adapt alternative organizations resources (Hessels and Terjesen, 2008).

Despite the fact that a review of previous studies in the Literature chapter pointed out that there is no consensus in the literature regarding theoretical base for research on corporate governance, the literature debate indicates that a large number of studies have employed agency theory in their examination of the relationship between corporate governance mechanisms, earnings management and external auditing. The rationale of this domination is that corporate governance mechanisms, earnings management and external audit represent types of agency cost that take various forms such as monitoring cost, bonding cost and residual cost.

Based on the above discussion, a number of theories have affected the development of corporate governance; Figure (5.1) summarises the theories that may be associated with the development of corporate governance. However, the main theories that have affected the development of corporate governance and the relevant theories adopted in the current study will be discussed in the following section.

Figure (5.1) Summary of common theories affecting corporate governance



5.2.1 Agency Theory

Agency theory has been widely employed by scholars in various academic areas such as accounting, economics, finance, marketing, political science and sociology (Clark, 2004). Primarily, an agency relationship originates from the separation between ownership and management or control, when one or more principals engage another person as their agent to perform services on their behalf (ICAEW, 2005). Thus, the emergence of the agency theory approach has been utilized to describe the relationship within organizations. The theory concentrates on the relationship between the principal (owners) and agents (management) who are given the authority to manage the principal's interests and make beneficial decisions.

On the other hand, the principal requires information which is used to evaluate the performance. This can result in problems of information asymmetry, which leads to agency problems such as: moral hazard and adverse selection (Hoque, 2006), which stems from the fact that managers may act in their own interests to maximize their personal wealth. This may be because they have personal goals that compete with those of shareholders (Davidson *et al*., 2004).

Jensen (1993) suggests that moral hazard is caused by different factors such as firm size and its complexity leading to difficulty in monitoring which increases agency costs. Furthermore, the agents may also be affected by factors such as financial rewards, labour market opportunities, and their relationship with other parties who are not related to the owners' interests (Shapiro, 2005). This leads to the creation of a conflict of interests between the principals and their agents.

However, principals can protect their interests by establishing appropriate incentives for the agents and by incurring monitoring costs designed to limit the irregular activities of agents. Establishing other devices, such as corporate governance mechanisms and external auditing, which monitor management behaviour, leads to agency costs which originate from many sources such as the costs of employment, consultations, controlling systems and monitoring, moral risks, shirking, stealing (earnings management), bonding, and providing incentives, since principals are not able to observe agent behaviour (Shapiro, 2005). Therefore, these mechanisms might lead an agent to change his behaviour in order to appear of good character. Additionally, according to this theory, greater ownership is considered a type of mechanism that can assist the board in increasing its mentoring effectiveness (Yen *et al*., 2007).

The separation between ownership and management does not come without costs (Depken, 2006). In Saudi Arabia, the agency costs of listed companies may result from conflicts between owner-manager relationships. However, the agency costs may also come from the conflict between the minority and the majority of shareholders. In fact, there is no clear evidence concerning the issues of agency relationship in the Saudi environment because of the shortage of studies in this area and because of the modern emergence of corporate governance. It could be argued that conflicts of agency relationship may be fewer and weaker in developing countries such as Saudi Arabia between the principals and agents. According to Clark (2004) collectivism is a dimension of the relationship between principals and agents in Asia, South America and Southern Europe. However, the conflict between the majority of shareholders and the minority can be made stronger.

In summing up, agency problems are mitigated by a number of actions that include monitoring behaviour or even supplying a catalyst to boost the behaviour toward owners' interest. Hoque (2006) highlights that these actions are defined by agency cost which is divided into three categories:

1- **Monitoring costs**: A number of studies such as Denis *et al* (1997) and Deegan (2000) define monitoring cost as the costs which stem from the agent's monitoring behaviour, such as corporate governance structure cost, external auditing cost or any action which might curb opportunistic behaviour.
2- **Bonding costs:** The costs which are associated with aligning the agent's interest with the principal's interest, such as compensation or any reward structure that mitigates opportunistic behaviour. In other words, managers are bonding themselves to prepare financial reporting.
3- **Residual costs:** These are defined as all costs incurred as a result of dispute between agent and principal's interest apart from bonding and monitoring cost. Cleary, the residual costs stem from inequality between the monitoring cost and bonding cost (Iskander, 2008).

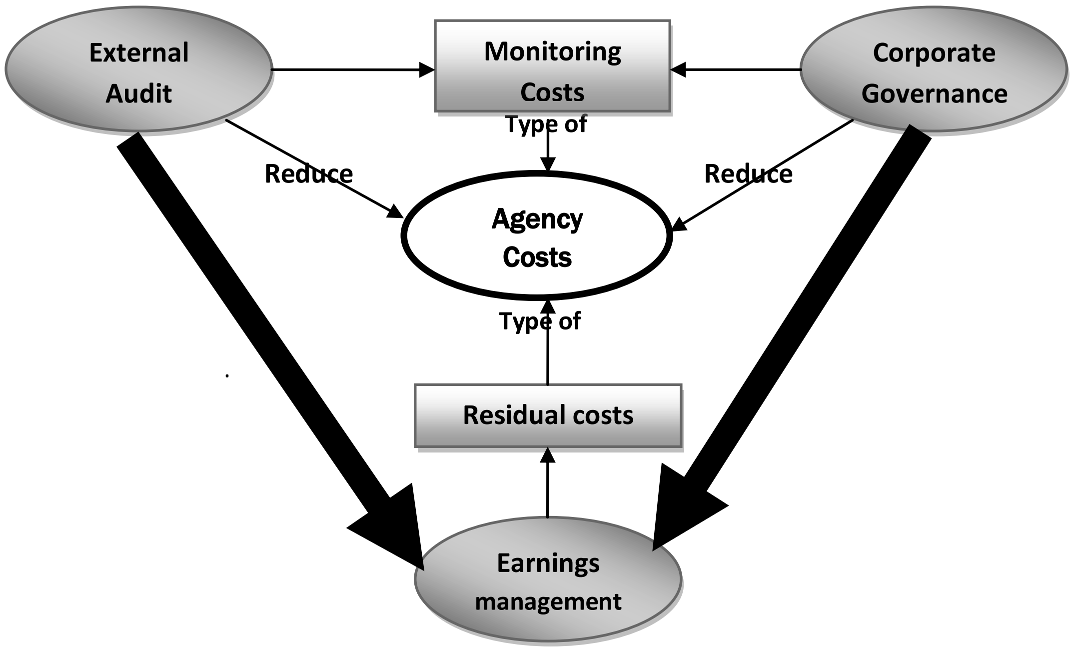
Earnings management is defined as the exploitation of the flexibility of accounting principles to affect the reported earnings by making them appear greater or smaller (Davidson, *et al.* 2004). On the other hand, it is believed that management discretions are related to agency problems which can occur when managers are not capable of operating the company for the shareholders. For instance, the Enron and WorldCom scandals show the importance of the discretion of management who could cause harm to shareholders by abusing their position. (Davidson *et al*. 2004). Jiraporn *et al.,* (2008) found that management manipulates earnings in firms when agency costs are lower. Davidson *et al*. (2004) also confirm that earnings management might be a type of agency cost if the management provides financial reporting that does not present accurate information. Even though several prior studies have classified earnings management as a type of agency cost, there is no evidence up to now to explain earnings management as a type of agency cost. However, these might be residual costs.

The corporate finance literature shows many techniques by which agency conflict can be cut in order to reduce agency costs. These techniques might be identified between internal mechanisms such as compensation contracts, bonding costs, monitoring activities and external mechanisms such as monitoring activities by a capital market authority, regulator or external audit (Shapiro, 2005). The main objective of these mechanisms is to align the goals of owners with the goals of management. Corporate governance is an internal mechanism strategy used to monitor management and reduce agency costs. McKnight and Weir (2009) confirm that corporate governance mechanisms reduce agency costs. On the other hand, auditing is a vital mechanism that plays a significant role in serving the interests of shareholders and the public to strengthen accountability and bolster trust and confidence in financial reporting (ICAEW, 2005). Principals will hire external auditors who are engaged as agents under contract and are expected to be independent of agents who manage the company. According to agency theory, monitoring should be neutral (independent) and not have any conflict of benefit with the corporation or its management (Culpan and Trussel, 2005). The role of external auditing is to reduce agency costs; more explicitly this role is to cut information asymmetry in financial reporting (Piot, 2001). Watts and Zimmerman (1983) confirm that successful external auditing will undermine the opportunistic behaviour cost (agency cost) generated by management. In general, agency theory recognizes auditing as the most important monitoring mechanism that regulates conflict of interest and reduces agency costs. For example, Shapiro (2005) believes that regulators may create mechanisms which monitor the agency relationship between principals and their agents, such as corporate governance mechanisms and external auditing, which lead to agency costs. As a result of monitoring, good corporate governance mechanisms and high audit quality can decrease opportunities for managers to pursue self-interest at the expense of owners and therefore principals will obtain beneficial returns.

In terms of ownership structure, Gogineni *et al*. (2010) found that agency costs increase as firms move from a single owner/single manager ownership structure to more complicated ownership structures and suggest that agency costs are significantly higher when firms are not managed by owners. This idea is consistent with Holderness (2007) who states that as the number and types of shareholders increase the incentive for any shareholder to sustain all of the monitoring costs decreases since the benefits associated with monitoring are proportional to the shareholder's ownership stake. Moreover, Li (1994) found that ownership structure has a significant influence over corporate governance practices. Henry (2010) suggests that good internal governance structure lowers the level of agency costs and that internal governance and external shareholding effects are substitute agency-mitigating mechanisms. Pagano and Roell (1998) state that optimal dispersion of share ownership can be accomplished by going public which leads to large external shareholders who may monitor management closely. McKnight and Weir (2009) found that board ownership helps to reduce agency cost.

Agency theory may be suitable for developed countries; however, ownership structure theory is probably appropriate for developing countries in terms of explaining a firm's agency cost, where family ownership is highly concentrated (Pornuptham, 2006). This theory explains the proportion of equity held among relevant parties (*i.e.* outside shareholders, debtholders, and managers) and is associated with the extent and direction of EM (Dempsey e*t al*., 1993).

Figure (5.2) Theoretical Explanation of Interaction of CG, EA, and EM



In conclusion, corporate governance has embraced agency theory for a long time as a framework. Thus, it seems to be a major theory in understanding the conflict of interest between principals and agents, particularly those resulting from possible issues of opportunism. The effect of agency theory on corporate governance studies can be observed in prior studies which provide contradictory results in the examination of the relationship between corporate governance mechanisms, earnings management, and audit quality. Therefore, using agency theory as a framework to explain how corporate governances and external auditing reduce earnings management is an appropriate approach for the current study. Figure 5.2 shows how agency theory can be applied to understand and interpret the relationship between corporate governance, external auditing and earnings management. The use of this theory in interpreting earnings management practices has been employed by prior studies; however, it may not cover all earnings management incentives.

5.2.2 Stewardship Theory:

In comparison with agency theory, stewardship theory, based on psychology and sociology literature, maintains that the interests of corporate executives as stewards are aligned with the organization and its owners (Albrecht *et al*. 2004). It is designed for researchers to investigate situations where management, as stewards, are motivated to act in the best interests of owners (Clark, 2004). Clearly, the behaviour of stewardship is collective since the steward aims to achieve the objectives of the organization. Generally, there is a relationship between the success of an organization and the owners' satisfaction and the role of the steward to balance between personal needs and the organization's objectives given that management (stewards) will increase their interests as they attain organizational, rather than self-serving objectives.

Under this theory the management which is not opportunistic wishes to perform a beneficial role as that of a good company steward. In addition, this theory predicts that there are no inherent issues of executive motivation (Donaldson and Davis, 1991). Primarily, the notion is that insider directors are better at increasing shareholders' wealth since they have adequate acquaintance and explicit understanding of the business. According to this theory, the board of directors is considered as a means of assistance to a steward CEO rather than a controlling means (Albrecht *et al*. 2004). Although management is less likely to manipulate earnings, the problem lies in to what extent the management aspires to attain a good corporate performance. Moreover, management will not act to align their interests with shareholders in all cases. Choo and Tan (2007) claim that, psychologically, a board's lack of executive experience might be a catalyst for managers to commit fraud. Albrecht *et al*. (2004) also highlight the fact that a relationship between principal and agent that is based on stewardship may provide opportunities for management to commit fraud.

Despite the differences between stewardship theory and agency theory, several studies have suggested that there is a need for both stewardship theory and agency theory in the explanation of management (Clark, 2004). For example, Muth and Donaldson, (1998) confirm that stewardship theory is used as an alternative to agency theory which expresses an opposing view of the structure of corporate governance mechanisms. Moreover, Lam and Lee, (2008) suggest that using agency theory or stewardship theory alone in the examination of duality and performance does not adequately explain the effect.

In conclusion, stewardship theory attempts to find the explanation and solutions to the principal-agent relationships since the perception of agency might not apply in all situations. Stewardship theory is a substitute model of managerial behaviour and motivation that comes from psychology and sociological pattern (Clark, 2004). Common distinctions between agency theory and stewardship theory which lie in several factors such as motivation, identification, and use of power, are presented by Clark, (2004).

Table (5.1) Differences between Stewardship Theory and Agency Theory

	Agency theory	**Stewardship theory**
Behaviour	Individual	Collective
Motivation	Extrinsic value	Intrinsic value
Governance	Monitoring	Trust
Time frame	Short term	Long term
Power	High power	Low power

5.2.3 Stakeholder Theory

Corporate scandals have increased the need for a range of theoretical perspectives to understand the complexity of corporate governance mechanisms and the role of audit quality as well as the motivations for earnings management. In comparison with agency–stewardship theory, which solely focuses on the relationship between shareholders (principal) and management (agent), stakeholder theory, which is not less important than owners' rights, is interested in a wider group of constituents rather than concentrating on one group (Mallin, 2004; Nasi, 1995). The concept of this theory is that society expects beneficial behaviour of corporations in terms of their social or economic role. Thus, firms with weaker stakeholder performance may face difficulties in gaining important support and resources for their business (Hoque, 2006). Historically, the shift away from the framework of shareholder to stakeholder model was identified in the late 20^{th} century and used in the 1930s by General Electric Company which promoted stakeholders' benefits in order to find a way of surviving the financial crisis (Letza *et al*., 2004).

Back in the 1930s, the new concept of this theory was presented as a separate company theory (Hoque, 2006) since a numbers of questions were raised about it in terms of how to define a stakeholder, how to align their interests and how to define the firm's objectives from its stakeholders' perspective (Sternberg, 1997). On the whole, the common criticism of this theory was that it was difficult to align the conflict of the stakeholder with the difficulties resulting from how to administer different stakeholders with various needs and demands and how to treat all stakeholders equally (Hoque, 2006).

Numerous attempts have been made by prior studies to identify stakeholder groups. For instance, Clarkson (1995) divided stakeholders into two groups: the primary group, which includes customers, employees, creditors, providers and government, which is given priority because of its intrinsic role of organisation. The secondary group, which is not considered crucial for organization comprises media, environmentalists and the consumer. Mitchell *et al* (1997) divided stakeholders in terms of power, urgency, perspective and legitimacy. This model ranks stakeholders into eight groups according to the importance of each group. Benson and Davidson (2009), who divided the stakeholder theory into two approaches: strategic approach and moral approach, suggest that the issue of this theory is how the stakeholder can be identified, and resources can be allocated. Moreover, if a firm provides more resources to stakeholders, the shareholder may suffer. Donaldson and Preston (1995) also examined the three types of stakeholder theory and found that they are mutually supportive and the normative base of theory has fundamentally been a modern theory of property rights.

The proponents of this theory argue that the rationale of paying attention to these groups is twofold: first, it can be argued that their demands have vital value; therefore, the firm has an important role to fulfil its responsibilities toward their legitimate claims. Second, the profitability of a firm can be improved by recognizing the stakeholders' interests (Ayuso, 2009).

Proponents of this approach also conceive that it can contribute to extending the scope of accountability (Gray *et al*., 1997). They also argue that whether the company is small or large it can ignore the reality of dealing within economic or social activities involving the public. Lee (1998) describes weak management who avoid the public aspects of the operation of firms further, stating that recent scandals have not just affected single shareholders, but rather every single stakeholder has suffered. Thus, different corporate governance structures and monitoring mechanisms may be favoured by stakeholders. This means that stakeholders may play a significant role in affecting monitoring mechanisms by being outside directors (Mallin, 2007).

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Alpaslan *et al.* (2009) suggests that crises can be contained when a firm has a robust relationship with its stakeholders; hence, the stakeholder model may be a more beneficial corporate governance model for a firm not just in difficult situations but also in more complex crises. Therefore, corporations should take into account all stakeholders' interests and treat them equally.

On the one hand, stakeholder theory has been censured by proponents of agency theory based on several points. Sternberg (1997) suggests that the stakeholder approach, which is incompatible with intrinsic objectives, is not fundamentally able to provide better corporate governance and financial corporate performance. She argues that balancing stakeholder interests is not likely to be successful and its accountability is unjustified. Moreover, stakeholder theory vitiates property rights and accountability. However, his criticisms do not mean that there is no legitimacy for employing the concept of stakeholder theory. Moreover, Etzioni (1998) suggests that it is not likely for all stakeholders to be effectively represented in corporate governance; if they were the welfare of the company could be undermined.

According to agency and stakeholder theories, the behaviour of managers, as agents, should be in the interest of the principal: either shareholders or stakeholders. Thus, unbiased authors, such as Hill and Jones (1992), have attempted to reconcile agency theory and stakeholder theory by constructing a paradigm called stakeholders-agency theory. This paradigm is considered as a modification of agency theory, combining efficiency of market and power differential between managers and stakeholders. Additionally it concentrates on the conflict between managers and stakeholders. Culpan and Trussel (2005) confirm that agency theory is beneficial in clarifying the dimensions of unethical practices in accounting and financial issues, while stakeholder theory is useful in explaining the unethical practices which damage employees, creditors, investors, government and society.

The link between stakeholder theory and earnings management is presented by Hoque (2006) who illustrates that managers may manipulate earnings in order to improve their private interests at the expense of shareholders and other stakeholders. Thus, agency theory and stakeholder theory offer a beneficial foundation for research into the connection between earnings management and corporate social responsibility. He also states that under the agency–stakeholder approach stakeholders can monitor managers by offering their resources in order to fulfil needs. Mattingly *et al.* (2009) also found that good corporate governance; earnings quality and low earnings management are associated with an organisation's stakeholder management. However, in terms of audit quality, Baker *et al.* (1992) concluded that the role of external auditing as a monitoring mechanism should be increased, not only for shareholders' benefit but also for the interests of all stakeholders and society.

In summary, the integration of agency and stakeholder theory highlights the special role of management towards all stakeholders. Moreover, information asymmetry between management and other stakeholders increases the manager's role to comprise responsibility of safeguarding the welfare of multiple stakeholders to accomplish this aim.

Table (5.2) Differences between Stakeholder Theory and Agency Theory

	Agency theory	**Stakeholder theory**
Objective	Maximizing shareholder wealth	Multiplying objectives of parties with different interest
Governance structure	Managers are agent of shareholders	Team production model
Governance	Monitoring	Coordination, cooperation and conflict resolution
Performance metrics	Shareholder value sufficient to maintain investors' commitment	Fair distribution of value created to maintain commitment of multiple stakeholders
Residual hazard holder	Shareholders	All Stakeholders

Source: Ayuso (2009)

5.2.4 Institutional Theory

Institutional theory which has been developed within management studies is a common theory applied generally in social science studies and notably in accounting literature (Scott, 1995). Institutional theory is interested in working on an economic phenomenon within its entire surrounding environment that comprises social, political, cultural, religious, civilization and technological factors. Recently, different types of institutional theory (old institutional economics (OIE), new institutional (NIE) or transaction cost economics and new institutional sociology (NIS) have been utilized to obtain perceptions in organizational change and accounting practices. In respect of this research, it might be helpful to summarize the nature of two types of institutional theory that are conceived to be relevant to the research topic.

5.2.4. 1 New institutional sociology (NIS)

As mentioned earlier, institutional theory has been used frequently in management accounting and is relevant to researchers who seek voluntary corporate reporting practices since it has a role in providing a complementary approach to both stakeholder theory and legitimacy theory (Clark, 2004). It is concerned with explaining mechanisms by which organizations may seek to align perceptions of their practices and characteristics with social and cultural values in order to obtain legitimacy (DiMaggio and Powell, 1983). These mechanisms, which encompass a wide range of legitimacy mechanisms, may be proposed by both stakeholder theory and legitimacy theory (Clark, 2004).

According to new institutional sociology theory, DiMaggio and Powell (1983) established three different isomorphics and suggested that firms embrace various rules or practices because of "***coercive***", "***mimetic***" or "***normative***" isomorphism. ***Coercive*** isomorphism occurs when organizations change their institutional practices solely due to pressure from stakeholders (Meyer and Rowan, 1977).The second isomorphism process presented by DiMaggio and Powell (1983) is mimetic isomorphism. This involves organizations endeavouring to imitate or enhance the institutional practices of other organizations for reasons such as competitive advantage in terms of legitimacy. The final isomorphism is normative isomorphism which is related to the pressure from group norms to adopt notable institutional practices (DiMaggio and Powell, 1983; Clark, 2004). In this case, professional expectation that accounts will comply with accounting standards acts as a form of normative isomorphism for the organization shaped by accounting standards.

According to this theory, corporate governance is viewed as change in organizational processes over time and how governance structures "fulfil ritualistic roles that help legitimize the interactions between the various actors within the corporate governance mosaic" (Cohen *et al*. 2007). It comprises pressures implemented to adhere to corporate governance regulations by regulators or stock exchanges. This leads some organizations to implement corporate governance recommendations, such as a more independent board and the establishment of an audit committee.

The primary aim of corporate governance is to confirm that a corporation is bound to an environment by elucidating and defining its goals which should accommodate the expectations of the environment (Judge *et al*., 1985). Therefore, according to institutional theory, corporate governance should entail defining the organizational aims of the corporation in the context of an existing value system within the firm.

Institutional theory argues that historical, social and political problems that are relevant to understanding organizational changes should be addressed for the adoption or rejection of a new system or regulation (Cohen *et al*. 2007). Thus, corporate governance as a new system will succeed to the extent that there is broad congruence between the new rules and existing routines in the corporation (Yazdifar, 2003).

Stedham, and Beekun (2000) assert that, according to institutional theory, the board of directors has two primary roles: linkage and administration. In the linkage role, the board of directors is interested in establishing a relationship between the corporation and the external environment; however, in the administrative role, the board of directors is concerned with overseeing the performance of top management, in particular the CEO.

On the other hand, institutional pressure leads organizations to adopt similar processes through the need to manage in a way that is similar to other organizations in the same environment (DiMaggio and Powell, 1983). Therefore, these characteristics can be defined as structures and management practices deemed legitimate and socially acceptable by other organizations, regardless of their actual effectiveness (Saudagaran, 1997).

Therefore, when organizations attempt to apply a new system considered to be legitimate and successful that other organizations have applied, mimetic isomorphism is a term which expresses imitated change. In this case, corporate governance practices may become more similar over time (Braiotta and Zhou, 2006; DiMaggio and Powell, 1983), as organizations are obliged to harmonize with new regulations or select “best practices,” or mimic other organizations to reinforce their legitimacy (Cohen *et al*. 2007).

Mimetic change arises when organizations perceive that certain corporate governance attributes contribute to the governance structure within successful organizations and follow similar accounting treatments and choices, and this will increase compliance with accounting standards and corporate governance recommendations over time (Hoque, 2006).

Stedham and Beekun (2000) suggest that institutional theory and agency theory are complementary to corporate governance effectiveness, therefore the use of both structures as a framework might be helpful in deepening the understanding of corporate governance and board functions.

According to institutional theory, earnings management incentives may be affected by formal or informal pressure, and change may be created by an organisation in order to model itself on other organisations. Kury (2007) views that institutional provides the best perspective for examining earnings management practices. He provides the institutional argument to explain that earnings management is helpful to complete the view of agency theory and suggests that insights for earnings management comprise the blending of agency and institutional theory perspectives to obtain a more complete understanding of the behaviour and the positing of a continuum of earnings management.

To sum up, organizations are subject to a number of rules and regulations in order to ensure legitimacy and thus have access to resources and ensure their survival (DiMaggio and Powell, 1983). However, these rules and regulations do not necessarily guarantee that organisations will continue to operate efficiently (Meyer and Rowan, 1977).

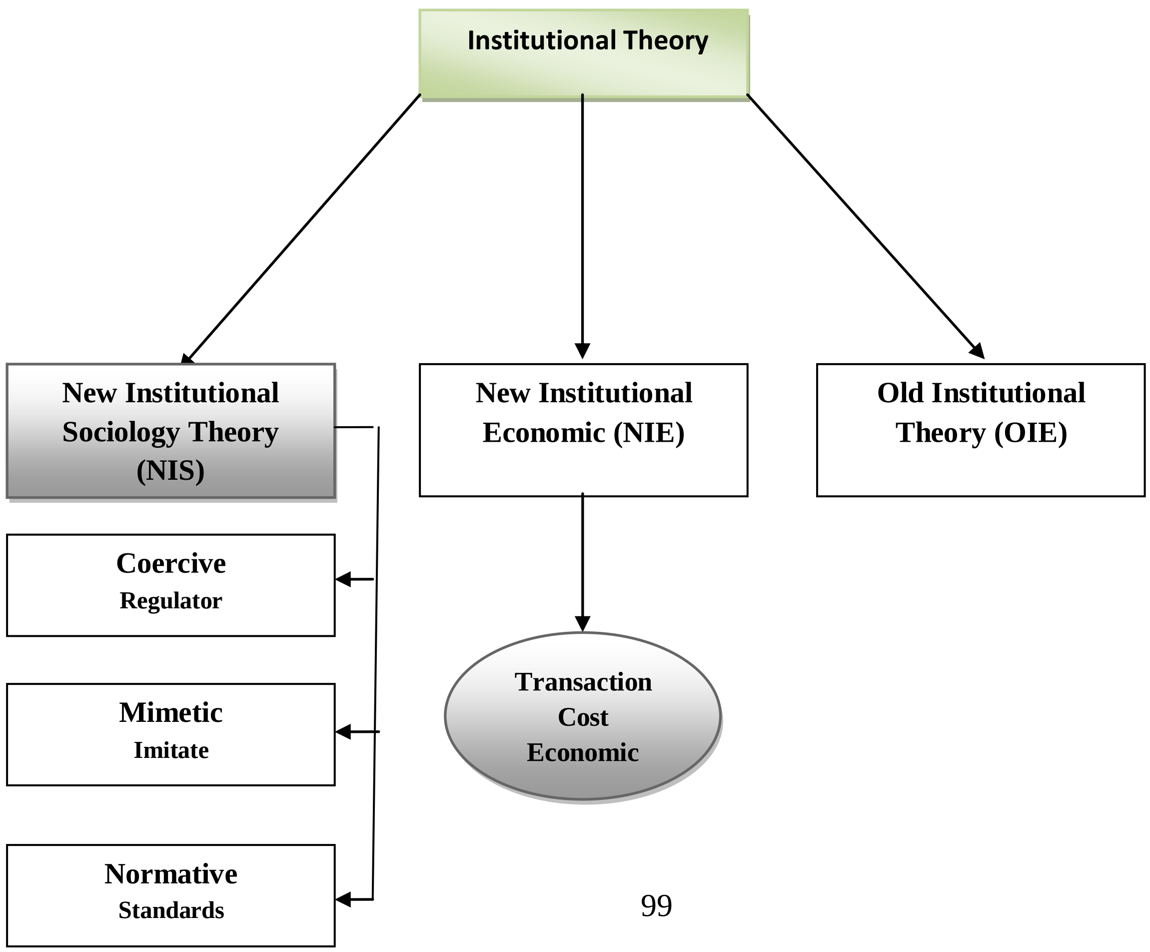
5.2.4.2 Transaction cost economics theory (TCE):

In 1973, Coase is considered an originator of transaction cost economics theory (TCE) which attempts to explain the framework of a company in terms of the optimal selection between market and hierarchal provision (Clark, 2004). However, the concept of transaction cost economics theory was incomplete until Williamson (1988) developed it in the most significant attempt to develop economic theory to take the structure of firms seriously. The notion of TCE was explained by Hardt (2009) as a move from treating the firm as an avoider of negative costs towards conceptualizing the firm as a creator of positive knowledge.

Williamson (1988) concludes two human factors and two sources that lead to transaction costs. Human factors are bounded rationality which explain how most transactions occur with little information; however, opportunism is defined as the incomplete disclosure of information. On the other hand, he also summarises two characteristics related to transaction costs: frequency, which refers to how often an asset is used and asset specificity, which is related to the extent to which assets deployed are customized.

Spekle (2001) confirms that transaction cost theory is a beneficial approach to controlling management because it offers a practicable method of addressing control structure effectiveness. However, he believes that it neglects much understanding of human agency. Geyskens *et al*. (2006) conclude that transaction cost theory, is well established and empirically supported and can explore the variety and complexity of organizational forms. However, they claim that two obstacles might constrain researchers who attempt to build on the existing transaction cost studies; one of them is the depth of transaction cost which constitutes the issue.

Figure (5.3) Types of Institutional Theory



5.3 POSITIVE THEORY, CAPITAL MARKET EFFICIENCY AND EM

Positive theory has contributed to explaining earnings management practice since a study conducted by Watts and Zimmerman (1978) who developed this theory as an alternative explanation for the problems of accounting choices (Xiong, 2006). This theory expects non-capital market motivations for managers to engage in earnings and is concerned with internal contractual motivations which lead to the use of different accounting choices.

Watts and Zimmerman (1986) proposed three primary assumptions for earnings management practice: bonus plan, debt covenant hypothesis, and political cost. In terms of bonus plan, managers are motivated to choose accounting methods and use their discretion in accounting estimates to increase their compensation or their benefit. Early studies suggest that this has been used as a means for managers to implement income-decreasing as an incentive for compensation. Healy (1985) and Dechow and Sloan (1991) found that managers use income-increasing techniques in order to increase their compensations and bonuses.

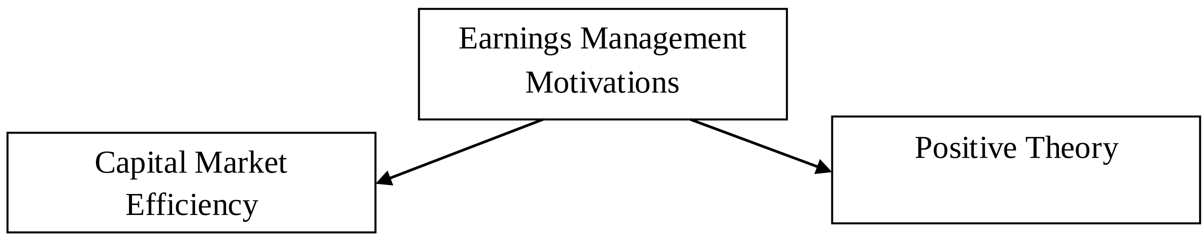
According to debt covenant hypothesis, there is often pressure on creditors to provide assurance that, repayments and interests will be made on time. Therefore, this pressure encourages firms with high debt to equity ratios to select accounting methods and policies that increase reported earnings to avoid being in technical default of debt covenants (Xiong, 2006). DeFond and Jiambalvo (1994) and Sweeney (1994) suggest that since managers attempt to defer violating lending covenants for as long as possible they use income-increasing accruals in the year prior to covenant violation.

The final positive theory premise is related to the political cost hypothesis. Governments often impose specific regulations that assert pressure and increase costs, as advantages to the public and to make excessive profits. Under such circumstance, managers have an incentive to manipulate earnings downward by selecting accounting methods. Hang and Wang (1998) who examined the situation after Iraq's attack on Kuwait in 1991 (the Gulf Crisis) suggest that oil companies are motivated to decrease the reported earnings for the third and fourth quarters in order to reduce political costs generated from potential adverse political actions such as regulations, antitrust and government. Further evidence from an Australian, study by Monem (2003), using a variant of the modified Jones model, revealed that Australian firms were motivated to engage in earnings management in order to diminish political costs during the period from June 1985 to May 1988.

To sum up, positive theory presents three primary motivations for earnings management: the bonus plan incentive, the debt covenant incentive and the political cost incentive. These motivations come from the existence of fixed contracts using accounting numbers. In other words, positive theory changed the way from testing capital market motivations to concentrating on firms' internal contractual reasons for cosmetic accounting changes. Current research on earnings management has, however, shifted the focus away from positive theory and back again to capital market motivations as an interpretation of the opportunistic behaviour of managers.

According to capital market, current studies test the potential for managers to intentionally mislead investors about the underlying value of their firms. Notably, the testing is concerned with managers' attempts to affect equity offers by overstating earnings or to affect their short-term share performance by engaging in earnings to meet financial analysts' expectations (Xiong, 2006; Kasznik, 1999). In other words, generally, most evidence provided by prior studies shows that earnings management seems to be a common practice among companies and has been an important matter for the SEC (Levitt, 1998). The motivations for earnings management can be classified into many: to encourage investment in a firm by offering shares, to meet expectations of financial analysts or to affect the expectations of specific types of investors, etc.

Figure (5.4) Motivations for Earnings Management According to Theory



5.4 CONCLUSION

This chapter has discussed the relevance of various theories in corporate governance research. The debate has revealed that there is no one specific theory which can elucidate corporate governance practices. However, the theories which have been employed in examining corporate governance mechanisms are agency theory, stewardship theory, stakeholder theory and institutional theory (Mallin, 2004). Importantly, the type of relationship between principals and agents is still ambiguous in Saudi Arabia because of the shortage of research in this domain. Despite the fact that Clark (2004) states that collectivism is a dimension of the relationship between principals and agents in Asia, South America and Southern Europe, it is difficult to generalise this concept to Saudi Arabia due to numerous factors including culture and the Islamic framework. Moreover, Benkel *et al*. (2006) suggest that the findings of prior studies do not necessarily apply to some countries since corporate governance practices may vary between countries as result of the above-mentioned differences. .

It can be concluded that agency theory is the most relevant theory to the research questions of this study. The literature related to the effectiveness of corporate governance on earnings management indicates that the board of directors is the apex of internal corporate governance and the main means of decreasing agency problems by aligning the interests of shareholders with managers' interests. Agency theory predicts that the board of directors and its committees will enhance the integrity of their financial reporting by monitoring management (Peasnell *et al*, 2005). As result of this conclusion by previous studies, the argument need to be tested empirically.

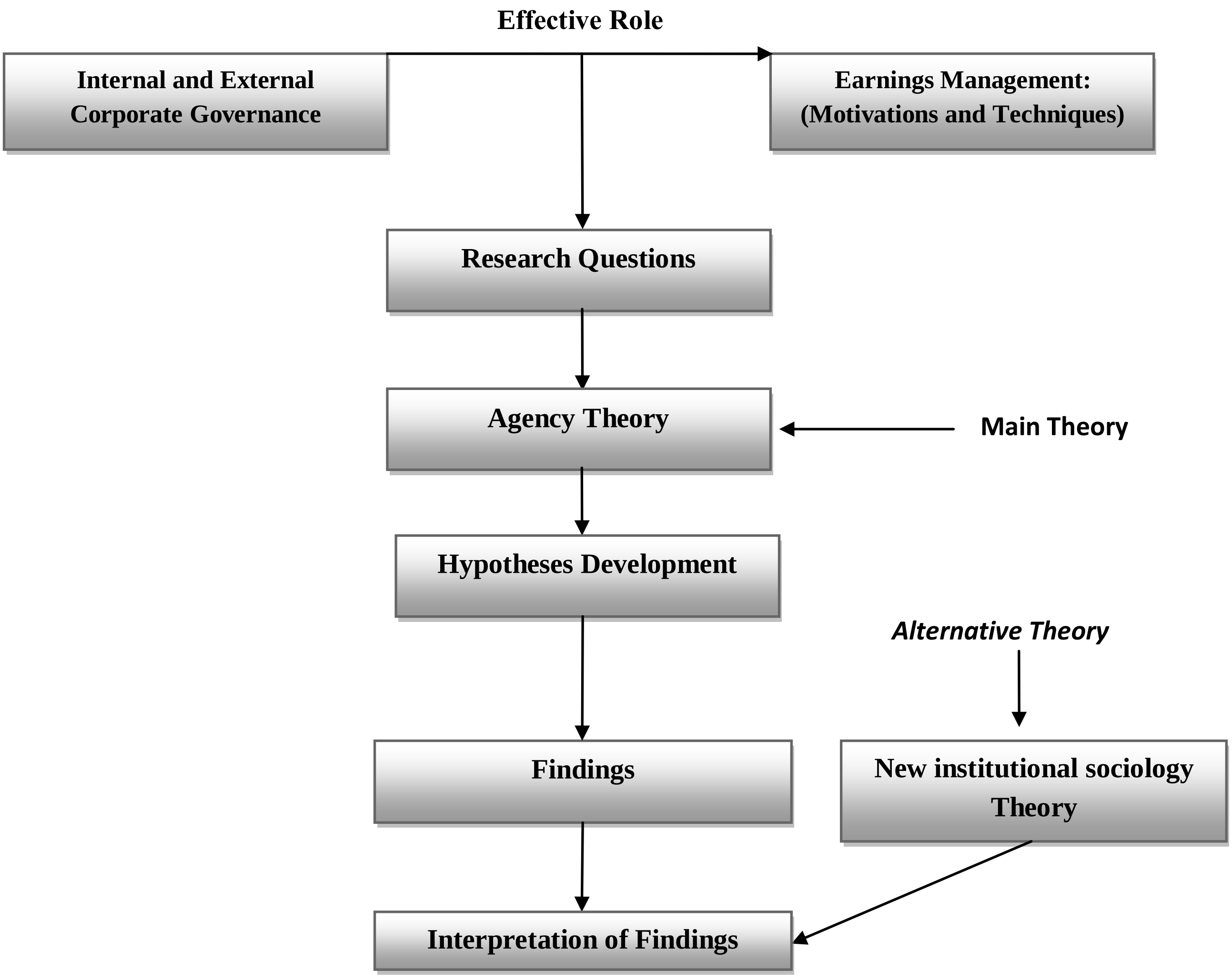
Given that Saudi listed companies are characterised as having family, state-owned and blockholder governance structures, this concentration may be a means of reducing agency problems. Agency theory expects that such a concentration might mitigate agency problems leading to a reduction in agency cost by aligning the interests of controlling owners with those of the company. Agency theory may be suitable for developed countries; however, ownership structure theory is probably appropriate for developing countries in terms of explaining firms' agency cost, where family ownership is highly concentrated (Pornuptham, 2006). This theory explains the proportion of equity held by relevant parties (i.e. outside shareholders, debtholders, and managers) and is associated with the extent and direction of EM (Dempsey *et al*., 1993).

Since corporate governance in Saudi Arabia is at a preliminary phase, institutional theory will be used as an alternative theory in interpreting the findings when necessary. Institutional theory suggests that companies might adopt practices or regulations as a result of coercion from legislators who impose certain practices in order to improve organizational effectiveness. Stedham and Beekun (2000) suggest that institutional theory and agency theory are complementary approaches to corporate governance effectiveness, so using both as a framework might be helpful in deepening the understanding of corporate governance and board functions. Accordingly, hypotheses will be formulated based on agency theory;

however, institutional theory will be used in the interpretation of finding if they are necessary as complementary.

In terms of earnings management practices, numerous theories have been employed to investigate earnings management motivations and techniques, such as agency theory, positive theory, capital market, and institutional theory. Agency theory is the most used theory in exploring earnings management practices however, agency theory alone may not be capable of adequately describing or justifying the motivations and techniques of earnings management; thus, convergence between agency theory and institutional theory may be helpful since institutional theory also provides a precise interpretation of earnings management practices. Figure (5.5) attempts to show the theory used in the current research.

Figure (5.5) Explanation of potential theories which could be used in this study



Chapter Six:

RESEARCH METHODOLOGY

6.1 INTRODUCTION

After shedding light on the theoretical framework in the preceding chapter, which presented the theories relevant to this study, this chapter addresses the methodology adopted in this research and the methods of collecting the primary and secondary data. As mentioned previously, this study aims to obtain an insight into respondents' perceptions of the motivations and techniques of earnings management and to examine the effectiveness of internal and external corporate governance mechanisms on reducing earnings management in Saudi Arabia. Hence, the chapter is structured as follows. Section 6.2 presents the research methodology related to assumptions with respect to the nature of social science, and assumptions regarding the nature of society. Section 6.3 explains the research paradigms while Section 6.4 provides data collection methods including the questionnaire survey, secondary data, and semi-structured interviews. Section 6.5 presents a brief summary of the chapter.

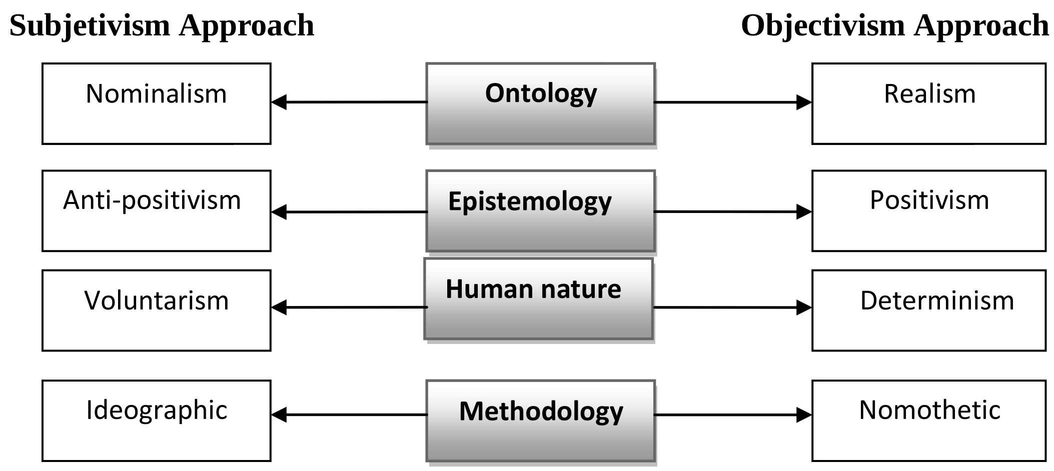
6.2 RESEARCH METHODOLOGY

It is worth pointing out that the research philosophy adopted by the researcher is an important stage which reflects how accurately the researcher understands the phenomena and that he is able to choose the appropriate research tools. Anyone who conducts a study in any domain should be able to come to grips with the main issues in his/her pursuit of knowledge and often the essential issue in social science is 'how do we know, what we know, and how do we gain knowledge' (Goles and Hirschheim, 2000). The concept of research philosophy which began in the UK gives importance to social science research, notably research methodology. Burrell and Morgan (1979), who produced a classification of organizational research, presented their assumptions regarding the nature of social science and their various philosophical stances. Likewise, Hopper and Powell (1985) provided further explanations associated with the various aspects of social science which consist of distinct elements regarding ontology, epistemology, human nature, and methodology.

6.2.1 Assumptions about the Nature of Social Science

Burrell and Morgan (1979) address four assumptions associated with the nature of Social Science: ontology, human nature, epistemology, and methodology. These four sets of assumptions have philosophical positions related to their subjective-objective dimension. The objective dimension comprises: realism, positivism, determinism and the nomothetic approach (quantitative) while, nominalism, anti-positivism, voluntarism and the ideographic approach (qualitative) are subsumed in subjectivism. (See figure 6.1). The selection of an appropriate research methodology cannot be made in isolation from the consideration of previous assumptions that reinforce the research in question (Ryan *et al.*, 2002). Accordingly, these dimensions will assist the researcher to identify the current research stance from these assumptions.

Figures (6.1) Assumptions Regarding the Nature of Social Science



Source: Burrell and Morgan (1979) (p. 3).

6.2.2 Objectivism Approach Versus Subjectivism Approach

Objectivism is an ontological stance which argues that social phenomena and their meanings have presences which are independent of social actors and implies that the social phenomena and categories that are used frequently in discourse have an existence which are independent or separate from actors (Bryman, 2004, p.16-18). However, according to the subjectivism approach, social phenomena and their meanings are not independent, but are achieved by their social actors, which are not produced via social interplay but are in a constant state of revision (Bryman, 2004). In other words, social phenomena are considered to be created from perceptions and consequent actions of social actors (Saunders *et al*. 2007). Social entities are viewed as objective entities which obtain a reality external to social actors according to the objectivism approach, while the subjectivism approach views social entities as social constructions which belong to social actors' perceptions and actions (Bryman, 2004).

Figure 6.1 shows that the term ontology defines what the nature of reality is. The world should either be considered objective and external to the researcher or socially constructed and understood solely by looking at the perceptions of the human actors, whereas epistemology is interested in seeking knowledge and what we accept as the researcher and what is being researched (Hussey and Hussey, 1997). Explicitly, the key difference between ontology and epistemology lies in the fact that ontology focuses on understanding 'what is' while, epistemology seeks to understand 'what it means to know' as well as assisting in the process in selecting 'what types of knowledge are legitimate and sufficient' (Gray, 2004).

Epistemology branches into two perspectives: positivism and anti-positivism (interpretivism); positivism refers to the philosophical position of natural scientists coping with the observation of social reality so the end product of such research can be law-like generalisations like those created by the physical and natural scientists (Saunders *et al*., 2007). Therefore, the main aim of the theory is to create hypotheses which can be tested (Bryman and Bell, 2003). Hussey and Hussey, (1997) define positivism as follows: '[the] researcher is independent from that being researched and value-free and unbiased'. In terms of an anti-positivist perspective, the researcher usually adopts specific methods such as participant observation and interviews and does not look for laws or underlying regularities of social affairs as in science. Generally, this perspective reflects the stance of the reality and claims that generalisation is not a fundamental matter (Saunders *et al*., 2007).

Human nature is the third assumption concerning the nature of Social Science, and takes into account the relationship between human beings and the environment. In other words, human activities should be understood to produce assumptions regarding human nature and provide the reality concerning whether human life is the subject or object of enquiry (Burrell and Morgan, 1979). Generally, there are two perspectives of the role of human beings in social life: Firstly, determinism views human beings and their experience as products of the environment, whereas voluntarism looks at man soundly as autonomous and free-willed (Burrell and Morgan, 1979).

In terms of methodological assumption, it is interested in the process of research that specifies the appropriate paradigm to be adopted (Hussey and Hussey, 1997). The nomothetic approach is a methodological assumption which seeks associations or causality and the researcher generally uses a large sample and investigates a topic that comprises the concept of intelligence and wants to find a way of measuring a specific aspect of intelligence in which he is interested. Hence, the researcher focuses on what he observes and formulates hypotheses (Hussey and Hussey, 1997). Regarding the ideographic approach, the researcher examines a small sample and, using different research methods to gain different perceptions of the phenomena and the analysis, will seek to understand 'what is happening' (Hussey and Hussey, 1997; Saunders *et al.*, 2007).

As regards to this research, it benefits both from the objectivism and subjectivism in terms of the nature of data collected and analysed, as this research collected primary data through a questionnaire and interview survey and secondary data through the annual reports. The former constitutes the subjectivism, as participants expressed, by definition and nature, their own understandings of the social reality. In other words, the respondents provides their opinion and understanding on the issues concerned and questioned through the questionnaire. This refers to the subjectivist nature of the society. Furthermore, the data collected through interviews also is considered to be subjective by definition, due to the same reasons. However, the data collected through the annual reports are considered as unobtrusive and objective. Thus, these study benefits two different data sets produced through two different approaches.

The same multi-approaches can also be seen in the case of data analysis. While objectivism based statistical analysis was used to analyse data related questionnaires and annual reports, interview data was analysed through interpretative method. It should also be mentioned that interpretative method shaped the general discussion as well.

6.2.3 Assumptions about the Nature of Society

Two different types of approach of sociology have been identified by Dahrendorf (1959) and Lockwood (1956) who claim that one focuses on the nature of social order and equilibrium whereas the other is concerned with issues of change, dispute, and coercion in social structure. The differences between the two approaches can be observed in Table 6.1 as presented by Burrell and Morgan (1979).

Figures (6.2) The Order-Conflict Theories

The (Order) or (Integrationist) View of Social Emphasis	**The Conflict and Coercion View of Society Emphasis**
Stability Integration Functional co-ordination Consensus	**Change Conflict Disintegration Coercion**

Source: Burrell and Morgan (1979) (p.13).

However, order-conflict differences have received a great deal of criticism. Cohen (1968) considers treating order and conflict as being entirely separate to be a mistake and believes that theories should entail elements of order and conflict in their models. Moreover, since the subjectivist movements were more important, the debate related to order-conflict has settled down to involve only the effect of issues concerning philosophy and methods of Social Science (Burrell and Morgan, 1979).

One of the pioneering studies to discuss the order-conflict distinction was that of Burrell and Morgan (1979) who argued that this issue is problematic and highlighted that regulation and radical change are replacement notions that have two dimensions. Firstly, regulation is interested in the explanation of a society emphasising its underlying unity and cohesiveness. Secondly, the sociology of radical change is concerned with explanations of radical change, deep-rooted structural conflict, modes of domination and structural contradiction.

6.3 RESEARCH PARADIGM

The paradigm is a helpful way of understanding and explaining social phenomena based on the ontological and epistemology positions (Saunders *et al.*, 2007). Moreover, Corbetta and Patrick (2003) illustrating the importance of this paradigm, claims that scientific research that is done without paradigm lacks orientation and criteria for selection, so that all issues, methods and techniques are equally legitimate. Likewise, Bryman (2004) confirms that paradigm means how a study should be conducted and how its results should be interpreted.

Burrell and Morgan’s (1979) study is considered a pioneer study in research methodology which made a magnificent contribution by presenting its four paradigm model which helps researchers to elucidate their research assumptions in order to design their research and to provide a beneficial understanding of their work (Jackson and Carter, 1991; Falgi, 2009). Burrell and Morgan (1979) present their four paradigm model (See figure 6.2) radical change, regulation (vertical axis), subjectivist and objectivist (horizontal axis).

Figures (6.3) Social Research Paradigm

The sociology of radical change

Subjective	Radical Humanist	Radical Structuralist	**Objective**
	Interpretive	Functionalist **(Researcher)**	

The Sociology of Regulation

Source: Burrell and Morgan (1979) (p.13).

The subjectivist and objectivist paradigms are discussed early in the research philosophy section, where they provide the ontological stances. Radical change is interested in providing a theme concerning the procedures that should be undertaken in an organisation's affairs and provides proposals to make important changes to their usual stance. However, the regulation position aims to depict current practice and how an organisation's affairs are regulated and then to offer suggestions for improvement consistent with the current stance (Falgi, 2009).

The radical humanist paradigm which is located within the subjectivist and radical change dimensions "seeks to change, emancipate and potentiate the status quo and to overcome all barriers facing this emancipation (such as ideology, power, psychological compulsions and social constraints" (Falgi, 2009). However, the radical structuralist paradigm, which takes a different ontological stance, aims to accomplish fundamental change and concentrates on organisational structure and then analyses organisational phenomena such as power relationships and patterns of conflict (Saunders *et al*, 2007).

Interpretive paradigm refers to the fact that "everyday life is accorded the status of miraculous achievement" (Burrell and Morgan, 1979: P.31). This would not necessitate the researcher accomplishing change in the order of things, however it would enable him to understand and interpret what is going on (Iskander, 2008). Finally, the other objectivist dimension (functionalism) which has the regulation perspective explains why notable organisational issues occur and offers recommendations set within the present structure of the organisational situation (Saunders *et al*., 2007).

6.4 DATA COLLECTION METHODS

Existing studies have recently attempted to adopt both quantitative and qualitative approaches within the context of a single research study to overcome the potential bias of a single-method approach. The primary feature of adopting multiple methods in the same study is to enable triangulation to take a place (Kamel, 2006). A number of studies suggest that the use of multiple methods in Social Science is an important matter; for example, Rudestam and Newton (2000, p. 45) and Hussey and Hussey (1997, p.74) suggest that it is a perfectly good choice to use both quantitative and qualitative methods for collecting data. Likewise, Denzin (1978) highlights that adopting various methodologies in the study of the same phenomenon is necessary if the conclusions are the same and leads to increased validity and reliability compared to using a single methodological approach.

In the same vein, Burgess (2001) suggests that research methods that do not apply sampling, observation and interviews are narrow and inadequate. In general, the main distinction between quantitative and qualitative methods is not of quality but of procedure as Saunders *et al*. (2007) observed. In other words, quantitative method uses measurements whereas qualitative method reflects perspectives on knowledge and research objectives.

The concept of triangulation was developed by Denzin (1970) who suggested that employing various methodologies and various techniques in one study would certainly enhance the credibility of research by presenting further ways of generating evidence in support of key claims. Denzin (1978), Easterby-Smith *et al.* (1991), Hussey and Hussey (1997) and Seale (1999) divided triangulation into four types as follows: data triangulation, in which data are collected at different points in time and from various sources; methodological triangulation where both quantitative and qualitative methods are adopted; investigator triangulation, which is related to data being collected independently by different researchers on the same phenomenon and their results being compared to diminish personal biases; theory triangulation, which is associated with a theory being taken from one discipline and adopted.

Existing studies have presented a limited insight into earnings management practices and the role of internal/external corporate governance in reducing them. Therefore, based on the objectives of this research, this study adopts both data and methodological triangulations to increase confidence in the findings obtained if the findings of all different methods agree.

In other words, both quantitative and qualitative methods have been adopted in order to enhance data quality and in an endeavour to fill the gap in the literature. Specifically, the quantitative method has enabled this study to examine the theory with a large sample size, whereas the qualitative method has enabled it to provide insight into the phenomenon being examined and obtain an in-depth understanding of the research problems.

To achieve that, this study will collect secondary data and primary data concerning the phenomenon of earnings management and internal/external corporate governance in Saudi Arabia. Regarding the quantitative approach, the questionnaire aims to provide better understanding the different aspects of earnings management practices which is mainly used to explore the motivations and techniques of earnings management in Saudi Arabia by obtaining the perceptions of respondents.

On the other hand, the relationships between corporate governance, external audit factors, and earnings management are primarily tested using database; the questionnaire survey is adopted for corroboration. In terms of qualitative approach, semi-structured interviews are used to provide a better understanding of the research questions, confirming and elaborating on the questionnaire survey and secondary data findings and supporting the hypotheses development.

6.4.1 Data Collection Problems in Saudi Arabia

Saudi Arabia is characterised as having different social, economic, cultural and religious aspects which considerably affect the conducting of social studies. During the undertaking of this research some problems arose which should be noted as follows:

1- In comparison with developed countries, the access to data in Saudi Arabia seems difficult due to a number of obstacles such as mandatory permission which is required.
2- Although there is published data in the Saudi market website, the availability of data is generally sparse, therefore it was necessary to obtain it from companies, which was a time-consuming process.
3- All secondary data including dependent and independent variables was mainly hand-collected from annual reports which required a great deal of time and accuracy.
4- The researcher needed to be very active to collect the data since a less active researcher would find difficulty in finishing the data collection on schedule.

5- In general, most respondents in Saudi Arabia place less importance on research.
6- Some respondents seemed to finish answering the questionnaire as quickly as possible without paying attention to the terms they chose.
7- Many respondents attempted to avoid the researcher for interviews which would be considered as an investigation.
8- Saudi Arabia is a big country and the headquarters of companies are distributed between different cities, which meant the researcher had to travel from city to city.
9- Access to members of boards of directors and sub-committees was very difficult as they do not stay in the same place. Therefore, the researcher used the contact number for respondents provided by management.

The above issues were taken into account when designing the data collection methods and choosing the sampling and groups of participants. The following section presents more details in respect of the research methods used in this study.

6.4.2 Quantitative Method

Quantitative methodology, based on the positivist philosophy, is concerned with counting and measuring aspects of the social world and its structure and processes; theoretical background establishes the standards of the approach of the social sciences over a long time (Sarantakos, 1994). This approach normally has a logical structure in which theories identify the issues to enable the researcher to address sets of hypotheses derived from general theories (Bryman, 2004).

One type of quantitative method is a survey technique that is usually related to the deductive approach and provides information on what people conceive or report (Neuman, 2000). The following section provides more details regarding the questionnaire survey, including design, questionnaire questions, sample selection and analysis procedures.

6.4.2.1 Questionnaire survey

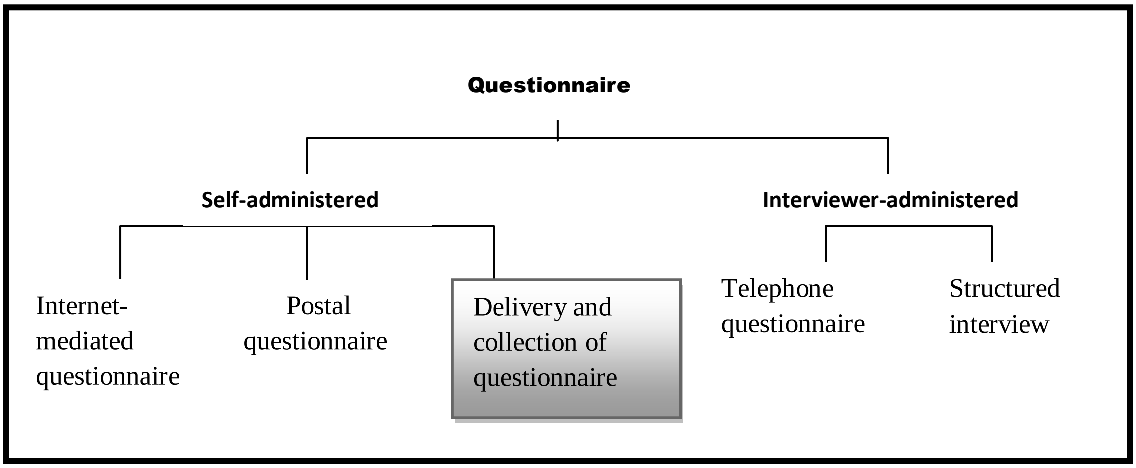
Questionnaires are generally used for descriptive or explanatory research conducted using attitude and opinion questionnaires and questionnaires regarding organisational practices (Saunders *et al.*, 2007). In other words, the questionnaire enables a study to identify and describe the variability in various phenomena.

The questionnaire survey is better when used together with other methods, such as in-depth interviews, to identify specific attitudes (Jankowicz, 2004). On the other hand, the questionnaire is more appropriate for Saudi respondents since they feel freer to express their opinions without fear of being identified (Falgi, 2009). As mentioned earlier, the questionnaire survey mainly answered the research questions related to the motivations and techniques of earnings management; however, at the same time it was employed as a support for the secondary data since using one method may not be sufficient to accomplish the study's objectives.

According to Saunders *et al*, (2007) there are two types of questionnaire: self-administrated and interviewer-administrated (See figure 6.4). The self-administrated questionnaire is divided into three types: internet-mediated questionnaire, postal questionnaire and delivery-collection questionnaire; the interviewer-administrated questionnaire is divided into two types: telephone questionnaire and structured interview.

For the purpose of this research, self-administered questionnaires were employed for a number of reasons; it is more appropriate for Saudi respondents, cheaper than other methods, easier for distribution, easier for respondents to complete, and the anonymity encourages respondents to complete the questionnaire leading to an increased response rate. Finally, this type of questionnaire is utilized extensively in surveys.

Figure (6.4) Types of Questionnaire



Source: Saunders *et al,* (2007) (P.357).

Although most questionnaires were delivered by hand to each respondent and collected later, a number of them were emailed to respondents and returned by email. Since some respondents may not understand how to answer the questions or may not be certain of the meaning of some of the questions or be unfamiliar with the questionnaire tool, these methods of questionnaires enabled the researcher to ensure that each question was answered correctly by clarifying any points of confusion and explaining the questionnaire to respondents.

Despite the aforementioned advantages, the self-administrated questionnaire has been criticised by some researchers such as Neuman (2000) and Sekaran (1992) who claim that it is not suitable for covering a wide geographical area and that anonymity cannot be guaranteed in some cases. Moreover, as they highlighted, this type of questionnaire provides little opportunity for the researcher to elicit more information when respondents provide incomplete answers. Finally, pre-coded questions can bias results toward the researcher's rather than the participant's way of looking things. Of course, no tool is without limitations that need to be considered to maintain the quality of the study; therefore, semi-structured interviews were adopted to diminish the limitations of the questionnaire in this study.

6.4.2.1.1 Design of the questionnaire

As indicated in the literature review, a large number of studies have investigated earnings management motivations and techniques employing various methodologies. However, those concentrating on collecting data from questionnaire survey and interviews are few. Two of the objectives of this thesis are to find out what are the motivations for Saudi managers for manipulating earnings and if they are, what are the frequent techniques used for this manipulation. Accordingly, the hypotheses for the study are formulated as follows:

H1: *There is a significant difference among respondents regarding earnings management motivations in Saudi Arabia.* .

H2: *There is a significant difference among respondents regarding earnings management techniques in Saudi Arabia.* .

In order to achieve the objectives of this research, the questionnaire was designed to elicit the perceptions of respondents regarding the research topic. The questionnaire attached in the appendix (See page 298) consists of four sections as follows:

1- General information
2- A set of questions related to the motivations and techniques of earnings management.

3- A set of questions related to the role of internal corporate governance characteristics in mitigating earnings management and one question regarding the concentration of ownership structure.
4- A set of questions related to the role of external audit factors in reducing earnings management.

Furthermore, in order to increase the response rate, the questionnaire was accompanied by a cover letter from the Business School (Durham University) and Taif University[1] requesting the recipient to participate in the survey, and confirming the confidentiality of any information provided by them. The content of the questionnaire for each section is set out as follows:

- **General Information:** This section attempts to obtain demographical information from respondents (position, working experience, educational level and major). Demographical information will be helpful for the researcher to justify various perceptions among groups.

- **Motivations and Techniques of Earnings Management:**
  This section attempts to elicit respondents' perceptions of motivations and techniques for Saudi companies engaging in earnings management. Specifically, this section consists of two parts: the first part includes a set of motivations for engaging earnings management derived from prior studies while the second part includes a list of techniques used to manage earnings management, also derived from prior studies. Generally, the questions present potential motivations for earnings management as identified by previous studies. These motivations include increasing remuneration (Aljifri, 2007; Baker *et al.*, 2000), increasing share price (Bergstresser and Philippon 2006; Louis and Sun), reporting a reasonable profit and avoiding loss (Markarian *et al* 2008; Roychowdhury, 2006), fulfilling the stock market's expectations (Coppens and Peek 2005), reducing buyout compensation (Kamel and Elbanna, 2010), retaining stable dividends (Daniel *et al*. 2007) and one question associated with the Saudi environment is to reduce *Zakat*. The questions related to the techniques of manipulation include inventory, receivable accounts, depreciation accounts, various expenses, revenue (Nigrini *et al* 2005), cash flow, reserves, sales of assets, of internal transactions related to business combination and capitalising (Kamel and Elbanna 2010; Markarian *et al* 2008).

[1] The r**esearcher is a member of the academic staff at Taif University which is a Saudi University.**

- **Internal Corporate Governance and Ownership Concentration:**

  Third section attempts to elicit respondents' perceptions of the role of internal corporate governance in reducing earnings management including board characteristics, audit committee characteristics, remuneration and nomination, and ownership concentration as well as the existence of members of the royal family on the board. Prior studies (Muth and Donaldson, 1998; Person 2006; Abdul Rahman and Ali 2006; Xie *et al*. 2003; Sarkar *et al*. 2006; Ebrahim, 2007; Benkel *et al*. 2006 and Uzun *et al*. 2004) found statistically contradictory findings which motivated this study to elicit the respondents' perceptions regarding the effect of internal corporate governance and ownership concentration on earnings management practices.

- **External Audit Factors:**

  Forth section attempts to elicit respondents' perceptions of the role of external audit in reducing earnings management including contracting with a firm which has high independence and a good reputation, contracting with a local firm affiliated with the BIG4, contracting with a specialist auditor in the industry, a short auditor tenure with a company, issuing deterrent punishments, issuing stricter auditing standards and accounting legislations. Prior studies (Chen *et al*., 2005; Dye, 1993; Mayhew and Wilkins, 2003; Carcello and Nagy, 2004; Simnett *et al.*, 2000; DeAngelo, 1981 and Mautz and Sharaf, 1961) found statistically contradictory findings, motivating this study to elicit the respondents' perceptions regarding the effect of external audit on earnings management practices.

In general, questions can be classified into two categories: open-ended questions that provide flexible formulation of responses and closed or pre-coded questions requesting respondents to click or choose one fixed answer with which they agree most. This study used closed or pre-coded questions in the questionnaire since this type usually gains a good response rate in Saudi Arabia. Moreover, all the questions in this study have been measured by adopting the five-point Likert scale used extensively in social science research, ranging from 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree (Saunders *et al*., 2000). The Likert scale measures opinions, beliefs, and attitudes by showing varying degrees of agreement with, or endorsement of, a statement (DeVellis, 2003). Finally, the questionnaire questions were translated back-to-back, into Arabic and then back into English to overcome any translation issues and to confirm that all questions conveyed the same meaning to all respondents.

6.4.2.1.2 Piloting the questionnaire and assessment of validity

Shortcomings in questionnaires may arise for different reasons, for example unstructured formulation, unclear language, illogical, omitted or unsuitable questions, and difficulty in answering them, which may lead to unwillingness to reply, missing data, and low response rates (Pornuptham, 2006). Validity is defined as ability to provide findings that are consistent with theoretical or conceptual values (DeVellis, 2003). Therefore, the questionnaire was validated by applying a pilot study that was not a pre-test, which was undertaken to provide relevant questions and to enhance specific areas that may not be explicit by obtaining astute feedback. For this purpose, twenty questionnaires were distributed to academic staff in Saudi Arabia and Durham Business School, external auditors, and audit committees respectively which is conceived to be sufficient according to Fink, (1995) who suggests that a minimum number of 10 is acceptable for a pilot study. During the pilot study, astute feedback and comments were mostly related to the language, omitting and adding some terms such as *Zakat* and Tax, whereas a number of them viewed the questionnaire as comprehensively and extensively covering the research questions. According to Burgess (2001) a pilot study enables researchers to perform a trial analysis sample that leads to enhanced test for the analysis process, the questionnaires of the pilot study are reviewed and examined and will provide similar findings to the results analysis.

6.4.2.1.3 Sample Selection Criteria

Respondent selection

Participants were divided into four groups: members of boards of directors, members of sub-committees, auditors, and academic accountants (See Table 6.2 next page). The primary criteria in the selection of specific groups of respondents were that all the groups should have adequate experience in their careers and they should be aware of earnings management practices. Moreover, these groups have the right and the means to monitor companies, which makes them intrinsically effective and gives them vital responsibility for the integrity of financial reporting and the accountability of management. In addition, they are considered as the cornerstone of monitoring mechanisms. It is worth pointing out that although the academics have limited features compared to the other groups in terms of responsibilities and monitoring, they are concerned with complicated issues and considered to be experts who provide a different perspective. In other words, as Dechow and Skinner (2000) indicate, academics' perceptions of earnings management are generally different from those of practitioners and regulators who often see earnings management as pervasive and problematic

Sample Size

The first phase in administering a questioner survey is to determine the sampling frame for the possible participants. However, because of limited time and resources as well as the difficulty of identifying the whole population, the research employs a judgement sampling selecting only individuals that met pre-determined criteria. In other words, Study population is limited by having many obstacles that may affect the selecting a type of sample, including:

1- Corporate governance mechanisms in Saudi Arabia are at a preliminary phase, therefore people who are interested in this area are limited.
2- Earnings management is considered to be a complicated topic, hence the participants should be well-educated.
3- There is a difficulty in specifying the whole population of this research.
4- There is limited time and resources in respect of this topic.

Accordingly, judgemental sampling, which is similar to snowball sampling, is used in this study, as respondents are selected by the researcher on the strength of their experience of the phenomenon under study (Hussey and Hussey (1997). Sekamn (1992) suggests that judgement sampling is recommended for use when a limited category of people have the required information, while Neuman (2000) states that when we select our sample and want to obtain deep understanding, judgemental sampling is appropriate. Moreover, snowball sampling was employed by asking respondents to distribute the questionnaire to their colleagues.

5.4.2.1.4 Questionnaire distribution

In total 280 questionnaires were distributed in two batches by email and by hand. Of the 280 distributed questionnaires only 124 were used in the analysis, with a response rate of 44.2%. Comparatively, previous research such as that of Kamel (2006) observed that the Middle East seems to have a low response rate for questionnaires, varying from 30% to 50%. Importantly, the non-respondent rate of 54% does not differ significantly from the respondent rate confirming that the findings are reliable, valid, and unbiased

Table (6.2) the Distribution of Respondents of Questionnaire Survey

<table>
<tr><th rowspan="2">Groups</th><th colspan="2">Issued Ques.</th><th colspan="2">Received Ques.</th><th rowspan="2">The percentage of response rate</th></tr>
<tr><th>Number</th><th>percent</th><th>Number and percent</th><th>Overall Percent</th></tr>
<tr><td>Members of boards of directors</td><td>70</td><td>25 %</td><td>23/32%</td><td>18.5 %</td><td rowspan="5">44.2%

(30% -50%) Average</td></tr>
<tr><td>Members of sub-committees</td><td>70</td><td>25 %</td><td>24/34.2%</td><td>19.3 %</td></tr>
<tr><td>Auditors</td><td>70</td><td>25 %</td><td>41/58%</td><td>33.1 %</td></tr>
<tr><td>Accounting academics</td><td>70</td><td>25 %</td><td>36/51.4%</td><td>29.1 %</td></tr>
<tr><td>Total</td><td>280</td><td>100 %</td><td>124</td><td>100 %</td></tr>
</table>

6.4.2.1.5 Reliability and correlation analysis

Reliability is a crucial issue in psychological measurement that can be defined as a measuring instrument which gives rise to variable errors, that is errors that lead inconsistently between observations either via any one-measurement procedure or each time a given variable is measured by the same instrument (Frankfort and Nachmias, 2000; DeVellis, 2003). In other words, the concept of reliability expresses the consistency that reveals the degree of consistent measurement across different items of instrument. Numerous methods have been employed to measure reliability comprising the test re-test, split half, and Cronbach's Alpha; however, one of the most commonly-employed consistencies is Cronbach's Alpha. Black (1999) and Oppenheim (1992) suggest that Cronbach's Alpha is the optimum indicator for internal consistency of instruments which do not have right-wrong (binary) marking schemes, and may hence be utilised for both suitable questions and questionnaires adopting scales such as the Likert Scale.

Although the reliability (consistency) is significant matter with non-probability sampling, this research applies Cronbach's Alpha as a measurement of consistency as it seems to be less biased and more appropriate than other methods and gives a more accurate statistical finding (DeVellis, 2003). Although most studies suggest that the Alpha coefficient should be 0.8 or above, Nunnally and Bernstein (1994) suggest that the Alpha coefficient should be 0.7 or above, which is now the standard. The Alpha coefficient was over 0.7 for all tests indicating that all data is reliable. Also, correlated items were higher than 0.3 suggesting a good indicator (Field, 2005).

6.4.2.1.6 Statistical methods of questionnaire analysis

It is widespread knowledge that parametric and non-parametric testing are methods of data analysis for any study. However, choosing a parametric method is subject to critical assumptions that should be met before conducting the analysis. Balian (1982) highlights that using parametric testing is subject to numerous assumptions that should be provided as follows: assumption of normality which requires that data should be normally distributed. Assumption of homogeneity requires that the variance or standard deviation of dependent variables should be equal, whereas the assumption of continuous form of the dependent variables assumes that because of nominal and ordinal dependent variables, parametric testing cannot be applied.

Generally, parametric testing is more powerful if all assumptions are provided and variables under analysis are subject to interval scales (Siegel, 1956). However, if no previous assumptions are provided non-parametric testing is an optimum choice. Siegel, (1956) suggests that non-parametric testing remains the alternative test where previous assumptions are not applied to data. Given that the analysis of normality for all questions using Kolmogorov-Smirnov and Shapiro-Wilk test reveal that the P.value was less than 5% and the test of homogeneity of variance using the Levene test was also less than 5% (See appendix pages 288 to 291), non-parametric tests were used in this study to analyse the data. Furthermore, Newbold *et al*. (2003) suggest that non-parametric testing is more suitable for the questionnaire survey because the data involved is mainly nominal and ordinal data without the assumption of population normality. Accordingly, the primary statistical techniques applied in this part of the research were as follows:

1- **Descriptive Statistics** of data comprise frequencies and percentages for responses and overall mean scores, standard deviations, and ranking for respondents according to level of agreement for each group of questions. Moreover, mean group is used in order to understand respondents' perceptions for different questions.
2- **Kruskal-Wallis** is a non-parametric test adopted to test the differences between respondents' perceptions (board of directors, sub-committees, external auditors, and academic staff).

3- **Mann-Whitney Test** is helpful in comparing two sample means on a continuous measure to specify whether two population means significantly differ.

Moreover, **ANOVA** one way testing is used to determine the differences between two analyses (parametric and non-parametric tests) and for sensitivity analysis.

6.4.2.2 Secondary data analysis

Secondary data are useful not only for finding out information to answer research questions, but also for providing a better understanding of and explaining research problems (Ghauri and Gronhaug, 2010). There are numerous advantages of using secondary data such as easy availability and saving time and money, however it is very important that secondary data should be consistent with research objectives (Bryman and Bell, 2004). Secondary data can be collected from government reports, annual reports, or different sources. In terms of data quality, a number of scholars, including Ghauri and Gronhaug (2010), suggest that secondary data is an important method and if they are available to answer research questions, there is no need to collect primary data.

6.4.2.2.1 Hypotheses development

The third objective of this study is to investigate the role of internal and external corporate governance in constraining earnings management after exploring and eliciting respondents' perceptions. In other words, this study aims to establish the relationship between internal corporate governance (boards of directors, sub-committees characteristics), ownership structure, external audit factors and earnings management. To achieve that, the third primary research question will be divided as follows:

1- What is the relationship between internal corporate governance mechanisms and earnings management?

Agency theory anticipates that boards will enhance the integrity of their financial reporting through monitoring management (Peasnell *et al*, 2005). On the other hand, institutional theory views these mechanisms as practices or regulations as a result of coercion from legislators who impose certain practices in order to improve organizational effectiveness or as result of imitation. Prior literature has investigated the relationship between board characteristics and earnings management. For example, Persons (2006) and Abdul Rahman and Ali (2006) found that firms with smaller boards are related to low earnings management. Moreover, Xie *et al*. (2003) and Sarkar *et al*. (2006) confirm that frequency of board meetings is associated with reduced levels of earnings management. On the other hand, agency theory expects that the presence of independent members on boards of directors will enhance boards' ability to monitor management (Young, 2008). According to the research, Ebrahim (2007); Benkel *et al*. (2006); Uzun *et al*. (2004) and Persons (2006) reveal that the proportion of independent board members is related to reduced levels of earnings management. Additionally, agency theory suggests that high insider ownership provides better corporate governance structure which leads to a high quality in financial reporting (Sanchez and Meca, 2005). Warfield *et al*. (1995) present evidence that managerial shareholding has a negative relationship with earnings management. Furthermore, Sarkar *et al*. (2006) find that earnings management is higher when the chair of the board also holds the CEO position. Interestingly, Saudi royal family members mainly serve on boards as managerial members; therefore they may monitor the management closely, thereby decreasing possible mismanagement and wrongdoing. In contrast, several studies failed to find a relationship, such as Ebrahim (2007) and Abdul Rahman and Ali (2006).

The principle cause of earnings manipulation ensues from managers seeking to increase their compensation and private benefit by revealing false earnings by manipulating shareholders' expenses. However, serious problems may arise when insiders serve on remuneration committees as this can lead to more interference in the design of the committee structure. Xie *et al.* (2003) found that compensation committees may affect the market's perception of golden parachute adoption. Also, concerns increased in particular when CEOs or executives served on remuneration committees as this led to agency problems between management and shareholders (Anderson and Bizjak, 2003). In Saudi Arabia, nomination and remuneration committees are integrated and designed to review the terms and conditions of employment of the management and board of directors. Perhaps the existence of a CEO or executive serving on nomination and remuneration committees might be an incentive to act opportunistically by obtaining high levels of compensation. Some prior studies mention the role of such committees; for example, Xie *et al.* (2003) observe that executive committees might not play a direct role, whereas audit or finance committees might have a more direct impact on controlling earnings management. Laux's (2008) implication is that there is a relationship between the structure of board committees and earnings management. In addition, Sun *et al.* (2009) suggest that intelligent compensation committees are capable of generating strong monitoring which leads to preventing management from controlling earnings management. Petra and Dorata (2008) suggest that independent directors of remuneration committees are better able to accomplish their duties objectively. Moreover, Dahya and McConnell (2007) also found that more outside directors sitting on committees leads to better performance as a result of independence.

Moreover, agency theory considers that the role of the audit committee is to monitor and oversee the integrity of financial reporting. Much emphasis has been placed on the fact that the audit committee's role prevents fraudulent accounting statements (Klein, 2002b). This study selects several characteristics which can affect its role in preventing firms from manipulating earnings management consistent with prior studies. Several studies such as Lin *et al.* (2006) and Yang and Krishan (2005) have found that there is a negative association between the size of the audit committee and the occurrence of earnings restatements. Extant research conducted by Lin *et al.* (2006); Abbott *et al.* (2003); Ebrahim (2007) and Xie *et al.* (2003) observes that there is a negative association between the activity levels of audit committees and the occurrence of restatements. Moreover, Yang and Krishnan (2005); Abbott *et al.* (2003); Bedard *et al.* (2004) and DeZoort and Salterio (2001) imply that a significant negative relationship exists between an audit committee that includes at least one member with financial expertise and earnings management. According to the research, Bedard *et al*. (2004); Abbott *et al*. (2004); Ebrahim *et al*. (2007) and Xie *et al*. (2003) emphasise that independent audit committees can reduce the occurrence of earnings management. Based on the above discussion, the following hypotheses have been developed:

H1: *There is a negative relationship between board size and earnings management.*

H2: *There is a negative relationship between board meetings and earnings management.*

H3: *There is a negative relationship between outside directors on the board and earnings management.*

H4: *There is a negative relationship between the existence of royal family members on the board of directors and earnings management*

H5: *There is a negative relationship between non-duality and earnings management.*

H6: *There is a negative relationship between the existence of a nomination and remuneration committee and earnings management.*

H7: *There is a negative relationship between nomination and remuneration committee independence and earnings management*

H8: *There is a negative relationship between audit committee size and earnings management.*

H9: *There is a negative relationship between audit committee meetings and earnings management.*

H10: *There is a negative relationship between audit committee independence and earnings management.*

H11: *There is a negative relationship between financial expertise and earnings management.*

2- What is the relationship between ownership structure and earnings management?

Saudi listed companies are characterised as having important family, blockholder, and state-owners who commonly sit on boards of directors. Accordingly, the current research addresses the hypotheses in terms of ownership structure, based on the theory that ownership concentration might mitigate agency problems leading to reduced agency costs by aligning the interests of controlling owners with those of the company (Jensen and Meckling, 1976). Agency theory may be suitable for developed countries; however, ownership structure theory is probably appropriate for developing countries in terms of explaining firms' agency costs, where family ownership is highly concentrated (Pornuptham, 2006). This theory explains the proportion of equity held among relevant parties (i.e. outside shareholders, debtholders, and managers) and is associated with the extent and direction of EM (Dempsey *et al*., 1993).

Recent studies have echoed some evidence regarding the effect of ownership concentration on earnings management. For example, the majority of empirical research concludes a positive association between insider ownership and earnings management (Habbash, 2010). Moreover, a large number of empirical studies, such as those conducted by Yu, (2008); Osma and

Noguer (2007); Charitou *et al*. (2007); Park and Shin (2004); and Rajgopal and Venkatachalam (1998), indicate that institutional ownership negatively affects earnings management. Unlike other ownership, Bozec *et al.* (2002) argue that there is no relationship between state-ownership and performance and suggest that it is not a question of who owns the firm, but the goals pursued by firm. Based on the above discussion, the following hypotheses have been developed:

H12: *There is a negative relationship between board managerial ownership and earnings management.*

H13: *There is a negative relationship between Institutional ownership and earnings management.*

H14: *There is a negative relationship between governmental ownership and earnings management.*

H15: *There is a negative relationship between family ownership and earnings management*

H16: *There is a negative relationship between blockholder ownership and earnings management.*

3- What is the relationship between external audit factors and earnings management?

An external audit is an important instrument for shareholders to ensure the transparency and credibility of financial reporting. Audit services may not ensure that falsified materials have been detected; however, the amount of manipulation discovered depends on the quality of audit services. In addition, the quality of audit services depends on the experience of the auditor, his knowledge of the industry, and his/her independence. Such knowledge and experience will help the auditor to diagnose the complex issues in specific industries. Generally, the role of the external auditor has long been discussed in the literature and the accumulated evidence is rather mixed. In other words, prior studies such as DeAngelo (1981**);** Hoitash *et al* (2007); Chen *et al*. (2005); Dye (1993); Mayhew and Wilkins (2003); Carcello and Nagy (2004); Simnett *et al.* (2000); and Geiger and Raghundan (2002) have shown different findings regarding the role of the external auditor on constraining earnings management. Therefore, this study adds to the literature by addressing these hypotheses:

H17: *There is a negative relationship between a BIG4 auditor and earnings management.*

H18: *There is a negative relationship between a specialist auditor and earnings management.*

H19: *There is a negative relationship between an unqualified opinion report and earnings management.*

H20: *There is a positive relationship between timeliness and earnings management.*

H21: *There is a relationship between auditor change and earnings management.*

6.4.2.2.2 Measurements of the dependant variable (earnings management)

The literature review chapter shed light on the development of discretionary accruals as a measure (proxy) for earnings management by providing prior key research that presents and enhances this measure and more recent suggested amendments for this proxy. Generally, a large number of recent earnings management studies have applied mainly discretionary accruals as a proxy for earnings management and have adopted various models to isolate discretionary accruals within the total accruals (Dechow *et al.*, 1995). This study uses discretionary accruals that calculate the difference between actual and expected accruals as a measure for earnings management. Consistent with empirical studies from recent contemporary literature in earnings management, namely Abdul Rhaman and Ali, (2006), Klein (2002), Xie *et al*. (2003), and Peasnell *et al*. (2000b), the present study adopts the cross-sectional modified Jones model (1995) presented by Dechow *et al*. (1995).

1- *Modified Jones Model (1995)*

Adding the change in receivables to the Jones model (1991) constitutes a new development of earnings management measure suggested by a study conducted by Dechow *et al.* (1995) that examines numerous models for detecting earnings management. The argument of this study is that management may engage in earnings management via discretionary revenues by timing the recording of these revenues, such as recording them at the year-end when the cash has not yet been collected. In this case, any increase in receivables that are supposed to be discretionary will certainly influence the total accruals. As a result, Dechow *et al*. (1995) conclude that the change in receivables should be deducted from the aggregate change in revenues when calculating the non-discretionary accruals utilising the Jones model (1991). This new proxy for earning management is the modified Jones model (1995).

This measure has acquired widespread support among accounting literature which has concluded that the modified-Jones model is the most powerful model than the Jones model at detecting cases of revenue manipulations; it posits that earnings management gives rise to all change in credit sales in the event period since manipulation of credit sales recognition might be more straightforward than that of cash flow (Aljifri, 2007). Additionally, it differs from the Jones model (1991) solely by adjusting for the change in receivables in the event period since this method assumes that there is no systematic management. Based on this discussion, this study uses the modified Jones model (1995) developed by Dechow *et al*. (1995) as a measure for earnings management as presented below:

$$\mathbf{TA_{t}/A_{t-1} = \acute{\alpha}_1 (1 / A_{t-1}) + \acute{\alpha}_2 (\Delta\, REV_t / A_{t-1} - \Delta\, REC_{it}) / TA_{t-1} + \acute{\alpha}3 (PPE_{t} / TA_{t-1})} + \varepsilon_t$$

Total Accruals = Non- Discretionary Accruals + Discretionary Accruals
(CFO Approach) Residual of Regression

Where:

TA_{it} = total accruals in year t;
At_{it} = total assets in year t-1;
$ARev_{it}$ = revenues in year t less revenues in year t- 1;
$AREC_{it}$ = net receivables in year t less net receivables in year t-1;
PPE_{it} = gross property plant and equipment in year t;
ε_{it} = error term in year t, and
$\acute{\alpha}_1, \acute{\alpha}_{2\,2}, \acute{\alpha}_3$ = firm-specific parameters.

Moreover, this research adopts the cash flow approach to calculate total accruals (TAC) which is considered as more efficient than the balance sheet approach (Collins and Hribar, 2002). Hence, TAC is the difference between income before extraordinary items, discontinued operations (NI) and net cash flow from operating activities (CFO) as follows (1):

$$TAC_{it} = NI_{it} - CFO_{it}$$

Where:

- NI it = is the earnings before extraordinary items of firm i in year t,
- CFO it = is the net cash flow from operating activities of firm i in year t,

2- The Jones Model (1991)

In addition to applying the modified Jones model of estimating earnings management, this study also adopts the alternative proxy for earnings management using the Jones model (1991). This model provides a new and potentially more influential way of estimating earnings management. Aljifri, (2007) states that "Looking at the Jones model, it is clear that the idea of using two variables (DREV and PPE) to control for changes in non-discretionary accruals makes this model potentially more accurate for an analysis of earnings manipulations". A large number of studies use the Jones model as a proxy for earnings management, including Subramanyam (1996b) and Bartov *et al.* (2001) Therefore, this measure is presented below:

$$\mathbf{TA_{t}/A_{t-1} = \acute{\alpha}_1 (1 / A_{t-1}) + \acute{\alpha}_2 (\Delta\, REV_t / A_{t-1}) + \acute{\alpha}_3 (PPE_{t} / TA_{t-1})} + \varepsilon_t$$

Total Accruals = Non-Discretionary Accruals + Discretionary Accruals

Residual of Regression (**EM**)

It is worth pointing out that although the previous measures are used as a proxy for earnings management by prior studies, they are still complicated due to the difficulty of measuring discretionary and non-discretionary accruals. In others words, Aljifri (2007) suggests that these measures are complicated by the difficulty of measuring discretionary and non-discretionary accruals. In addition, there is a potentiality that other factors not tested in these studies may have effect on accounting choices.

Overall, the modified Jones and Jones models are used in this study since they are considered as the most powerful for detecting earning management. Moreover, the cross-sectional method is used in this research since most previous studies suggest that cross-sectional Jones and the cross-sectional modified Jones models perform better than their time-series at detecting earnings management.

It is worth recalling that the current study would have adapted Kothari *et al.* (2005) which is a powerful measurement for detecting earnings management used by a large number of prior researches. However, during the calculation of earnings management according to this measure, some issues occurred. For example, the value of earnings management for many industries has a minus sign that indicates the exclusion of some industries that will reduce the sample size or a shift toward another proxy for EM. The reason for industries obtaining a minus signs is that some companies originally had negative ROA reflected in the equation including ROA as part of it.

6.4.2.2.3 Measurements of the independent variables and model specifications.

The literature review chapter discussed the role of internal/external corporate governance characteristics on earnings management in depth. In addition, the previous section briefly presented a summarised debate regarding the role of independent variables (internal and external corporate governance) on reducing earnings management, together with development of the hypotheses in a theoretical way. This section will present the measures of independent variables including internal and external corporate governance characteristics that have been derived from the prior literature and acquire widespread consensus as proxies as well as presenting model specifications. The rationale behind the selection of these variables is that there is consensus in the accounting literature that these variables express the role of internal and external corporate governance.

This study contains two models to examine the research hypotheses regarding secondary data. Although EM is a dependent variable in each model, there are numerous factors which support separation. Initial results imply a high correlation coefficient between audit committee characteristic and board of directors on the one hand, and audit committee and remuneration & nomination committee on the other that constitutes more than 77%. This problem is not surprising since many studies such as Xie *et al. (2003)* have found a correlation and suggest the separation of audit committee and board characteristic into two models. More examples can be seen in Ramsay *et al*. (2006), Benkel *et al*. (2006) and Klein (2002a). Although this correlation can be resolved by omitting the collinear variables from regression (Baum, 2006), omitting may affect some important characteristics or damage others related to the board of directors or sub-committees, etc; thus, separation may be better than omission as recommended by Xie *et al*.(2003).

Another justification for division is that research conducted by Rediker and Sith (1995) Carcello *et al*. (2002), Agrawal and Knoeber (1996), Rediker and Sith (1995); and Boo and Sharma (2008) suggests that different characteristics of corporate governance may be substituted for one another. For example, Carcello *et al*. (2002), who examine the relationship between corporate governance and audit quality, replaced the board of directors' attributes with audit committees' attributes (i.e. size, frequency of meetings and expertise). Accordingly, in order to avoid the potential substitution issue that may occur between boards of directors' attributes and audit committees' attributes, this research adopts a separate model for each set of attributes. This enables the study to investigate the influence of audit committees on earnings management separately from the influence of board composition.

Statistically, it is argued that increasing the number of variables in a model might have the impact of reducing the power of the model. During conducting stepwise, it is found that the existence of audit committee characteristics in the same model as board composition decreases the level of R2 which leads to including the audit committee in a separate model.

Finally, most studies that investigate the role of audit committees and external auditing on the one hand and earnings management on the other, such as Lin *et al*. (2006), Rainsbury *et al*. (2009) and Baxter and Cotter (2009) do not include board characteristics due to the interaction between the audit committee and external auditing.

1- First model specifications

The first model aims to investigate the effect of board characteristics and ownership structure on earnings management. As mentioned above, audit committee characteristics are eliminated from the first model for the above reasons. Therefore, details for all variables in the first

Model (1) Specifications

$$\textbf{DAC} = \begin{bmatrix} \beta_0 + \beta_1(OUTSIDEit)+) + \beta_2(BRDSIZEit) + \beta_3(BRDMEETit) + \beta_4(RFAMILTit) \\ + \beta_5(non.DUALit) + \beta_6(RNEXISit) + \beta_7(RNIDPit) + \beta_8(FAMOWNit) + \beta_9(INSTOWNit) \\ + \beta_{10}(STATEOWNit) + \beta_{11}(MANGOWNit) + \beta_{12}BLOCKWONit) + \beta_{13}(BIG4it) \\ + \beta_{14}(LEVGit) + \beta_{15}(ROAit) + \beta_{16}(CFO) + \beta_{17}(SIZEit) + \beta_{18}(COMPLEXit) \end{bmatrix}$$

All measures of independent variables are derived from the prior literature, namely: Abdul Rahman and Ali (2006), Klein (2002), Xie *et al*. (2003), Peasnell *et al*. (2001), Sarkar *et al*. (2006; 2007), Benkel *et al*. (2006), Uzun *et al*. (2004), Habbash, (2010) and Persons (2006). Table 6.3 presents all definitions of independent variables and their measures for the first model.

Table (6.3) Definition and Measures for Independent Variables for First Model

Symbol	Variable name	Descriptions and measures
OUTSIDE	Directors' independence	The ratio of number of outside directors (non-executive) to total members
BSIZE	Board size	The total number of members on the board
BRDMEET	Board meetings	The number of meetings per year held by board of directors
RFAMILY	Royal family members	A dummy variable that takes the value of 1 if the board of directors includes at least one of the royal family members.
Non-Dual	Non-Duality	A dummy variable that takes the value of 1 if the CEO and chair of board have separate roles, otherwise 0;
RNEXIST	Remuneration and nomination committee existence	A dummy variable that takes the value of 1 if the this committee exists on the company, otherwise 0;
RNIDP	Remuneration and nomination committee independence	A dummy variable that takes the value of 1 if the CEO does not sit on this committee otherwise 0; following study by Klein (2002b).
FAMOWN	Family ownership	The percentage of total shares held by family
INSTOWN	Institutional ownership	The average percentage of shares outstanding owned by institutional investors
STATEOWN	State-owned	The percentage of total shares held by government
MANAGOWN	Managerial ownership	The percentage of total shares held by executive directors divided by the total number of shares
BLOCKOWN	Blockholder ownership	A dummy variable that takes the value of 1 if the firm has an external stockholder owning 10% or more of the outstanding shares, and zero otherwise.
	<u>**Note:**</u>	**DAC**= discretionary accruals estimated by the modified Jones (1995)

2- Second model specifications

The second model aims to investigate the effect of audit committee characteristics and external audit factors on earnings management. As is seen from the second model, ownership structure is placed again in the second model as a control variable since ownership structure is a very important variable that should be taken into account for each model. In other words, Chan *et al*. (2007) who test agency theory stress that ownership structure plays an important role in affecting audit quality that should be taken into account. Therefore, details for all variables in the second model and their measures are presented below:

Model (2) specification

$$\textbf{DAC}=\begin{bmatrix} \beta_0 + \beta_1(ACINDEPit)+) + \beta_2(ACSIZEit) + \beta_3(ACMEETit) + \beta_4(ACEXPERTit) \\ + \beta_5(AUDSPECit) + \beta_6(AUDOPINit) + \beta_7(TIMELIENSSit) + \beta_8(AUDITSWITCHit) + \beta_9(BIG4) \\ + \beta_{14}(FAMOWNit) + \beta_{10}(MMANGOWNit) + \beta_{11}(MANGOWNit) + \beta_{12}(INSTOWONit) + \beta_{13}(STATEOWNit) \\ + (BLOCKHWONit) + \beta_{14}(LEVGit) + \beta_{15}(ROAit) + \beta_{16}(CFO) + \beta_{17}(SIZEit) + \beta_{18}(COMPLEXit) \end{bmatrix}$$

Table (6.4) Definition and Measures for Independent Variables for the Second Model

Symbol	Variable name	Descriptions and measures
ACINDEP	Audit committee independence	The ratio of independent non-executive directors in the audit committee to total committee members
ACSIZE	Audit committee size	The total number of members on the audit committee
ACMEET	Audit committee meetings	The number of meetings per year held by the audit committee
ACEXPERT	Financial expertise	A dummy variable that takes the value of 1 if at least one independent financial expert sits on the audit committee, and zero otherwise.
AUDSPEC	Specialised auditor	A dummy variable that takes the value of 1 if the firm is audited by a specialised auditor, and zero otherwise. (Proxy based on market share).
BIG4	BIG auditors	A dummy variable that takes the value of 1 if a company is audited by BIG4
AUDOPIN	Auditor opinion	A dummy variable that takes the value of 1 if auditor issued unqualified report in this year, and zero otherwise.
TIMELIENSS	Audit delay	(LOG) The number of days from fiscal year end to audit report date
AUDSWITCH	Auditor change	A dummy variable that takes the value of 1 if auditor is changed, and zero otherwise.
FAMOWN	Family ownership	The percentage of total shares held by family
INSTOWN	Institutional ownership	The average percentage of shares outstanding owned by institutional investors
STATEOWN	State-owned	The percentage of total shares held by government
MANAGOWN	Managerial ownership	The percentage of total shares held by executive directors divided by the total number of shares
BLOCKOWN	Blockholder ownership	A dummy variable taking the value of 1 if the firm has an external stockholder owning 10% or more of the outstanding shares, and zero otherwise.
	Note:	**DAC**= discretionary accruals estimated by the modified Jones (1995)

All measures of independent variables are also derived from the prior literature, namely: Abdul Rahman and Ali, (2006), Klein (2002), Xie *et al*. (2003), Lin *et al.* (2006), Yang and Krishan (2005), Abbott *et al.* (2003), Ebrahim (2007), DeZoort and Salterio (2001), Sarkar *et al*. (2006; 2007), Benkel *et al*. (2006), Uzun *et al*. (2004), Habbash, (2010) and Persons (2006). Table 6.4 presents all definitions of dependent variables and their measures for the second model.

6.4.2.2.4 The control variables and their measurements

In addition to the independent variables mentioned previously, a number of control variables are comprised in this research to control for firms' characteristics that may affect the extent of earning management. These variables are considered to be fundamental for ensuring that the tests concentrate more accurately on the differences created by variations in corporate governance. In other words, as this study aims to specify whether there is a relation between both internal corporate governance attributes and external corporate governance and the incidence of earning management, it is essential that other factors that affect earnings management should also be controlled. Logically, it is not possible to control for numerous incentives to manage earnings management behaviour, such as management style, integrity and corporate culture, since they are difficult to measure (Archambeault, 2002). However, the discussion in the literature review chapter shows that some variables are frequently used as control variables. For example, Dechow *et al.* (1995) show many controls variables that provide useful information should be used when testing earnings management.

These variables contains firm size, firm performance, leverage, firm growth, cash flow from operations which are considered individually, along with the method of measurement for each variable; however, apart from a few studies, no prediction is made for the coefficient sign (Habbash, 2010). Hence, this section presents the control variables for the influence of potential confounding factors (Bartov *et al.*, 2000) in the two models that have been found to be associated with earnings management by prior studies.

1- Firm size (Size)

A number of studies have presented evidence suggesting that large firm size may be an incentive for managers to engage in earnings management (Pincus and Rajgopal, 2002); however, from a different perspective Becker *et al.* (1998) suggest that large firms have less motivation for earnings management since they are subjected to closer monitoring by investors and financial analysts. This study assumes that large firms have less motivation for earnings management in Saudi Arabia.

2- Leverage (LEVG)

Numerous studies such as Elayan *et al.* (2008) use leverage as a measure for debt covenant violations that represent the debt structure of a firm. Most studies argue that highly leveraged companies are less likely to be involved in wrongdoings, such as earnings management. Generally, leverage is considered to be positively related to earnings management practice, as understating liabilities or overstating assets might be utilised to prevent debt covenant violations (Habbash, 2010). However, some studies such as Becker *et al.* (1998) (1994) found that leverage is negatively associated with the absolute value of discretionary accruals. This study assumes that leverage is positively associated with earnings management.

3- Firm Performance (ROA)

Consistent with the majority of previous studies in both earnings management and corporate governance research, this study will control for firms' performance. A number of studies, such as Kothari *et al*. (2005) and Carter *et al*. (2003), indicate that not using ROA as a control variable in earnings management research may lead to an invalidated model and suggest that ROA is a beneficial measure in explaining a firm's value. According to the prediction of the majority of prior studies such as Abdul Rhanman and Ali (2006), this study assumes that ROA is positively related to earnings management.

4- Cash Flows from Operating Activities (CFO)

To capture performance differences across firms in various industries and to control for the influence of economic activity on earnings management, this study controls for the influence of cash flows from operating prior studies such as Habbash, (2010) which suggests that CFO is used to control for the association between abnormal accruals and operating cash flows. Becker *et al*. (1998) state that the manipulation of earnings management is less likely to occur when a company has a strong operating cash flow performance. Likewise, Dechow *et al*. (1995) emphasise that the magnitude of discretionary accruals is influenced by CFO in more cases. Therefore, this study assumes that cash flows are negatively associated with earnings management.

5- Complexity (Complex)

Although the number of subsidiaries as a measure of complexity is used by a few studies, the new research conducted by Dyreng *et al*. (2010) indicates that earnings management is found to be less when a firm has subsidiary operations in foreign countries that have a strong rule of law.

In addition to previous control variables and following prior studies, BIG4 auditor is used as control variables in first model while OUTSIDE is used as control variable in second model while ownership structure are used as control variables in second model. Table 6.6 present all definition of control variables and their measures.

Table (6.5) the measures of main control variables

Symbol	Variable name	Descriptions and measures
SIZE	Firm size	The natural logarithm of total assets at year-end.
LEVG	Leverage	Total long-term debt divided by total assets
ROA	Performance	Net income divided by the total assets at the beginning of the year
CFO	Cash Flow	Cash flows from operating activities divided by beginning of period total assets.
COMPLEX	Complexity	A dummy variable takes the value of 1 if the company has a subsidiary; otherwise 0.

In the same vein, all measures of control variables are also derived from prior literature namely Abdul Rahman and Ali, (2006), Klein (2002b), Xie *et al*. (2003), Lin *et al.* (2006), Yang and Krishan (2005), Abbott *et al.* (2003), Ebrahim (2007), DeZoort and Salterio (2001), Habbash, (2010), Sarkar *et al.* (2006), Benkel *et al*. (2006).

6.4.2.2.5 Data Sources, Sample Selection Criteria

The sample size of the study consists of all Saudi companies as the entire population of the Saudi Stock Exchange. However, the study sample is subjected to the following criteria:

1- The study covers the financial period between December 2006 and December 2009. The rationale for using this as the study period is summarised in the following points: (a) the reforms to Saudi Arabia's environment commenced at the beginning of 2006. (b) The implementation of the best practice of corporate governance mechanisms was embarked upon in 2006. (c) The financial crisis witnessed by the Saudi Stock Exchange was in 2007 to 2008.

2- Because financial and insurance companies apply (IFRS), they were excluded since they have specific practices and operations. Prior studies such as Chen *et al*. (2005); Habbash, (2010); Peasnell *et al*., (2000) suggest that financial and insurance companies have an incentive to apply different accounting practices leading to difficulty in capturing management's opportunistic manipulations.

3- The main sources of secondary data collected from the Saudi Market website.

4- The data, which was mainly hand-collected from annual reports of listed companies, includes two categories: dependent and independent variables as well as control variables making this task viable since there is no DataStream in Saudi Arabia.

5- Missing data not found on site was collected by the researcher from companies' headquarters.

Table: (6.6) Description of Data Selection Process for Study Period

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Description	2006	2007	2008	2009	Pooled
Initial sample (All companies)	**88**	**122**	**134**	**144**	**488**
***Excluded*:**	-	-	-	-	-
Financial companies	(11)	(11)	(11)	(11)	(44)
Insurance companies	(6)	(15)	(22)	(30)	(73)
Missing annual reports	(5)	(2)	(2)	(3)	(12)
Missing corporate governance data	(1)	(2)	(4)	(3)	(10)
Outliers	(2)	(4)	(3)	(3)	(12)
Final sample for first model	**64**	**88**	**92**	**93**	**337**
Missing audit report	(1)	(1)	(1)	(0)	(3)
Final sample for second model	**63**	**87**	**91**	**93**	**334**

Table 6.6 presents a description of the study sample with an explanation of the exclusion of items such as financial/insurance companies, missing data, and outliers. More clearly, extreme outliers are identified from the sample then eliminated because inclusion of extreme values may distort the research analysis and the interpretation of the research results. However, companies that have extreme values for earnings management are not removed from the sample as outliers since these are probably the observations constituting large negative accruals or large positive accruals, which may actually explain management discretion.

Moreover, because of the lack of disclosure, many companies are excluded since missing corporate governance variables are found that lead to downsizing the study sample so the final usable sample is 337 firms for the first model and 334 for the second model. Following prior research (DeFond and Jiambalvo, 1994; Subramanyam, 1996a), in order to avoid the results being biased, industry groups with less than six observations are integrated with other industries, taking into account the characteristics for each industry.

Finally, Table 6.7 provides information regarding the sample in terms of industries. As is shown in the table, petrochemical, agriculture & food, industrial investment, and building & construction are the largest industries.

Table: (6.7) Original Distribution of the Sample Relative to Industry

Industry group	First Model		Second Model	
	Number	Percentage	Number	Percentage
Petrochemical	41	0.12	41	0.12
Cement	31	0.09	31	0.09
Retail	28	0.08	28	0.08
Energy & Utilities	8	0.02	8	0.02
Agriculture & Food	54	0.16	54	0.16
Telecommunication	11	0.03	11	0.03
Multi- investment	27	0.08	27	0.08
Industrial Investment	38	0.11	36	0.10
Building & Construction	39	0.12	39	0.12
Real Estate Development	24	0.07	23	0.06
Transport	16	0.04	16	0.04
Media and Publishing	12	0.03	12	0.03
Hotels and Tourism	8	0.02	8	0.02
Total	**337**	**100%**	**334**	**100%**

6.4.2.2.6 The processes of secondary data analysis

This section aims to illustrate the statistical methods adopted for secondary data analysis. As mentioned earlier, the statistical methods for analysing data are divided into two types: parametric and non-parametric. As a whole, the method used is determined by the nature and characteristics of the study data. Numerous scholars such as Balian (1982), Gujarati, (2003), Berenson *et al*. (2009) suggest some important assumptions that should be met before applying parametric tests. These assumptions are presented as follows: assumption of normality, which requires that data should be normally distributed, assumption of homogeneity which requires that the variance or standard deviation of dependent variables should be equal, the assumption of independence from error, which assumes that no harmful coloration exists between variables, and finally the assumption of linearity, which suggests that the relationship between variables is linear.

The previous assumptions, necessary for applying parametric testing, are more powerful if all assumptions provided and variables under analysis are subjected to interval scales (Siegel, 1956). However, if no previous assumptions are provided, non-parametric testing is an optimum choice. Siegel, (1956) and Judge *et al*. (1985) suggest that non-parametric testing remains the alternative test where previous assumptions are not applied to the data. As a result of the measurement of data on an interval scale, the normality and homogeneity of variance are not required by the non- parametric method.

Previous assumptions of the parametric tests are tested in Chapter Seven applying Skewness-Kurtosis to verify the normality assumption. The results indicate using non-parametric tests that are an appropriate method which do not require the measurement of data on an interval scale and do not require data to meet the previous assumption. In addition, this research uses correlation coefficient and variance inflation factor (VIF) tests to verify multicollinearity since numerous studies such as Hair *et al*. (1998) and Kennedy (2008) highlight that a VIF of more than 10 points rules out harmful multicollinearity. The findings in Chapter Seven indicate that there is no harmful correlation between variables. In terms of heteroskedasticity, this study uses Breusch-Pagan/Cook-Wesberg tests to explore the variance between variables and the findings indicate that the data suffers from heteroskedasticity. Finally, the residuals versus the independent variable values are also plotted utilising STATA 9 and results show that the relationship between the dependent and independents variables is linear.

The above tests are applied to examine the data against the OLS assumptions; non-parametric test are used in this research to analyse the data since the data of this study did not meet the conditions required for parametric tests, particularly in terms of normality and heteroskedasticity. In other words, in addition to the OLS estimate being inefficient in cases of violation of normality (Greene, 2007), standard errors may be biased and inconsistent which could lead to results also being biased and not in line with the real state (Baltagi, 2001; Greene, 2007). However, where coefficient is constant over time, the adopting of pooled regression, which is an appropriate way to examine the sensitivity of the results to alternative specifications (Beaver, 1998), is more efficient since it provides greater flexibility in modelling differences in specific behaviour of the sample (Greene, 2007). Another justification for using GLS is the important assumption of homoscedasticity and no serial correlation in pooled OLS (Beaver, 1998).

Therefore, GLS estimation (random effect) panel regression over the four-year test period was used in this study. This method allowed the study to test for variations among cross-sectional units simultaneously with variations within individual units over time (Baum, 2006). It supposes that regression parameters are not dissimilar between various cross-sectional units and do not change over time, which reinforces the reliability of the coefficient estimates.

According to (Baltagi, 2001) there are two basic methods: fixed effect and random effect that can be applied to determine the relationship within or between each cross-section. Fixed effect presupposes that the individual constant is a group-specific constant term in the regression model; however, random effect method presupposes that the constant is a group-specific disturbance similar to the error term, apart from each group (Greene, 2007). Generally, there is a mutual relationship between the efficiency of random effect method and the reliability of the fixed effect method and the primary assumption of choosing the random-effect estimation is that the unobserved heterogeneity should not be correlated with independent variables (Greene, 2007).

The Hausman Test (1978) is a common test used to check for strict exogeneity in social sciences (if an explanatory variable is exogenous when the relationship between continuous variables is tested). This test is used to determine which previous methods (fixed or random effect) can be adopted. The Hausman test differs from random and fixed effect methods by verifying the correlation between the X variables and the individual random effects εi. In others words, fixed effect should be applied in case of occurred correlation, random effect should be applied. Hence, this study follows McKnight and Weir (2009) who use the Hausman test to verify these assumptions and to test the appropriateness of using the random-effect estimation. The insignificant findings gained from the Hausman test for both models indicates that Prob>chi2 is higher than 5% showing that the assumptions for the fixed effect estimation are violated and random effect should be applied.

It is worth noting that even though the use of stepwise regression has been criticised by many scholars due to some problems such as incorrect degrees of freedom (Whitaker, 1997), it is still used to reveal the reliability of a model via the strength of R^2 in order to reach the appropriate model (Berenson *et al.*, 2009). Generally, the current study used the stepwise forward regression (Gujarati and Porter, 2009), commonly employed to determine the appropriate model by eliminating variables conceived to downsize the value of R^2. As a whole, the results of stepwise regression do not support the exclusion of any variables in both models since all variables contributed to increase the value of R^2. (See pages 294 and 295 in the appendix for the result of use of stepwise test).

According to the previous discussions, the primary statistical techniques applied in this part of the research were as follows:

1- **Descriptive statistic** comprises the analysis of the overall mean scores, standard deviation, median, minimum, and maximum for each individual variable.

2- In addition to **univariate** means difference test (the analysis of one variable at a time), **Mann Whitney** test and **T-test** for each variable applied.
3- (**Multivariate analysis**) Non-parametric **GLS** (**Random-effect**) panel regression test was applied.
4- Numerous **sensitivity analyses** were presented such as using parametric testing.

6.4.3 Qualitative Method

Adopting qualitative and quantitative methods in a single topic has become a common approach for studies, since one approach used alone may not provide accurate findings. For example, Kamel, (2006) suggests that the questionnaire suffers from the inability to obtain perceptions from respondents; therefore conducting interviews will amplify and complement the questionnaire survey. Van Maanen (1983) defines qualitative methods as "a type of interpretive techniques that search to explain, decode, translate and otherwise come to terms with meaning, not the frequency of certain more or less naturally happening phenomena in the social world". In general, qualitative data can be gained via a diversity of research methods and formats. In other words, there are many different types of qualitative method such as interviews, observations, ethnography and case studies which can be applied to collect data. However, interviews are the most frequently used among these techniques due to the features that they contain.

Accordingly, this research has adopted qualitative techniques to diminish the potentiality of errors and present greater insight into the different aspects of earnings management practices on one hand, and the role of internal and external corporate governance in mitigating aggressive earnings management on the other. More clearly, in addition to the questionnaire survey and secondary data as quantitative methods, semi-structured interviews are applied as a type of qualitative method.

6.4.3.1 Semi-structured interviews

The interview survey, which is one of the most comprehensively applied approaches of data collection in social sciences, helps the researcher to gather validity and consistency that are relevant to research questions (Saunders *et al*. 2007). In addition, interviews are deemed to be an appropriate technique in certain cases such as those which involve complicated and highly confidential information or when the required information cannot be collected by other techniques (Hussey and Hussey 1997). However, unlike other qualitative techniques, the researcher should possess the skill to be able to obtain the answers from the interviewee and provide support without introducing bias (Kamel, 2006). As well as the advantages, interviews are subjected to some limitations such as validity. What is more, they are more costly and time consuming than other methods such as questionnaires. (Hussey and Hussey, 1997).

Various types of interview have been presented by many scholars according to typology. For example, Healey, (1991) divides interview surveys into non-standardised and standardised, whereas Saunders (2007) divides them into structured interviews, semi-structured interviews and unstructured interviews. Among these types the semi-structured interview is the most popular approach in accounting and finance and provides a deep understanding of social phenomena (Bence *et al.* 1995; Hussey and Hussey, 1997). According to this method the researcher has a list of themes and questions that may vary from one interview to another which creates more flexibility than other methods. In other words, semi-structured interviews allow the researcher to ask astute and varied questions which arise during the interviews and to discuss them. At the same time they offer the interviewees the opportunity to express their opinions clearly according to their experiences and knowledge (Saunders *et al*. 2007). Unlike other interview types, the semi-structured interview method is capable of exploring the uncovered problems in prearranged questions or to obtain rich astute information related to the research topic (Berg, 2007). Bryman and Bell, (2003) suggest that semi-structured interviews are important for explaining and understanding events, patterns, and forms of behaviour as well as providing a more accurate picture of respondents' positions.

In accordance with the above discussion, this study employed the semi-structured interview method as second step after questionnaire in order to deepen the understanding of the motivations for and techniques of earnings management and the role of internal and external corporate governance in mitigating earnings management as a supplementary tool to reinforce the findings of the questionnaire survey and secondary data.

6.4.3.1.1 Semi-structured interview questions

Initially, eight questions were formulated to obtain an understanding of the previous objectives. These questions mainly focus on the motivations and techniques of earnings management and the role of internal and external corporate governance in mitigating earnings management. However, the aim of these questions is to uncover the issues that have not been explored by the questionnaire survey in order to provide rich information. These questions were mainly derived from prior studies and the Saudi environment to cover most issues regarding the research topic and were typically asked of each interviewee in a systematic and consistent order. Interestingly, interviewees were allowed to answer freely to discover far beyond their answers in order to prepare new questions. In terms of validity, academic staff in Durham Business School and Uumm Al-Qura University in Saudi Arabia reviewed all the questions and provided some comments which were taken into account. (See page 304 in the appendix).

6.4.3.1.2 Respondents to interviews and sample selection criteria.

Semi-structured interviews were undertaken with fifteen individuals drawn from four groups (See Table 6.8). The interviews have the same limitations as questionnaires because they have predetermined specific categories of answers, and thus the interviewee is not free to provide additional information. Therefore, this research was actuated by the theme of theoretical sampling presented by Glaser and Strauss (1967). One justifiable reason for non-probability sampling techniques including theoretical sampling ensue from the theme that research "process is one of '*discovery*' rather than the testing of hypotheses" (Denscombe, 2007). This is, semi-structured interviews are employed in order to obtain more understanding in study's phenomenon rather testing the hypotheses. The theoretical sampling approach requires an adequate sample regarding certain questions and choosing respondents according to the priority of their theoretical basis for their inclusion rather than a statistical one. Therefore, a particular number of respondents is important to accomplish the objectives of study. Following Kamel and Elbanna, (2010) who applied this approach, the interview survey sample was subjected to a number of criteria as follows:

1- The interviewees should be from respondents who participated in the questionnaire survey.
2- The interviewees should have adequate experience and knowledge regarding the research topic.
3- The interviewees should be willing to be interviewed.

Accordingly, the names of respondents of questioners survey, who have a capability to interview, were taken during questionnaire survey.

6.4.3.1.3 The process of conducting the interview surveys and analysis.

As mentioned above, semi-structured interviews were conducted with fifteen individuals drawn from four groups (boards of directors, sub-committees, external auditors, and accounting academic staff). In other words, 17 respondents were selected from four groups and one member of a Zakat and Tax department. Two interviewees (member of sub-committee and academic staff) were excluded since they did not provide beneficial information in this study; hence, in total 15 interviews were conducted and were of benefit to this study. (See Table 6.8).

Three trips were conducted to three main cities in Saudi Arabia to collect the data: Jeddah, Riyadh, and Dammam. Semi- structured interviews were conducted using two methods: face-to-face and by phone with each interview lasting approximately 30 minutes. Each interview began with an explanation of the objective of the study and the importance of such research in Saudi Arabia. It is worth noting here that some interviewees in developing countries do not like to have their opinions tape-recorded or they are worried if notes are taken by devices during the interview as it appears like an interrogation to them.

Table (6.8) Information from respondents' interviews

Number of interviews	Position	Type of organisation	Experience of position (Years)
1	Academic	University of Taif	15
1	Academic	King Khalid University	2
1	Academic	King Abdulaziz University	20
1	Chairperson	Al-Baha Develpment	22
1	M. board of directors	Hloany Company	15
1	M. board of directors	Yanbu Cement Company	13
1	Auditor	KPMG	2
1	Manager of Auditing team	Ernst & Young	16
1	Auditor	Saudi Accounting	9
1	Auditor	Deloitte	6
1	Auditor	Ernst& Young	7
1	M-Sub-committee	Al-Baha Develpment	14
1	M-Sub-committee	Al-Baha Develpment	12
1	M-Sub-committee	Agricultural company	3
1	M-Sub-committee	Zakat and Tax department	8
15			

For this reason note-taking was applied for all interviewees and for the same reason this research included only 15 interviews. Although there are different types of program for analysing interviews, this study only includes 15 interviews and the data were manageable, hence the amount of data was coded as well as being analysed manually. Ghauri and Gronhaug (2010) suggests that using the program of analysing qualitative data is useful when there is a large quantity of data requiring coding, annotation, and linking. Overall, the findings of the analysis of interviews are presented in Chapter Six together with the results of the questionnaire survey.

6.5 SUMMARY

This chapter began with a discussion on research methodology and research paradigm. The adopted methodology is justified by the objectivist (realism) ontological position and positive epistemology. Therefore, the hypothetic-deductive approach (examining theory) seems to be the appropriate approach for this study. According to this methodology, this study adopts both data and methodological triangulations to increase confidence in the findings obtained if the findings of all different methods agree. One important way of attempting to understand earnings management practices and corporate governance mechanisms at a preliminary phase, and of external auditing, is to combine a qualitative with a quantitative method, as is implemented in this research. Additionally, quantitative and qualitative methods are not only meaningful for obtaining an accurate image of the nature of an issue, but also for providing a deeper understanding of a phenomenon (Cooper and Schindler, 2003). For example, Filatotchev and Nakajim (2010) suggest that understanding corporate governance depends on a variety of sources such as combining a statistical study based on a survey or published information with semi-structured interviews.

Thus, both quantitative and qualitative methods were adopted in order to enhance data quality and to endeavour to fill the gap in the literature. To be precise, the quantitative method enabled this study to examine the theory with a large sample size; however, the qualitative method enabled it to provide insight into the phenomenon being examined and to obtain an in-depth understanding of the research problems. However, since our sample is quite small, the results cannot be generalised to the research population as whole. Moreover, this chapter justifies the choice of each approach and presents details of three instruments employed in this research (questionnaire, secondary data and semi-structured interviews) in terms of design, sample selection criteria, analysis procedures. Generally, Kruskal-Wallis and GLS as parametric test are used in the questionnaire and secondary data survey respectively since the data did not meet parametric test conditions. However, the amount of data obtained from semi-structured interview was coded as well as being analysed manually.

Table (6.9) Summary of Data Collection and Analysis

Data Collect Methods	Sample Size	Choosing Sample Method	Process of analysis
Questionnaire survey	124	Judgmental sampling + snowball	Kruskal-Wallis and Mann-Whitney Test
Interviews Survey	15	Theoretical sampling approach	Manual analyse.
Secondary Data	First Model (337) Second Model (334)	Whole population Excluding: Missing data+ Financial and insurance companies	Logistic Regression- GLS- Cross-Sectional (Panel and Pooled Data)

Chapter Seven:

ANALYSIS OF QUESTIONNAIRE SURVEY AND RESULTS OF SEMI-STRUCTURED INTERVIEWS

7.1 INTRODUCTION

Since members of boards of directors, sub-committee members, and external auditors are a cornerstone of monitoring mechanisms, their perceptions could have remarkable implications for the purpose of the current research. As mentioned previously, the primary purpose of this study is twofold. The first goal is to highlight new evidence concerning earnings management motivations and techniques in Saudi Arabia. Secondly, it contributes to the existing literature by investigating to what extent earnings management practices can be affected by key features of internal corporate governance mechanisms, ownership structure and external audit factors.

Accordingly, the main thrust of this chapter is to provide the overall results given from both a questionnaire survey and semi-structured interviews. The remainder of this chapter is organised as follows: Section 7.2 outlines a descriptive analysis of general aspects of respondents, particularly, in terms of their characteristics. Section 7.3 describes the results of the questionnaire and interviews with respect to motivations and techniques for earnings management. Section 7.4 offers the results of questions concerning the effect of corporate governance mechanisms on earnings management. Sections 7.5 and 7.6 show the effect of ownership structure and the role of external audit factors on constraining earnings management practices in mitigating EM respectively. Section 7.7 reveals the importance of issuing more regulations and Section 7.8 provides the concluding discussion.

7.2 DESCRIPTIVE STATISTICS OF RESPONDENTS

7.2.1 Descriptive Statistics of Respondents' Demographic Information (Questionnaire)

Table 7.1 (See page 144), provides descriptive statistics as classified by position, which is mainly used to examine the differences between the groups, whereas work experience, educational level, and major are presented in Table 7.2 to provide additional information for each group to assist in interpreting the findings. The analysis displayed in Table 7.1 relates to the number of respondents in each group and their percentage. In general, the questionnaires were personally distributed to the four groups equally, and the process lasted for about three months. In total 280 questionnaires were distributed in two batches by email and by hand. Of the 280 distributed questionnaires, only 124 were used in the analysis, with a response rate of 44.2%.

The basic result, shown in Table 7.1, illustrates that the auditors group represents the highest percentage of questionnaires answered, which constitutes 33.1% of usable responses, whereas, the academic staff group, in second place, make up approximately 29.1% of responses. However, the responses of the groups of members of boards of directors and sub-committee members are much lower - 18.5%, and 19.3% respectively - than those of the other groups.

This result is consistent with the expectations as access to auditors and academic staff is somewhat easier than to other groups and they are more familiar with modern subjects such as current study. Moreover, members of boards of directors and sub-committee members practise their duties part-time, so it is difficult to meet them at a particular time which led to the their responses being lower in comparison with other groups.

Table (7.1) the Distribution of Respondents of Questionnaire Survey

Groups	**Issued Ques.**		**Received Ques.**			**The percentage of Response Rate**
	Number	percent	Number and percent		Overall Percent	
Members of boards of directors	70	25 %	23	32%	**18.5 %**	**44.2%** (30% -50%) Average
Members of sub-committees	70	25 %	24	34.2%	**19.3 %**	
Auditors	70	25 %	41	58%	**33.1 %**	
Accounting academics	70	25 %	36	51.4%	**29.1 %**	
Total	**280**	**100 %**	**124**		**100 %**	

According to work experience, the figures in Table 7.2 (panel1) (See page 146) show that less than a third of respondents (29%) had more than 15 years work experience in the field, which was the highest percentage for length of working experience. In addition, 28% of respondents had work experience of between 10 to 15 years. Those with work experience of between 5-10 years made up 23%, while the respondents with work experience of between 1-5 years and less than a year represented the lowest percentage of respondents at 13% and 7%, respectively. In comparison, Table 7.2 (panel1) also shows that the sub-committee members and academic staff had more work experience in their positions gaining 41% and 38% respectively. These findings are consistent with expectations since these groups usually retain their positions for a long time as a result of the nature of their work and the shortage of candidates in their subject. In contrast, the members of boards of directors and auditors had less work experience, 22%, and 17% respectively, in their positions compared to the other groups. In general, the findings indicate that more than half of respondents from the members of boards of directors, sub-committee members, and academic staff - 74%, 58% and 52% respectively - had work experience of more than ten years. However, the auditors group, at 44%, had the lowest percentage of working experience of the groups. The study's results are also consistent with those of Kamel, (2006) which showed that the academic staff have more experience in the field of earnings management practice because their position requires experience.

The respondents were also questioned about their educational level. As indicated in Table 7.2 (See page 146) (panel 2) the majority of respondents (39%) held a PhD, 38% held a BA, 18.5% held a Master's degree and 4% held other qualifications such as a diploma. As for the members of boards of directors, 48% replied that their most recent and highest educational level was BA, 39% a Master's degree, 13% a PhD, and 4% diploma. The diplomas consisted of diplomas in Business Administration, Finance, and Business Banking. Moreover, more than half (66%) of the auditors held a BA, 20% held a Masters degree, 7% held a PhD, and a similar percentage held a diploma in accounting or finance. In contrast with the members of boards of directors, auditors, and sub-committee members, the largest percentage among respondents (100%) of academics held a PhD since their job would essentially require them to gain a higher level of education. Finally, 38% of the members of sub-committees held a BA degree, 25% held Master's degree, 29% held a PhD and 8% held other qualifications such as a Diploma.

With regard to majors, as shown in panel 3, 77% of respondents majored in accounting fields. In other words, the majority (86%) of the academic staff, 88% of the auditors, and 79% of the sub-committee members had an accounting background, whereas the largest percentage of the members of boards of directors had Bus-Administration Certificates.

In summary, the majority of respondents have beneficial experience as 80% of them have at least five years work experience, while the academics and members of sub-committees had the longest working experience of the groups. Moreover, the respondents were well educated since all of them had at least a BA degree. According to background, the majority (77%) of respondents possessed an accounting background. Hence, the demographic information suggests that the perceptions of respondents would be astute and reflect credibility and confidence in the findings.

Table (7.2) Analysis Revealing the Duration of Employment of Respondents Participating in Questionnaire Survey

Panel (1)										
The length of experience	**Boards of Directors**		**Sub-committees**		**Auditors**		**Accounting academic**		**Total**	
	Number	percent	Number	percent	Number	percent	Number	percent	N	%
Less than one year	2	9 %	2	8 %	4	10 %	0	0	8	**7%**
1- 5 years	0	0	4	17 %	8	19 %	4	11 %	16	**13%**
5- 10 years	9	39 %	4	17 %	11	27 %	5	13 %	29	**23%**
10-15 years	7	30 %	4	17 %	11	27 %	13	36 %	35	**28%**
More than 15 years	5	22 %	10	41 %	7	17 %	14	38 %	36	**29%**
Total	23	100	24	100	41	100	36	100	124	**100**

Panel (2)										
Education Level	**Boards of Directors**		**Sub-committees**		**Auditors**		**Accounting academic**		**Total**	
	Number	percent	Number	percent	Number	percent	Number	percent	N	%
BA	11	48%	9	38%	27	66%	0	0	47	38%
Master	9	39%	6	25%	8	20%	0	0	23	**18.5%**
PhD	3	13%	7	29%	3	7%	36	100	49	**39.5%**
Others	0	0	2	8%	3	7%	0	0	5	**4%**
Total	23	100	24	100	41	100	36	100	124	**100**

Panel (3)										
Major	**Boards of Directors**		**Sub-committees**		**Auditors**		**Accounting academic**		**Total**	
	Number	percent	Number	percent	Number	percent	Number	percent	N	**%**
Accounting	9	39%	19	79%	36	88%	31	86%	95	**77%**
Finance	4	17%	4	17%	2	5%	4	11%	14	**11%**
Bus-Administration	10	44%	1	4%	1	2%	1	3%	13	**10%**
Others	0	0	0	0	2	5%	0	0	2	**2%**
Total	23	100%	24	100%	41	100%	36	100%	124	**100**

7.2.2 Descriptive Statistics of Respondents' Information (Semi-Structured Interview)

The semi-structured interview, as a qualitative approach, focuses on ideas not covered by the questionnaire, and is a complementary source to the primary data. For the current research this consisted of fifteen individual interviews. Providing demographic information for interviewees is useful because it enables the researcher to interpret and compare the findings. In this respect, Table 7.3 (See page 147) presents the sample of semi-structured interviews conducted during fieldwork. Generally, the semi-structured interviews were undertaken with 15 individual interviewees using two methods - face-to face and by phone - with each interview lasting approximately 30 minutes. As mentioned earlier, the main objective of conducting these interviews was to obtain more understanding and gain a variety of opinions on earnings management practices, external auditing, and corporate governance mechanisms in Saudi Arabia. According to Table 7.3, two members of boards of directors, four sub-committee members, three auditors, and three academic staff interviewed had gained work experience on average of ten years. A chairman, manager of an audit team and member of the Zakat and tax department were also interviewed. The table also provides information in terms of the positions of interviewees who work in different organizations.

Table (7.3) Analysis Revealing the Duration of Employment of Respondents Participating in the Semi-Structured Interview

Number of interviews	**Position**	**Type of organisation**	**Experience of position (Years)**
1	Academic	University of Taif	15
1	Academic	King Khalid University	2
1	Academic	King Abdulaziz University	20
1	Chairperson	Al-Baha Develpment	22
1	M. board of directors	Hloany Company	15
1	M. board of directors	Yanbu Cement Company	13
1	Auditor	KPMG	2
1	Manager of Auditing team	Ernst & Young	16
1	Auditor	Saudi Accounting	9
1	Auditor	Deloitte	6
1	Auditor	Ernst& Young	7
1	M-Sub-committee	Al-Baha Develpment	14
1	M-Sub-committee	Al-Baha Develpment	12
1	M-Sub-committee	Agricultural company	3
1	M-Sub-committee	Zakat and Tax department	8
15			

7.3 EARNINGS MANAGEMENT PRACTICES

It is recognised that, based on agency theory, the issues related to the separation between ownership and management might lead managers to collude against owners to increase their own personal wealth (Abdul Rahman and Ali, 2006). In this instance, “under general accepted accounting principles (GAAP), managers have discretion in reporting earnings” (Othman and Zeghal, 2006) therefore, they might employ various methods to report earnings for different incentives. Hence, the National Commission on Fraudulent Financial Reporting categorises earnings management practices as an illegal activity and a serious action which will mislead financial-statement users (Merchant and Rockness, 1994). This section contributes to the previous research on earnings management by providing evidence from a developing country, Saudi Arabia, which has received little attention to date.

7.3.1 Do Saudi Managers Engage in the Manipulation of Earnings?

Saudi accounting academics have recently expressed many concerns about the integrity of financial reporting which did not reflect the spillovers of a global financial crisis. A typical example of these concerns can be seen in the following statement:

> ***"The global financial crisis has affected the whole world. However, we have not seen any effect on financial reporting in Saudi Arabia such as the revenues or value of assets. This might raise the question and increase the concerns about the integrity of financial reporting and to what extent the figures presented by companies express the reality of financial statements"***

Another topic covered by the Saudi and Arab media related to the size of Saudi Market losses caused by Saudi listed companies' bankruptcy and financial scandals[2]. Although this crisis might not have been related directly to earnings management practices there has been, to date, no investigation into this issue or into the size of losses incurred by small shareholders who were the primary victim. In this regard the chairperson attempted to explain how this issue could establish earnings management practices in Saudi Arabia:

> ***"With regard to recent financial scandals, the Saudi Market was transformed from a share market to a gambling market and the investors transformed to gamblers. This action creates opportunists representing the managers of Saudi listed companies who tend to manipulate earnings to increase share prices or manipulation of figures that be used by investors to attract a large number of them"***

Previous academic research such as that of Shubita and Shubita (2010) and Jaggi and Lee (2002) suggests that managers tend to manipulate earnings by increasing income during hard times and decreasing it in good times. During interviews, an auditor was asked about this action in Saudi Arabia. He commented that:

> ***"From my experience, I think our clients tend to engage in earnings management by income-increasing rather than income-decreasing. By this action, they will obtain more benefits such as compensation or a bank loan rather than decrease. However, income-decreasing might be used in rare cases"***

[2] There was panic selling on the Saudi Stock Exchange which crashed from 21000 points to 6000 points, as prices fell to new point lows

On the other hand, all interviewees were concerned that the integrity of financial reporting suffers from a lack of disclosure and transparency which leads investors to make incorrect decisions. Allegations were made by interviewees that one crucial indication of manipulation of earnings is non-compliance with full-disclosure and hiding important information leading to misleading investment decisions that could damage the Saudi economy. During the interview survey, one academic researcher argued that:

> ***"Recent academic research concluded that Saudi financial reporting suffers from a lack of disclosure and transparency which harms its integrity and credibility. This leads us to suspect that the manipulation of figures is one of the reasons for non-compliance with full-disclosure and other regulations"***

In conclusion, the objective of this section is to elicit the perceptions of participants as to whether Saudi managers tend to manipulate earnings as well as to investigate the integrity of financial reporting. Based on the semi-structured interviews, the results indicate that although all participants to a certain extent believed that financial reporting reflects the real status of Saudi companies, they suspected that it might involve manipulation. As can be seen from Figure 7.2 (See page 150) the majority (86%) of them believed that Saudi managers have the incentive to manipulate earnings in order to achieve their objectives.

Figure (7.1) The perceptions of interviewees according to the integrity of financial reporting in Saudi Arabia

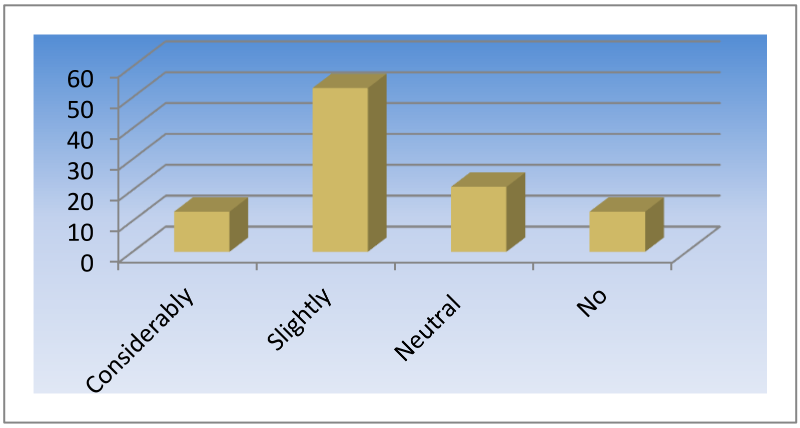
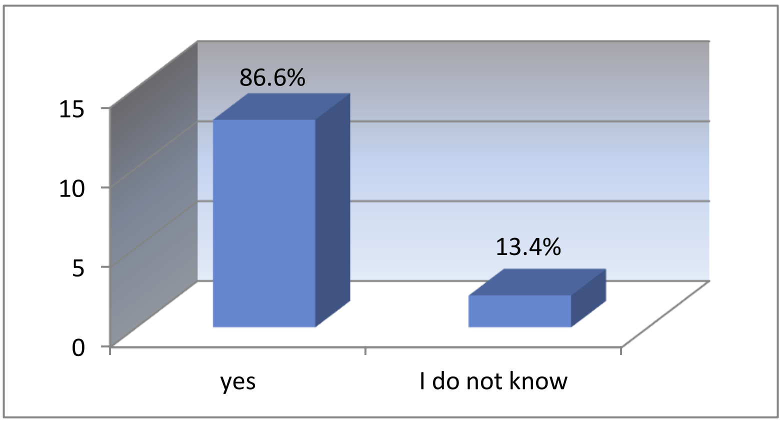


Figure (7.2) the perceptions of interviewees according to whether or not they think Saudi managers manage reported earnings



7.3.2 Why Saudi Managers Manipulate Earnings (Motivations)

Earnings management is the changing of reported earnings figures by management to affect contractual outcomes that rely on reported accounting figures (Schipper, 1989). More recently, this issue has been discussed in the literature, which has shown contradictory findings, in order to show various types of earnings management manipulation and provide productive results.

Therefore, the purpose of this section is to increase the understanding of perceptions with regard to motivations of earnings management practices in Saudi Arabia and to contribute to the literature by investigating Saudi managers' incentives for earnings management. Moreover, this section in the questionnaire will not only answer the research question concerning earnings management motivations, but it might also help the research by employing the appropriate model of calculating earnings management used in the secondary data. Perez and Hemmen (2010) suggest that future research should consider motives for earnings management to estimate discretionary accruals. To accomplish this objective, this section begins by determining the fundamental questions regarding the motivations for earnings management that have been derived from prior research. The review of these questions considers the main body of literature on the subject of motivations for earnings management and identifies the key reasons why companies manipulate earnings.

. The findings of this questionnaire are analysed to provide an indication of the motivations of Saudi managers for manipulating. Preliminary results in Figure 7.3 and Table 7.4 (pages 155 and 156) show that in general a number of questions related to earnings management practices in Saudi Arabia are conceived as being strong catalysts for manipulation by a wide range of respondents. More than three-quarters (80%) of questionnaire respondents, including all groups, strongly agreed or agreed with four potential reasons for manipulation in Saudi Arabia (i.e., 'to increase the amount of remuneration; to report a reasonable profit and avoid loss; to obtain a bank loan; to increase share price'. This was reflected in overall means for each incentive (4.21, 4.09, 4.14, and 4.13 respectively). In addition, the semi-structured interviews support the findings of the questionnaire by drawing attention to the above-mentioned motivations as key reasons for manipulating earnings. During the interviews, a manager of the audit team suggested that the desire to increase share price ranked third and obtaining a bank loan was ranked in terms of incentives for manipulating earnings. He remarked that:

> **"*In my opinion, a number of managers might manipulate earnings since they would accomplish a higher share price and obtain a bank loan. These incentives are the most important in my view. Others reasons, which are minor and do not have much effect, are to fulfil the stock market's expectations and to increase the confidence of investors"***

Moreover, as can be observed from the chairperson's view below, consistent with the questionnaire results, one incentive for earnings management by Saudi managers could be to increase their wealth. This perception is also consistent with that reported by prior studies such as Abdul Rahman and Ali (2006) which stated that the issues related to the separation between ownership and management might lead managers to collude against owners to increase their own personal wealth. He commented as follows:

> **"*From my experience, most managers of Saudi listed companies aim to increase their wealth by gaining stock options, high remuneration, and bonuses because in this way they will give themselves security; also most Saudi companies face great pressure from the Saudi capital market to correct their financial statuses, which leads them to manipulate*...."**

To overcome these issues, he suggested that:

> **"The *CEO should be selected carefully because his opportunistic behaviour would influence that of other senior-managers. Moreover, communication between management, boards of directors, and its committees is a key to success. In other words, when a lack of communication exists, it causes potential problems by increasing the likelihood of manipulating"***

Previous suggestions and comments are consistent with prior studies such as that of Jackson and Pitman (2001) who indicate that when the CEO is effective, other managers tend to behave in the correct way to increase the benefits to shareholders. Moreover, Perez and Hemmen (2010) suggest that market pressure might create a level of earnings management among companies. On the other hand, according to the questionnaire, Zakat was not ranked among the top-four motivations; auditors and academics drew attention to this issue by remarking that:

> ***"Numerous Saudi listed companies commit manipulation because they want to reduce the amount of Zakat determined by the Zakat and Tax department. This issue cannot be generalized to be the key reason for manipulation or be applied to all listed companies, but it is still a potential reason for manipulating in Saudi Arabia"***

Further to this, a member of the Zakat and Tax Department argued that:

> ***"Manipulation of earnings to reduce the amount of Zakat might occur in the private sector rather than the public sector. However, we have seen a few cases of listed companies manipulating the amount of Zakat. These cases might occur more in companies dominated by high ownership concentration. Our role is to mitigate the conflict between companies and the Department of Zakat and Income Tax by verifying the assessment made by the Department and the amount of Zakat shown by a company"***

The Kruskal-Wallis analysis of respondents' perceptions in Table 7.5 (Page 157), reveals that there are significant differences in perceptions with regard to "increasing the amount of Zakat and Tax", "increasing the amount of remuneration", "increasing share price", "reducing buyout compensation" and "retaining stable performance". Statistically, there are differences in perceptions between the groups with respect to increasing the amount of Zakat. As is shown in Table 7.6 (See page 158), overall mean of auditors (3.60) was the highest of the groups. More than 70% of auditors and 60% of academics saw reducing Zakat as incentive for manipulating earnings. In contrast, a greater percentage of members of boards of directors and sub-committee members viewed that the reduction of Zakat is not motivation for manipulation. It is expected that the academics and auditors would be more aware of this as a result of their function. For example, auditors observe this issue in practice during auditing, and academics contribute to alleviate the dispute between Saudi listed companies and the Zakat and Tax Department by their active participation in first instance committees.

The majority (93%) of the members of boards of directors, 82% of the members of sub-committees and 86% of the academic staff strongly agreed or agreed that firms attempt to increase the amount of remuneration, while the auditors showed a lower level of agreement (78%). As can be observed from Table 7.5 (See page 157), Mann-Whitney indicates that the auditors' response differs from the other groups and this was reflected in the overall mean for each group (4.56, 4.1, 4.3, and 3.92 respectively). This result can be interpreted as follows: members of boards of directors and members of sub-committees are much closer to management than the auditors, notably in respect of their job security. In addition, the academic staff are more aware of this than the auditors due to their wide knowledge of this issue because of their connection with modern research.

It can also be seen from Table 7.6 (See page 158), regarding 'to increase share price' that there is a significant difference between all four groups. The result of this difference is presented in Table 6.9 which shows that the overall means of the auditors (4.49) and the academic staff (4.52) was higher than those of the members of boards directors (3.68) and sub-committee members (3.95). It could be that the auditors and the academics might have more knowledge of several features of this motivation than the members of boards of directors and the sub-committee members. This result is consistent with (Pornupatham, 2006) who found that 'to increase share price' was the most important reason for manipulating earnings in Thailand according to auditors' views.

In relation to the reason that resulted in significant differences among four groups - "to reduce buyout compensation", the members of sub-committees viewed reducing buyout as an important reason for manipulating earnings (mean = 4.37) compared to the other groups whereas, the lowest level of agreement for this reason was by the auditors (mean = 3.02).

Finally, for the motivation "to retain stable performance", table 7.5 (page 157) reveals a significant difference between the groups. This can be observed from the findings that the majority of the members of boards of directors agreed that a reason to retain stable performance was a potential incentive compared to the other groups. Overall means for each group based on the level of agreement were: members of boards of directors 4.30, auditors 3.43, academics 3.22, members of sub-committees 2.95. According to this result, the members of boards of directors perceived this incentive as a very strong potential reason since they are aware of the importance of stable performance to management.

To sum up, the objective of this section was to shed light on the potential motivations for manipulating earnings in Saudi-listed companies. The results show that the four main incentives for Saudi managers to manage earnings are "to increase the amount of remuneration", "to report a reasonable profit and avoid loss", "to obtain a bank loan" and "to increase share price”. The present findings seem to be consistent with prior studies such as Baker *et al*. (2003); Bergstresser and Philippon (2006); Latridis and Kadorinis (2009); Roychowdhury (2006); Louis and Sun (2008); Kamel and Elbanna (2010).

Figure (7.3) Overall results of respondents' perceptions of earnings management motivations in Saudi Arabia

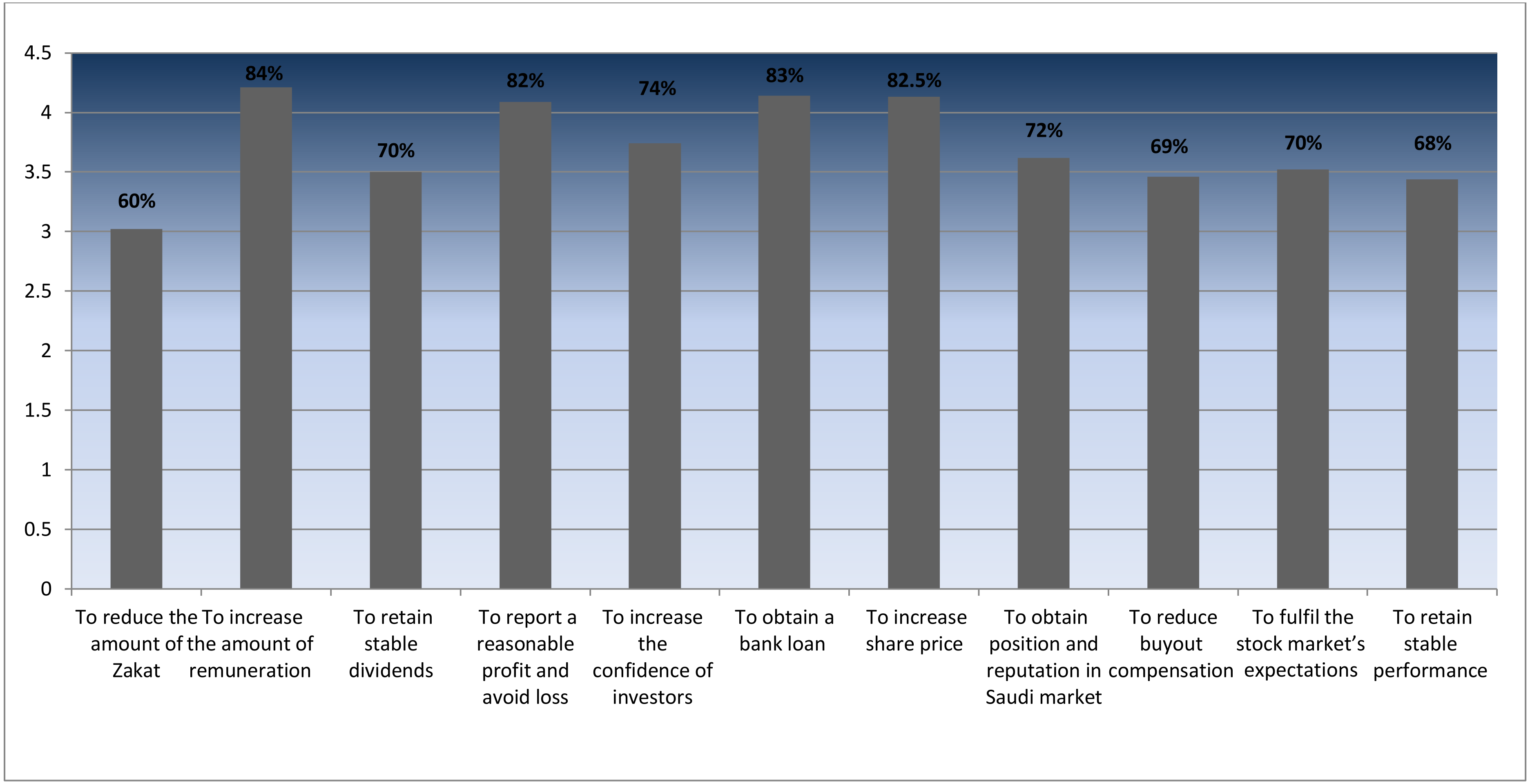


Table (7.4) Descriptive statistics of Respondents' Perceptions about the Motivations of Earnings Management in Saudi Arabia

Questions	Level of agreement (percentage) 1	2	3	4	5	Total Mean score	Rank	Standard Deviation	Corrected Item-Total Correlation	Cronbach's α (alpha) (Consistency)
1-To reduce the amount of Zakat	13.5	11.7	40.1	19.4	15.3	**3.02**	11	1.08	.312	
2- To increase the amount of remuneration	0	10.5	4	38.7	46.8	**4.21**	1	.941	.485	
3- To retain stable dividends	10	16.1	28.9	25.6	19.4	**3.50**	8	.719	.440	
4- To report a reasonable profit and avoid loss	0	5.6	19.4	34.7	40.3	**4.09**	4	.905	.501	
5- To increase the confidence of investors	12.8	18.9	22.4	16.3	21.6	**3.74**	5	702	.512	**0.701**
6- To obtain a bank loan	4	9.7	7.3	40.2	40.5	**4.14**	2	1.07	.401	
7- To increase share price	2.4	9.7	7.3	33.1	46.6	**4.13**	3	1.06	.533	
8- To obtain position and reputation in the business market	18	18.9	21.5	22.1	26.8	**3. 63**	6	.690	.513	
9- To reduce buyout compensation	8	22.6	21	40.3	15.3	**3.46**	9	1.03	.343	
10- To fulfil the stock market's expectations	3.2	15.3	20.2	48.4	12.9	**3.52**	7	1.00	.324	
11- To retain stable performance	2.4	22.6	16.1	45	13.9	**3.44**	10	1.05	.393	
1-strongly disagree 2- disagree 3-neutral 4- agree 5- strongly agree Likert Scale										

Table (7.5) Non- Parametric Test (Kruskal-Wallis) versus Parametric Test ANOVA one-way

	Kruskal-Wallis Non-Parametric Test P. value Sig	**ANOVA one way Parametric Test P.value Sig**
Questions	**Less than 0.05**	**Less than 0.05**
1- To reduce the amount of Zakat	***	***
2- To increase the amount of remuneration	***	***
3- To retain stable dividends	-	-
4- To report a reasonable profit and avoid loss	-	-
5- To increase the confidence of investors	-	-
6- To obtain a bank loan	-	-
7- To increase share price	***	***
8- To obtain position and reputation in the business market	-	-
9- To reduce buyout compensation	***	***
10- To fulfil the stock market's expectations	-	-
1`- To retain stable performance	***	***
***p < 0.05 **P < 0.01 *** P < 0.001** **Note: Using ANOVA one way is an additional or secondary test to verify the results**		

Table (7.6) Descriptive Statistics of Means for Each Groups and Multiple Comparison Test

Questions	Mean				Mann-Whitney Test – Post Hoc test			
	Board of directors	**Sub-Committee**	**Auditor**	**Academic**	**Board of director (Sig) with**	**Sub-Committee (Sig) with**	**Auditor (Sig) with**	**Academic (Sig) with**
1- To reduce the amount of Zakat	2.41	2.70	3.60	3.40	Auditor Academic	Auditor Academic	Board of director Sub-committee	Board of director Sub-committee
2- To increase the amount of remuneration	4.56	4.1	3.92	4.3	Auditor		Academic Board of directo	Auditor
3- To retain stable dividends	3.42	3.51	3.46	3.63	No significant differences among groups			
4- To report a reasonable profit and avoid loss	4.08	4.08	4.02	4.20	No significant differences among groups			
5- To increase the confidence of investors	3.71	3.69	3.81	3.77	No significant differences among groups			
6- To obtain a bank loan	4.17	4.11	4.02	4.13	No significant differences among groups			
7- To increase share price	3.68	3.95	4.49	4.52	Auditor Academic	Academic Auditor	Board of directors Sub-committees	Sub-committees Board of directors
8- To obtain position and reputation in the business market	3.61	3.55	3.67	3.72	No significant differences among groups			
9- To reduce buyout compensation	3.30	4.37	3.02	3.47	Sub-committee	Board of director Auditors Academic	Academic Sub-committee	Auditors Sub-committee
10- To fulfil the stock market's expectations	3.39	3.91	3.39	3.50	No significant differences among groups			
11- To retain stable performance	4.30	2.95	3.43	3.22	Sub-committee Auditors Academic	Board of directors	Board of directors	Board of directors

***p < 0.05 **P < 0.01 *** P < 0.001**
Note: Using Post-Hoc is an additional or secondary test to verify the results

7.4 How do Saudi Managers Manipulate Earnings? (Techniques)

Manipulation of figures has recently become an increasingly serious issue in financial reporting. In addition, it is widely conceived by the business community that executives might engage in earnings management using various techniques (Rutledge, 1995). In this instance, executives can intervene by changing how they interpret financial accounting standards and figures or by transactions as a way of changing financial reporting (Healy and Whalen, 1999). However, the techniques used by managers to manipulate earnings are still considerably ambiguous in different developing countries such as Saudi Arabia. Thus, respondents' perceptions of the frequency of use of such techniques have been shown in this section to identify the various techniques used to manipulate earnings in Saudi listed companies.

In section 2 (part 2), participants in the questionnaire survey were given a number of potential techniques that might be used to manage earnings. These techniques, taking into consideration the Saudi environment, were mainly derived from previous literature which has been discussed earlier. In addition, a number of participants were interviewed individually to obtain a better understanding of the likelihood of using specific techniques for manipulating in Saudi listed companies.

Overall, Figure 7.5 and Table 7.7 (pages 163 and 164) indicate how the four groups who responded in the current research expressed their opinions on the level of agreement to each of ten statements developed for this research related to earnings management techniques. It can be seen from Figure 7.5 and Table 7.7 that the majority (80%) of all four groups of respondents agreed or strongly agreed with seven techniques which they believed were used frequently. These techniques were reflected in overall mean for each technique as follows: (i.e., manipulation of the provision of inventory (4.07); manipulation of the amount of receivable accounts (4.04); manipulation of the amount of depreciation accounts (4.09); manipulation of amount of expenses (4.07); manipulation fn sales of assets (4.10); manipulation of internal transactions (4.10); and capitalising rather than expensing expenditure (4.01). These findings are consistent with prior literature such as Kamel and Elbanna, (2010); Markarian *et al* (2008); Nigrini *et al,* (2005).

It is worthwhile noting that Table 7.8 (See page 165) shows a significant difference between the groups who cited 'manipulation of the provision of inventory', and 'manipulation of the amount of depreciation accounts'. For instance, more than 80% of the sub-committee members, auditors, and academics recognized that manipulation of inventory figures occurred frequently; however, there was a lower level of agreement by the members of boards of directors (76%). It can be noted that the members of sub-committee, auditors, and academics are more sophisticated than the members of boards of directors in accounting methods, and this might be used to manipulate inventory figures. The result of the Mann-Whitney test, with regard to manipulation of amount of depreciation, indicates that more than 85% of the members of boards of directors and academics identified this technique frequently compared to the other groups who viewed that this technique is not used frequently. In this case, Dechow and Skinner (2000) suggest that accounting academics are different from practitioners in terms of their perceptions concerning earnings management.

Additionally, as can be seen from Figure 7.5 and Table 7.7 (See pages 163 and 164), the remaining techniques (i.e., manipulation of the amount of revenue; manipulation of the amount of cash flow; manipulation of the amount of reserves) received a moderate level of agreement from all four groups as frequently-used techniques. It is also important to note that the Mann-Whitney test shows a significant difference between the four groups of respondents regarding the manipulation of amount of revenue and manipulation of cash flow. As we see from Table 7.9 there was a moderate level of agreement between the members of boards of directors (3.4) and the academics (3.46) regarding manipulation of revenue. However, the majority of the sub-committee members (4.11) and the auditors (4.12) perceived manipulation of revenue figures to be used frequently. This is because of the specialized role performed by sub-committee members and auditors regarding financial activities that might enable them to obtain more experience and knowledge of the techniques of earnings management than those in the others groups. Finally, with regard to manipulation of cash flow, the majority of the members of boards of directors and academics agreed or strongly agreed that cash flow is a method used frequently for manipulating. However, the auditors and sub-committee members were of the opinion that this method was not used frequently for manipulating.

Investigation with the interview participants indicates additional evidence and information with regard to earnings management techniques in Saudi Arabia. For instance, one interviewee from among the academics expressed his concerns about Saudi accounting standards. He commented:

> ***"From my experience, Saudi managers might exploit the flexibility of Saudi accounting standards to manipulate earnings for their benefit. For example, the methods of evaluation of inventory and allowances or the ways of capitalizing expenses gives managers the opportunity to manipulate earnings. Therefore, international accounting standards should be applied similar to financial companies that are committed to these standards"***

The collapse of Enron induced a large number of accounting academics to investigate the company's status. One such investigation was presented by Nigrini *et al.* (2005) who found that Enron's reports showed a type of earnings management technique used by managers representing manipulation of revenue. Moreover, Kamel and Elbanna (2010), found that the techniques of capitalizing rather than expensing expenditure and overestimating are the most frequently used to engage in earnings management in Egypt. In this case, a member of the audit committee and an auditor emphasised that:

> ***"In Saudi Arabia, managers frequently use many techniques for manipulating earnings. From our experience, manipulation of revenue figures, general expenses, and capitalizing rather than expensing expenditure are the most common techniques used frequently in Saudi companies"***

In the same vein, the various accounting methods or the companies' structure related to size and ownership might provide a tremendous opportunity for earnings management. For example, Noronha *et al.*, (2008) found that size and ownership structure are effective factors in earnings management. In this regards, interestingly, one of the audit committee members and one academic, raised the following important issue.

> ***In my opinion, earnings management techniques are subject to several factors such as the size of company, nature of industry, and ownership structure. These factors might affect, directly or indirectly, a type of earnings management technique. Additionally, incentives for manipulating earnings determine the techniques used. For example, if the company tends to manipulate the amount of Zakat, I think the manipulation would be on working capital since the Zakat is calculated based on capital working"***

In conclusion, this section aims to investigate the potential techniques of earnings management used in Saudi listed companies. To conduct this investigation, a number of questions were addressed in the questionnaire and semi-structured interviews to ascertain the techniques which might be used frequently. The findings indicate that only seven statements relating to earnings management received support from respondents as techniques of earnings management in Saudi companies. Additionally, the interviews supported the questionnaire findings which are consistent with prior studies such as (Kamel and Elbanna, (2010); Markarian *et al*. (2008); Nigrini *et al*., (2005).

Moreover, the interviews indicate interesting points that might affect earnings management techniques in Saudi Arabia such as company size, nature of industry and ownership structure. This is not surprising because Noronha *et al*. (2008) indicate that earnings management motivations and techniques are affected by the size and form of ownership of firms. Moreover, the flexibility of Saudi accounting standards might be a way of enabling Saudi managers to manipulate earnings.

The following diagram illustrates the findings regarding earnings management incentives and techniques in Saudi Arabia.

Figure (7.4) the most common earnings management motivations and techniques in Saudi Arabia

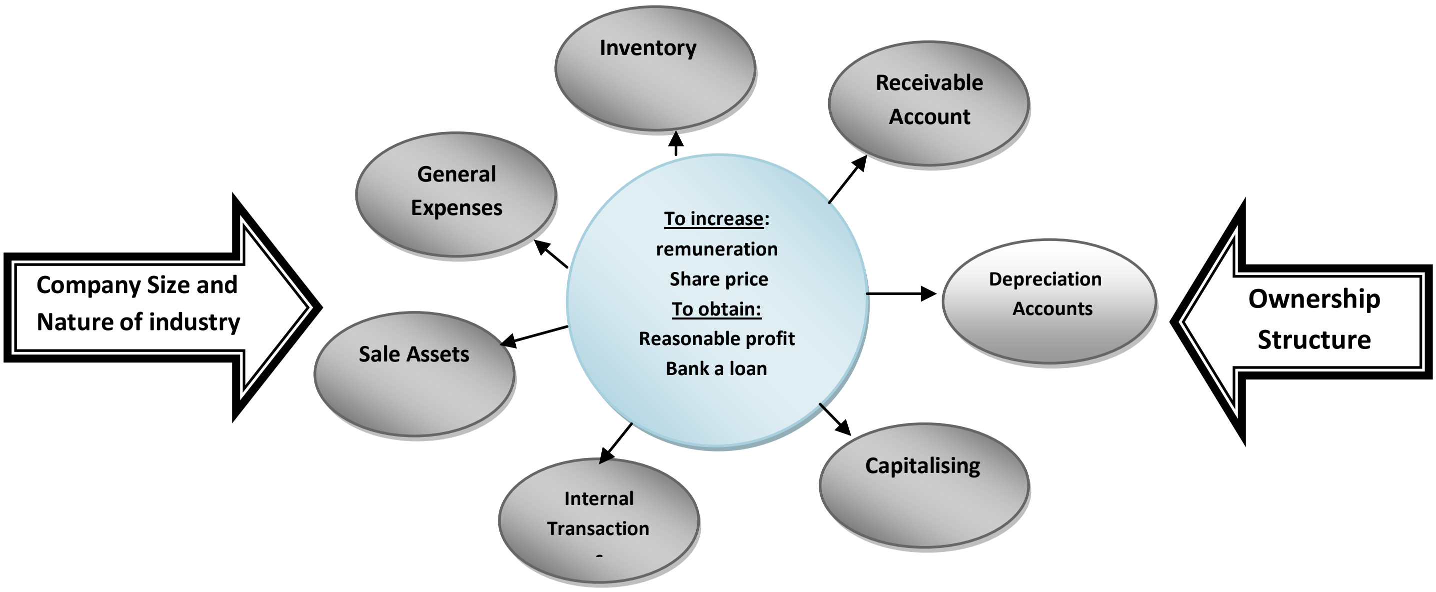


Figure (7.5) Overall results of respondents' perceptions of earnings management techniques in Saudi Arabia

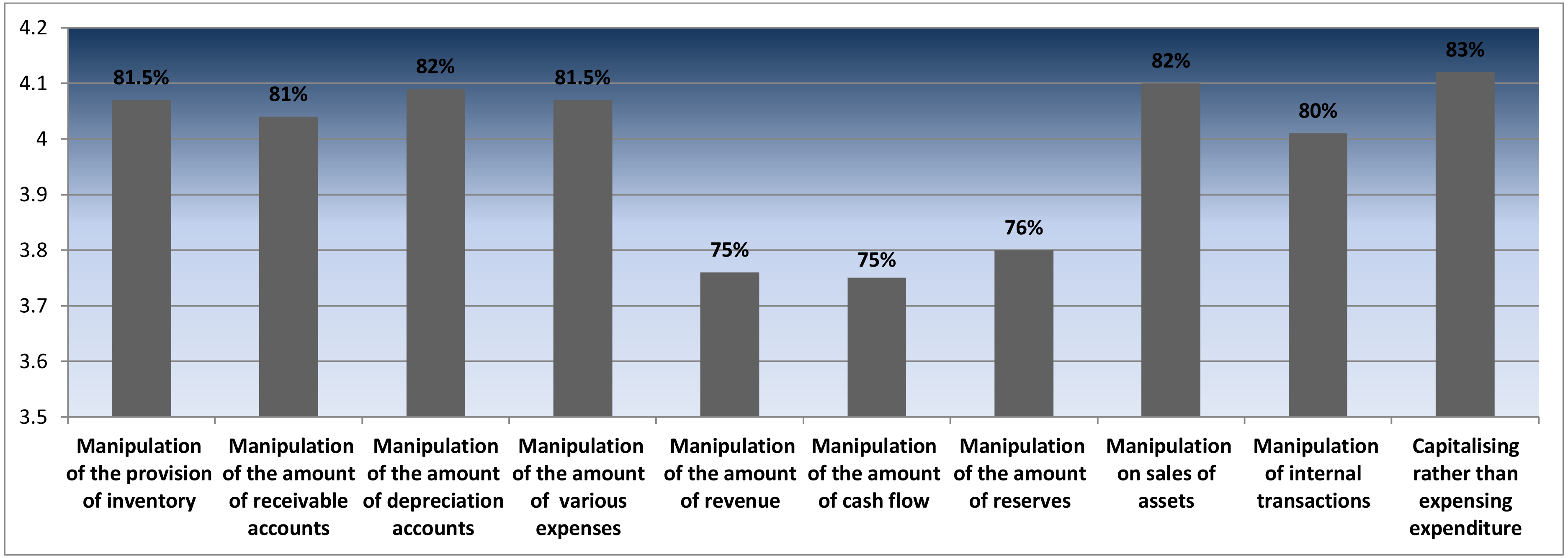


Table (7.7) Respondents' perceptions of techniques frequently used to manipulate earnings in Saudi Arabia

Questions	Level of agreement (percentage)					Total Mean score	Rank	Standard Deviation	Corrected Item-Total Correlation	Cronbach's α (alpha) (Consistency)
	1	2	3	4	5					
1- Manipulation of the provision of inventory	0	14.5	6.5	55.6	29.6	**4.07**	**4**	.828	.390	0.774
2- Manipulation of the amount of receivable Accounts	0	14.5	6.5	39.7	39.3	**4.04**	**5**	1.02	.303	
3- Manipulation of the amount of depreciation accounts	0	12.1	8.1	42.7	72.1	**4.09**	**3**	.914	.424	
4- Manipulation of the amount of various expenses (such as development costs, maintenance expenses)	0	12.1	8.1	42.7	37.1	**4.07**	**4**	.969	.420	
5- Manipulation of the amount of loan interest			This item, after conducting pilot study, is removed to meet the research criteria							
6- Manipulation of the amount of revenue	8	21.0	5.6	46.0	26,6	**3.76**	**7**	1.09	.528	
7- Manipulation of the amount of cash flow	2.4	25	22.6	37.9	12.1	**3.75**	**8**	1.05	.423	
8- Manipulation of the amount of reserves	0	12.9	10.5	59.7	16.9	**3.80**	**6**	.871	.390	
9- Manipulation on sales of assets	0	3.2	12.9	54	29.8	**4.10**	**2**	.741	.557	
10- Manipulation of internal transactions related to business combination	8	13.7	7.3	39.5	38.7	**4.01**	**9**	1.04	.557	
11- Capitalising rather than expensing expenditure	0	9.7	1.6	54.8	33.9	**4.12**	**1**	.855	.511	
1-strongly disagree 2- disagree 3-neutral 4- agree 5- strongly agree Likert Scale										

Table (7.8) Non- Parametric Test (Kruskal-Wallis) versus one-way Parametric Test ANOVA

	Kruskal-Wallis Non-Parametric Test P. value Sig	**ANOVA one way Parametric Test P.value Sig**
Questions	**Less than 0.05**	**Less than 0.05**
1- Manipulation of the provision of inventory	**	**
2- Manipulation of the amount of receivable accounts		
3- Manipulation of the amount of depreciation accounts	***	***
4- Manipulation of the amount of various expenses (such as development costs, maintenance expenses)		
5- Manipulation of the amount of revenue	***	***
6- Manipulation of the amount of cash flow	***	***
7- Manipulation of the amount of reserves		
8- Manipulation on sales of assets		
9- Manipulation of internal transactions related to business combination		
10- Capitalising rather than expensing expenditure		

***p < 0.05 **P < 0.01 *** P < 0.001**

Note: One-way ANOVA is an additional or secondary test to verify the results

Table (7.9) Descriptive statistics of overall means for each group and multiple comparison test

Questions	Mean				Mann-Whitney Test – Post Hoc test			
	Board of directors	**Sub-Committee**	**Auditor**	**Academic**	**Board of director (Sig) with**	**Sub-Committee (Sig) with**	**Auditor (Sig) with**	**Academic (Sig) with**
1- Manipulation of the provision of inventory	3.82	4.29	4.39	4.00	Auditor **Sub-Committee**	**Board of director**	**Board of director**	
2- Manipulation of the amount of receivable accounts	3.96	4.22	4.17	3.94	No significant differences among groups			
3- Manipulation of the amount of depreciation accounts	4.33	3.82	3.87	4.36	Auditor **Sub-Committee**	**Board of director** **Academic**	**Board of director** **Academic**	Auditor **Sub-Committee**
4- Manipulation of the amount of various expenses (such as development costs, and maintenance expenses)	4.06	4.24	4.06	4.10	No significant differences among groups			
5- Manipulation of the amount of revenue	3.41	4.11	4.12	3.46	**Auditor** **Sub-Committee**	**Board of director** **Academic**	**Board of director** **Academic**	Auditor **Sub-Committee**
6- Manipulation of the amount of cash flow	4.01	3.33	3.62	4.06	**Auditor** **Sub-Committee**	**Board of director** **Academic**	**Board of director** **Academic**	**Auditor** **Sub-Committee**
7- Manipulation of the amount of reserves	4.13	3.79	3.61	3.86	No significant differences among groups			
8- Manipulation on sales of assets	4.23	4.04	4.10	4.16	No significant differences among groups			
9- Manipulation of internal transactions related to business combination	4.20	3.97	4.07	4.11	No significant differences among groups			
10- Capitalising rather than expensing expenditure	4.00	4.50	4.20	4.07	No significant differences among groups			

$*p < 0.05$ $**P < 0.01$ $***P < 0.001$

Note: Using Post-Hoc is an additional or secondary test to verify the results

7.4 Do Internal Corporate Governance Mechanisms Remedy Earnings Management in Saudi Arabia?

As concluded in the previous section the motivations for Saudi managers to manipulate reporting of earnings may be affected by different objectives related to their external contract, management compensation and capital market motivations. Thus, it is essential for a company to establish effective mechanisms such as corporate governance to protect the rights of investors in obtaining true and fair financial information. As mentioned previously, the Saudi Capital Market Authority has issued corporate governance regulations as guiding principles for all Saudi listed companies; however, in 2010 most regulations became mandatory.

Since the implementation of corporate governance in Saudi Arabia is still at a very preliminary phase the benefits need to be understood in order to successfully constrain unlawful activities relating to earnings management. This section attempts to elicit the opinions of respondents who are familiar with this issue, on the role of internal corporate governance mechanisms for deterring earnings management. Hence, a number of questions were posed in the questionnaire and interviews derived from prior research related to the role of corporate governance mechanisms that may remedy earnings management. Corporate governance in Saudi Arabia was viewed by many of the participants as a new concept that needs more time for the new regulations to be assimilated. In this regard, a member of boards of directors stated that:

> ***"The concept of corporate governance is a new concept within the Saudi environment that was not discussed in advance with the legislator. Corporate governance is at a very important stage in the Saudi Market; however, the Saudi legislator should have given background information and discussed the concept with Saudi companies before its implementation since that would have provided homogenous implementation. Most companies believe that they perform well so they do need corporate governance or more regulation because they do not know about the main objectives for corporate governance"***

On the other hand, other groups as proponents saw that internal corporate governance mechanisms are not a new concept and there is no complicated idea or mystery associated with their implementation because the Saudi Capital Market Authority translated the terms of corporate governance into Arabic and all companies were invited to ask about anything they did not understand. During the interviews, one of the academic staff stated:

"In my view, corporate governance is not a new concept as claimed. Corporate governance is a modification or arrangement of previous roles such as that of the audit committee that were established previously. Thus, the new concept is not acceptable at all. All companies should be adapted via the understanding of objectives of implementation and the advantages that can be achieved"

7.4.1 The role of the board of directors and its effect on earnings management:

This section focuses on interviewees' perceptions and the results of the questionnaire on the role played by boards in constraining earnings management. Firstly, interviewees indicated a key point related to frequency of board meetings and board size. For instance, one member of the boards of directors expressed his opinion on how frequent meetings and board size may affect earnings management. He stated that:

"Successful boards of directors should meet frequently to discuss the important issues. Some boards of directors meet just four times annually to endorse the quarterly financial statements and they are not really aware of their duties towards shareholders. Moreover, a large board of directors is better than a small one since it has variety of experiences which is helpful in reaching wise decisions"

On the other hand, agency theory expects that the presence of independent members on boards of directors will enhance the boards' ability to monitor management (Young, 2008). Institutional theory views these mechanisms as practices or regulations as a result of coercion from legislators who impose certain practices in order to improve organizational effectiveness or as a result of imitation. The Saudi Capital Market Authority mandates that the majority of members of a board of directors should be non-executive. According to the research, Ebrahim (2007), Benkel *et al*. (2006), Uzun *et al*. (2004) and Persons (2006) show that the proportion of independent board members is related to reduced levels of earnings management. One audit committee member expressed his opinion by indicating that:

"I think most Saudi listed companies comply with regulations which require that the majority of members of boards of directors should be non-executive. This action will safeguard the rights of investors and give more protection to minority shareholders. However, in my view, the key issue related to the independence of members should be given attention because more independence will provide more protection"

With regard to the previous statement, participants stressed a crucial point that might impair the independence of boards leading to increased earnings management. This point relates to the procedure of the appointment of board members that is affected by cultural factors. A member of the sub-committees emphasised that:

> ***"Because of the nature of the culture of Saudi society, the appointment of a member of a board of directors is effected by nepotism which plays a significant role in the selection of members, whether to a board of directors or to sub-committees. This behaviour is expected to considerably impair a board's independence which leads to increased risks in a company"***

Although the culture and religious framework may play a substantial role of internal corporate governance, this study does not aim to examine causality, but rather the association between earnings management and attributes of monitoring mechanisms.

Additionally, agency theory suggests that high insider ownership provides better corporate governance structure, which leads to a high quality of financial reporting (Sanchez and Meca, 2005). Warfield *et al*. (1995) present evidence that managerial shareholding has a negative relationship with earnings management. Moreover, because of a lack of disclosure regarding the shares held by board members, particularly by independent members or outside directors, the investigation regarding this issue was extended by interviewing a member of a board and an academic who stated that:

> ***"Recently Saudi regulations mandate that each member of a board of directors should hold at least 1000 shares. This action might encourage members to protect their benefits as shareholders by monitoring management. They will also be very keen to obtain high earnings and grow their shares via improving performance"***

From another perspective, and relating to board ownership on the one hand and board independence on the other hand, one of the academic staff stated that:

> **"*Most shareholders holding a high proportion of shares use their power to appoint their relatives as outside directors on boards of directors as a kind of delegation that results in an expropriation of rights of minority shareholders of getting a board with high independence*"**

It is worthwhile noting that the Saudi Capital Market Authority has recently issued the following resolution:

> [3] "Amending the definition of "Independent Member" in paragraph (b) of Article 2 of these Regulations to include as infringements of independence the ownership of 5% or more of the company or its group by the member of the Board of Directors or a representative of a legal entity which owns 5% or more of the company or its group. The amendments shall be applied on companies that apply for listing on the Saudi Stock Exchange (Tadawul) from the date of its publication. And will be applied on companies listed on the Exchange upon the appointment of any member of board, starting from the date 1/1/2011"

Regarding another characteristic of internal corporate governance, Sarkar *et al*. (2006) found that earnings management is higher when the chair of the board also holds the CEO position. Therefore, Saudi regulations prohibit conjoining the position of chairman of board of directors with any other executive position in the company. The interviewer discussed this issue with a participant who is chairman of an agriculture company. He suggested that:

> ***"In my opinion, the separation between the position of chairman and CEO is an important matter in protecting shareholders, but it is not really applied in all companies. The separation is applied in appearance but not real fact. In most companies the CEO has a close relationship with the chairman that impairs accountability"***
>
> .

To overcome previous issue, CEO should not have any a close relationship or strong friendship with chairman which may impair accountability.

Interestingly, there may be situations where several people are more powerful than others, so that those who have greater power influence the behaviour of the others to get things done (Clark, 2004). Moreover, the diversity of a board of directors enhances the effectiveness of the board's actions, increasing the performance and productivity of the company, which leads to increased profitability and shareholder value. Under agency theory, a more diverse board is likely to monitor the management because board diversity increases board independence. Carter *et al.* (2003a) found a positive relationship between the percentage of ethnic minority directors and performance. Cater *et al.* (2007) also stress that diverse board composition seems to generate value for shareholders. In Saudi Arabia, many members of the royal family are appointed as members of boards of directors;

[3] This resolution was issued on 16-3-2010 while the fieldwork was being conducted.

thus, the presence of royal family members might increase the firm's value because having royal family members sitting on boards as owners, they expose the firm to a competitive environment, which leads to improved performance in addition to the business benefits through informal nextworks. Saudi listed companies are dominated by royal family members who mainly serve on the board of directors as managerial members; therefore, they may monitor the management closely, thereby decreasing possible mismanagement and wrongdoing. In this regard, a member of the academic staff said that:

> ***"I do not think that the existence of royal family members might constrain earnings management. However, the integration and variety of the board in terms of experience and qualifications leads to enhance board activities that would enable them to monitor the executives"***

In section 3, questionnaire respondents were given a number of board characteristics that might constrain earnings management. These characteristics were mainly derived from the previous literature as discussed earlier. According to the questionnaire, as shown in Figure 7.6 and Table 7.10 (pages 178 and 179), the majority of respondents highlighted six actions of corporate governance related to boards of directors. More than 80% of respondents viewed that frequent meetings, large board size, high proportion of outside directors and the separation between the position of chairperson and CEO are key characteristics of boards of directors in constraining earnings management. However, the existence of royal family members on the board did not receive agreement as a possible factor in constraining earnings management. It is worthwhile noting that apart from the separation between functions of chairperson and CEO, there is no significant difference between the groups regarding others characteristics. As the auditors group and the sub-committees have more experience than the other groups, they believed separation to be more effective in constraining earnings management than other groups. The findings can be reflected in means scores of more than (4) for five characteristics of boards of directors.

7.4.2 The role of the audit committee and its impact on earnings management:

In the interviews, participants were asked how audit committee size and frequency of meetings can influence earnings management in Saudi Arabia. A member of the academic staff viewed that:

> ***"In theory, audit committees in Saudi listed companies should play a significant role in protecting the rights of investors against any wrongdoings but, in practice audit***

committees do not perform the role required properly. For example, from my experience in research, there is no active communication between these committees and auditors, and most of these committees are established in compliance with Saudi regulations”

Moreover, an audit team manager believed that communication between auditors and audit committees would contribute to reducing information asymmetry and solve a large number of issues related to financial reporting. Several issues which might occur because of the lack of communication between external auditors and audit committees have been identified in the following comments presented by external auditor:

> ***“I do not rely on the audit committee. I have never met a member of the audit committee and I have never been invited by them to discuss the main issues. I always meet the top-manager or financial manager in the company. I think members of audit committees do not behave toward their role, as they should, so they will not constrain any wrongdoings”***

The previous statements suggest that the framework of the audit committee’s role seems to be evident and well-organized in theory; however, practically it is not successful and effective since most members of audit committees do not perform their role properly. These comments led this researcher to interview a member of an audit committee to ascertain the reasons for the weak role of audit committees in Saudi listed companies. He stated that:

> ***“I agree that the role of audit committee is ineffective. From my experience, this issue arises because: 1- Our recompense is inadequate to encourage us to perform our duties, as we should. 2- Most members of audit committees in Saudi listed companies are part-time which does not enable them to perform their duties properly.3- We do not feel that we are responsible toward shareholders and the culture affects us in doing things as management wants, otherwise we will be dismissed”***

To overcome this issue, he suggested that:

> ***“I think audit committees members should feel responsible for their duties by making them issue a report attached with the financial report clarifying their responsibilities for the integrity of financial reporting. In addition, all members should be full-time and obtain beneficial recompense”***

Moreover, Yang and Krishnan (2005); Abbott *et al*. (2003); Bedard *et al*. (2004) and DeZoort and Salterio (2001) imply that a significant negative relationship exists between an audit committee that includes at least one member with financial expertise and earnings management. In Saudi Arabia, corporate governance regulations mandate that audit committees should include at least one member with financial expertise. During the interviews, a member of the boards of directors was interviewed to explore his opinion on this matter. He viewed that:

> ***"The existence of a financial expert as a member of the audit committee is very important. Their financial expertise would add valuable effect by increasing the understanding of complicated issues and help other members to take beneficial decisions practically in difficult times. However, most companies select the expert according to "a known person is better than an unknown one" since they aim to keep their business confidential which leads them to ignore efficiency and experience"***

According to the research, Bedard *et al*. (2004), Abbott *et al*. (2004), Ebrahim *et al*. (2007) and Xie *et al*. (2003) emphasise that independent audit committees can reduce the occurrence of earnings management. Thus, Saudi corporate governance regulations mandate that all members of audit committees should be independent. One member of the audit committees viewed that:

> ***"Independence is a very important characteristics in audit committees, however in my view most audit committees in Saudi listed companies are less independent since most members are appointed on audit committees by nepotism, not for their experience or education. Moreover, independence can be impaired by the increase of fear of dismissal"***

As can be seen in Figure 7.6 (See page 178), the analysis of the questionnaire survey reveals that over three-quarters of respondents agreed or strongly agreed that the following characteristics are useful in avoiding earnings management: frequent meetings by audit committees (86%), high proportion of outside directors (89%) and the existence of financial experts (93%). However, just less than half (45%) of respondents did not agree that a small audit committee might be effective in reducing earnings management. It is important to note that, as shown in Table 7.11 (See page 180), there is significant difference between the groups regarding three characteristics: frequent meetings, audit committee size, expertise. Firstly, as indicated in Table 7.12 (See page181) the majority of members of boards of directors (86.5%), sub-committee members (95%) and academic staff (89%) agreed or strongly agreed that frequent meeting of audit committees is likely to constrain earnings management. However, because of the lack of their experience in this field there was lower agreement by the auditors group (79%) in respect of this characteristic. Secondly, with regards to audit committee size, although most respondents perceived that a small audit committee would not be effective in reducing earnings management and this was reflected in an overall mean score of only 2.88, the sub-committee group believed that a small audit committee is more effective than a large one. This view is consistent with the idea that a small audit committee might reach a beneficial decision more easily than a large committee. Finally, as can be seen in Tables 7.10 and 7.12 (Pages 179 and 181), although the majority of members of boards of directors (93%), sub-committee members (90%), and auditors (89%) agreed or strongly agreed that the existence of financial expertise is a good way of constraining earnings management, the academics showed greater agreement (98%) reflected in their overall mean score (4.88).

7.4.3 Nomination and remuneration committees:

In this section, the study attempts to elicit the respondents' views on the effectiveness of remuneration and nomination committee characteristics on earnings management. Overall, the majority of respondents showed a low level of agreement compared to audit committee characteristics as effective in the prevention of earnings management. This is reflected in overall mean scores in Table 7.10 for each characteristic as follows: Frequent meetings (3.58), small committee size (2.94) and the proportion of outside directors (3.67). However, a level of disagreement occurred by respondents about the existence of CEOs on remuneration and nomination committees (2.44). During the interviews one of the members of the boards of directors declared that:

> ***"Remuneration and nomination committees have been established recently by all listed companies. Despite the importance of their role, I think these committees need more time to be effective. In my view, these committees might not play a crucial role in mitigating earnings management practices. However, they might have an indirect role by improving the role of the board of directors by nominating qualified members that will be reflected on others committees such as the audit committee"***

One of the academic staff expressed his concerns regarding the CEO being a member of remuneration and nomination committee as possibly impairing its independence as follows:

> ***"The existence of the CEO as chair of the remuneration and nomination committee might impair its independence by imposing his suggestions of selecting***

board members or in relation to payment. In the case of board members attempting to satisfy the CEO, the board of directors may be destroyed”

6.6 Does Ownership Concentration Mitigate Earnings Management in Saudi Arabia?

Figure 7.6 (See page 178) reports the analysis of respondents’ opinions related to ownership concentration and earnings management. Almost three-quarters of respondents (71%) agreed that controlling shareholders might constrain earnings management. This result represents a lower percentage than others questions and this was reflected in the overall mean score (3.58). Moreover, Table 7.11 (See page 180) indicates that there is no difference between the groups regarding ownership structure.

Family ownership sometimes reaches 95% of a company’s capital as revealed in the secondary data. However, as has been shown by the secondary data, well-known families in Saudi Arabia own approximately 13% of Saudi listed companies’ capital. An interview with a member of a board of directors indicated the likelihood of capability of family ownership in constraining earnings management in companies because they are concerned with earnings. He expressed his opinion as follows:

> ***“In my view, family shareholders are concerned with earnings, and they might realise the number of risks in the company. They have an overall image of the company and know what is going wrong. Moreover, they are very mindful of the company’s reputation. For example, the most successful companies are dominated by family ownership Such as X and Y”***

From a different perspective, one academic’s opinion presented a pessimistic view regarding family ownership concentration. He stated that:

> ***“Groups of families dominate a large number of Saudi companies which is highly risky. Because we do not have more protection in the Saudi Market, family concentration might increase earnings management as a type of expropriation of the rights of other shareholders”***

Comments provided by members of boards of directors and academics are consistent with two opposing arguments. Jaggi *et al* (2009) argue that family control via ownership might be healthy because they will be effective on the board in limiting management's ability to manipulate; however, in countries that have a lack of protection for investors, family ownership may be less effective and lead managers to manipulate earnings.

As indicated in the secondary data, state-ownership sometimes reaches 83% of a company's capital and the Saudi government dominates, on average, 8% of companies' capital. One sub-committee member, also an academic, expressed his opinion in respect of the effect of state ownership on earnings management.

> **"*Most companies in which the governments hold more shares are subjected to rigorous monitoring, whether by BIG 4 auditor or by government, so state-owned companies are considered safer in terms of investment; therefore manipulation should be less than in other companies*"**

The third type of ownership structure which can exist in the Saudi market is institutional. Institutional ownership sometimes reaches 75% of a company's capital as the secondary data revealed. The interviewees suggested possible explanations for the effect of institutional ownership on earnings management. A member of the academic staff, who said it had a potential effect, stated that:

> ***"We should differentiate between long-term and short-term institutional investors. Long-term institutional investors have an incentive to mitigate opportunistic behaviour by monitoring management since they want to protect their benefits and improve performance. However, short-term institutional investors have objectives for short-term investment, so they might not pay attention to opportunistic behaviour, which could lead to increased earnings management"***

Previous comments made by a member of sub-committee are consistent with Koh's (2003) result. He found that there is a positive relationship between earnings management and the percentage of short-term institutional ownership and a negative relationship in long-term institutional ownership. Generally, in short-term ownership, the investor might be motivated to manipulate earnings management; however this motivation might be restricted in long-term ownership.

In summary, the possible conflict of interests between controlling shareholders and minority might be motivation of earnings management in Saudi Arabia since ownership structure is the primary determinant of agency cost. There is moderate agreement among respondents, lower than in the responses to other questions, about the effectiveness of ownership concentration on earnings management practices in Saudi Arabia. However, the type of ownership structure might have a different effect on earnings management. For example, the interviews reveal that state ownership companies are safer in terms of manipulation because of entrenchment. In relation to institutional ownership, and family ownership, two views have been presented according the nature of investment.

Figure (7.6) Overall result of respondents' perceptions of the effect of CG and ownership structure on constraining EM

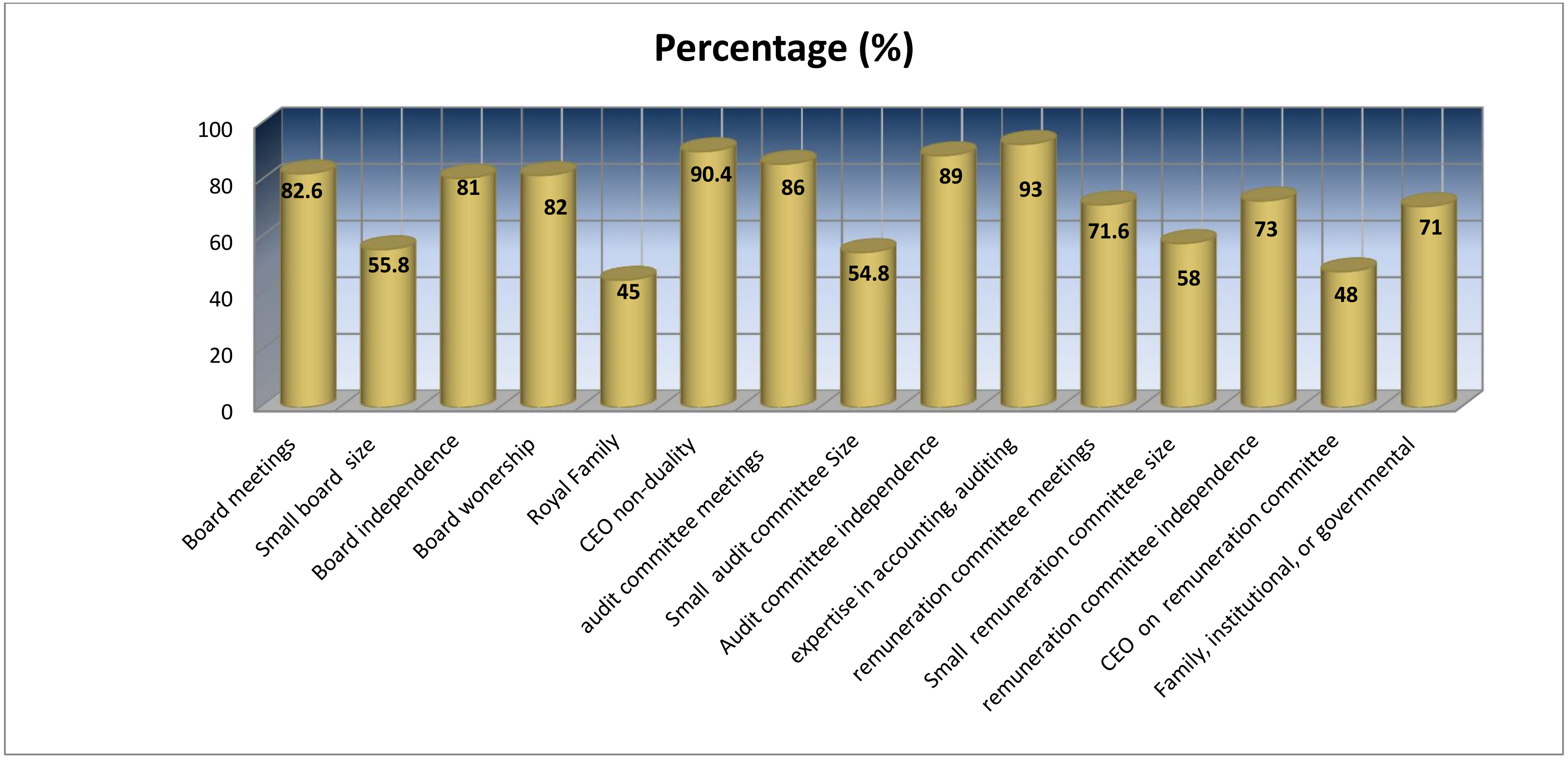


Table (7.10) Respondents' Perceptions of the role CG on constraining EM

Questions	Level of agreement (percentage) 1	2	3	4	5	Total Mean score	Rank	Standard Deviation	Corrected Item-Total Correlation	Cronbach's α (alpha) (Consistency)
1- Frequent meetings of board of directors	8.1	4	3	51.8	33.1	4.13	5	.726	.392	0.780
2- Small size of board of directors	4.6	40.5	22	24	8.3	2.79	11	.981	.354	
3- High proportion of outside directors on board of directors	10.1	4.4	3	45	37.5	4.05	7	.651	.596	
4- High proportion of shares owned by board of directors	0	10.7	3.2	49.8	36.3	4.10	6	.873	.587	
5- Existence of royal family members on the board of directors	7.6	58.6	10.2	17.2	5.6	2.25	14	.951	.054	
6- Separation between functions of CEO and chair of board	8	1.6	8	37.9	58.9	4.52	2	.680	.335	
7- Frequent meetings of audit committee	0	6.5	1.6	50	41.9	4.27	4	.789	.473	
8- Small size of audit committee (no more than 3)	4	51.6	15.3	24.2	4.8	2.74	12	1.02	.303	
9- High proportion of outside directors on audit committee	8	5.6	3.2	27.4	62.9	4.45	3	.868	.310	
10- Sufficient expertise in accounting, auditing and/or finance on audit committee	0	8	4	25.8	69.4	4.63	1	.602	.278	
11- Frequent meetings of remuneration and Nomination committee.	0	27.4	9.8	45	17	3.58	9	1.07	.337	
12 - Small size of remuneration and nomination	1.1	40	29	24.2	5.6	2.94	10	.939	.412	
13- High proportion of outside directors on remuneration and nomination committee	0	16.9	8.1	56.5	18.5	3.67	8	.946	.414	
14- CEO should not serve on remuneration and nomination committee	15.3	46	17	21	0	2.44	13	.990	.529	
15- High proportion of family, institutional, or governmental ownership	3.2	15.3	9.7	63.7	8.1	3.58	9	.995	.346	

1-strongly disagree 2- disagree 3-neutral 4- agree 5- strongly agree
Likert Scale

Table (7.11) Non- Parametric Test (Kruskal-Wallis) versus one-way Parametric Test ANOVA

Questions	Kruskal-Wallis Non-Parametric Test P. value Sig	ANOVA one way Parametric Test P.value Sig
	Less than 0.05	Less than 0.05
1- Frequent meetings of board of directors		
2- Small size of board of directors		
3- High proportion of outside directors on board of directors		
4- High proportion of shares owned by board of directors		
5- Existence of royal family members on the board of directors		
6- Separation between functions of CEO and chair of board	*	*
7- Frequent meetings audit committee	*	*
8- Small size of audit committee (no more than 3)	**	**
9- High proportion of outside directors on audit committee		
10- Sufficient expertise in accounting, auditing and/or finance on audit committee	*	*
11- Frequent meetings of remuneration and Nomination committee.	***	***
12 - Small size of remuneration and nomination	***	***
13- High proportion of outside directors on remuneration and nomination committee	***	***
14- CEO should not serve on remuneration and nomination committee	***	***
15- - High proportion of family, institutional, or governmental ownership		

$*p < 0.05$ $**P < 0.01$ $***P < 0.001$

Note: Using ANOVA one way is an additional or secondary test to verify the results

Table (7.12) Descriptive statistics of means for each groups and multiple comparison test

Questions	Mean				Mann-Whitney Test – Post Hoc test			
	Board of directors	Sub-Committee	Auditor	Academic	Board of director (Sig) with	Sub-Committee (Sig) with	Auditor (Sig) with	Academic (Sig) with
1- Frequent meetings of board of directors	4.39	4.20	4.02	4.03	No significant differences among groups			
2- Small size of board of directors	2.51	3.04	2.97	2.70	No significant differences among groups			
3- High proportion of outside directors on board of directors	4.00	4.11	3.97	4.12	No significant differences among groups			
4- High proportion of shares owned by board of directors	4.11	4.12	4.00	4.20	No significant differences among groups			
5- Existence of royal family members on the board of directors	2.30	2.22	2.31	2.20	No significant differences among groups			
6- Separation between functions of CEO and chair of board	4.26	4.79	4.39	4.66	Sub-Committee Academic	Board of director Auditor	Sub-Committee	Board of directo
7- Frequent meetings of audit committee	4.34	4.41	3.97	4.47		Auditor	Sub-Committee Academic	Auditor
8- Small size of audit committee (no more than 3)	2.47	3.33	2.41	2.88	Sub-Committee	Board of director Auditor	Sub-Committee Academic	Auditor
9- High proportion of outside directors on audit committee	4.74	4.50	4.48	4.81	No significant differences among groups			
10- Sufficient expertise in accounting, auditing and/or finance on audit committee	4.65	4.50	4.48	4.88		Academic	Academic	Sub-Committee Auditor
11- Frequent meetings of remuneration and Nomination committee.	3.90	4.29	2.90	3.60	Auditor	Board of director Auditor Academic	Academic Sub-Committee	Auditor Sub-Committee
12 - Small size of remuneration and nomination	2.69	3.91	2.43	3.02	Sub-Committee	Board of director Auditor Academic	Academic Sub-Committee	Sub-Committee Auditor
13- High proportion of outside directors on remuneration and nomination committee	4.00	3.87	2.97	4.43	Auditor	Academic Auditor	Board of director Academic Sub-Committee	Auditor
14- CEO should serve on remuneration and nomination committee	2.39	2.90	1.82	2.44	Auditor	Auditor	Board of director Academic- Sub-Co	Auditor
15- High proportion of family, institutional, or governmental ownership	3.70	3.87	3.13	3.61	No significant differences among groups			

***p < 0.05 **P < 0.01 *** P < 0.001**

Note: Using Post-Hoc is an additional or secondary test to verify the results

7.6 Do External Audit Factors Affect Earnings Management?

In Saudi Arabia, the regulators' concern is that manipulation of earnings management is attributed to lower audit quality that might contribute to providing non-transparent information thereby misleading the shareholders in their decision-making (Saudi Accounting Journal, 2008). As a whole, the role of corporate governance on constraining earnings management has been discussed previously as a safeguard and the main focus of this section is to shed light on the role of the external audit as a safeguard in constraining earnings management. For this purpose, many effective factors related to external audit of constraining earnings management were prepared and presented in Section 4 of the questionnaire and interviews based on the ongoing debate in accounting literature.

7.6.1 Brand Name (BIG4)

As shown in Figure 7.7 (See page 186), approximately 91.8% of respondents agreed or strongly agreed with contracting firms that high independence and a good reputation will mitigate earnings management practices because of their ability to detect earnings management practices. Moreover, more than 80% of respondents perceived that contracting a local firm affiliated with BIG4 would reduce the occurrence of earnings management. However, among this support, as indicated by Table 7.14 (See page 188), there is significant difference between groups regarding contracting a local firm affiliated with BIG4. Although the majority (94.4%) of the academics and 87.4% of the sub-committee members agreed or strongly agreed that contracting a local firm affiliated with BIG4 would constrain earnings management, lower agreement was shown by the members of boards of directors (66%) and the auditors (77%).

This is consistent with the expectations; members of boards of directors are very keen to give local auditors the opportunity to prove their quality and skills in the Saudi audit market with the aim of Saudi recruitment. On the other hand, and because of competition, Saudi audit firms would confirm that their quality and performance are as good as those of BIG4.

During the interviews, previous aspects provided by BIG4 were discussed with participants suggesting that BIG4 is adequately independent and provides good quality. However, some reservations were raised regarding the Saudi audit market. One of these reservations was presented by the manager of an audit team who viewed that:

> ***"The Saudi audit market faces serious issues that might affect audit quality. These issues can be summarized as follow: 1- the monopoly of audit services by a small number of audit firms. 2- Illegal competition between audit firms. 3- Audit service fees decrease. These issues reduce the audit quality in the Saudi market that might lead to increased information asymmetry"***

One member of a board of directors stated that:

> ***"In my opinion, BIG4 do not necessarily provide a high audit quality particularly in the Saudi market. We saw a typical example in the Andersen and Enron case; so Saudi firms should be given more opportunities enhancing and devolving the Saudi audit market by merging small audit firms with big firms"***

The previous view is consistent with the view of Francis (2004) that it is not always the case that BIG4 firms provide high audit quality; failure can and does occur.

7.6.2 Specialist Auditors

Approximately 25% of Saudi listed companies practise their business in a complex field such as petrochemical and multi-investment industries that need a specialist auditor to provide high audit quality. In this regards, the results presented in Figure 7.7 and Table 7.13 (See pages 186 and 187) reveal that the majority (87%) of respondents agreed or strongly agreed that contracting with a specialist auditor who understands the client's business and industry is an effective method to reduce earnings management. However, as shown in Table 7.14 (See page188), there is a significant difference between groups regarding this statement. Over 80% of members of sub-committees and auditors agreed that contracting with a specialist auditor would reduce earnings management, whereas academics and members of boards of directors showed a higher level (94% and 90% respectively) of agreement. This was reflected in overall mean scores for each group as follows: academics, 4.72; members of board of directors, 4.52; members of sub-committees, 4.29 and auditors, 4.02. There are several explanations for this result. Since members of boards of directors and academic staff are not practitioners, they understand the importance of specialization of industry. By contrast, sub-committees members and auditors, as practitioners, might not give much importance to specialization in constraining earnings management compared to the other groups. Overall, contracting specialist auditors was ranked the second most important factor in detecting earnings management. Prior findings were consistent with the following opinion of one academic in Saudi Arabia:

> ***"Understanding clients' industry and business is essential in order to determine the potential risks that lead to detecting earning management. In my view, an auditor with an inadequate knowledge and low experience in industry is very risky since he will not identify the risky area in a company that encourages management to commit fraud"***

7.6.3 Auditor Tenure

In Saudi Arabia, agreement has recently been reached that auditor tenure with a client should be no more than five years. As shown in figure 7.7 (See page 186), approximately 86% of respondents agreed or strongly agreed that shorter tenure would increase the auditor's independence, thus enabling him to detect earnings management, and this was reflected in the overall mean score (4.30). However, as indicated by Table 7.14 (See page 188), there is significant difference between the groups regarding audit tenure. Even though the majority (93.2%) of the academics, 87.8% of the members of boards of directors and 85% of the members of sub-committees agreed with the notion that shorter tenure for auditors enables them to constrain earnings management, there was a lower agreement level provided by the auditors (79%). The view of the auditors might be consistent with the second notion that suggests that lengthy auditor tenure might provide depth of understanding to the auditor enabling him to detect earnings management. In Thailand, Pornupatham (2006) found that the majority of external auditors (92%) agreed that lengthy tenure might help them to identify risks to clients. Earlier results were reflected in the overall mean scores as follows: academics, 4.66; members of boards of directors, 4.39; members of sub-committees, 4.25 and auditors, 3.97. The results of the questionnaire are consistent with the views of one academic who suggested that:

> ***"Recent regulations regarding auditor tenure contributes to enhancing auditor independence that will be reflected in audit quality. In my view, two to four years is an adequate period for auditors to understand a client's business and identify areas of risk that will lead them to detect earnings management. However, more than five years might make the auditor more lenient since the relationship will be affected by the culture"***

Earlier results obtained from the questionnaires and interviews with regard to the effectiveness of auditor tenure and earnings management is consistent with the prominent notion that suggests lengthy tenure would affect the auditor's independence leading to lower audit quality.

7.7 Issuing Deterrent Punishments and Stricter Auditing Standards and Accounting Legislations

Recently, official Saudi organizations such as the Ministry of Commerce & Industry, Saudi Capital Market Authority, and Saudi Organization for Certified Public Accounting have begun to impose fines on companies that do not commit to full-disclosure. Moreover, a number of auditing firms have been punished by being forbidden to practise audit services for a while as they have violated professional standards of auditing. These actions might enhance audit quality as well as the integrity of financial reporting, leading to a reduction in information asymmetry. On the other hand, attention must be paid to accounting and auditing standards to reinforce the transparency of financial reporting and enhance the audit quality alike.

Figure7.7 and Table 7.13 (See page 186 and 187) indicate that whereas over just 80% of respondents agreed that the issuing of stricter auditing and accounting standards contribute to deterring earnings management, approximately 88% of them also agreed with the issuing of deterrent punishments against offenders. During the interviews, a member of the boards of director suggested that developing audit standards should be the first step toward enhancing audit quality. He stated that:

> ***"If we wish to constrain earning management or any wrongdoings, we should enhance external auditing by developing its standards and other standards related to the auditing profession"***

Figure (7.7) Overall result of respondents' perceptions about the effectiveness of external audit factors on constraining EM

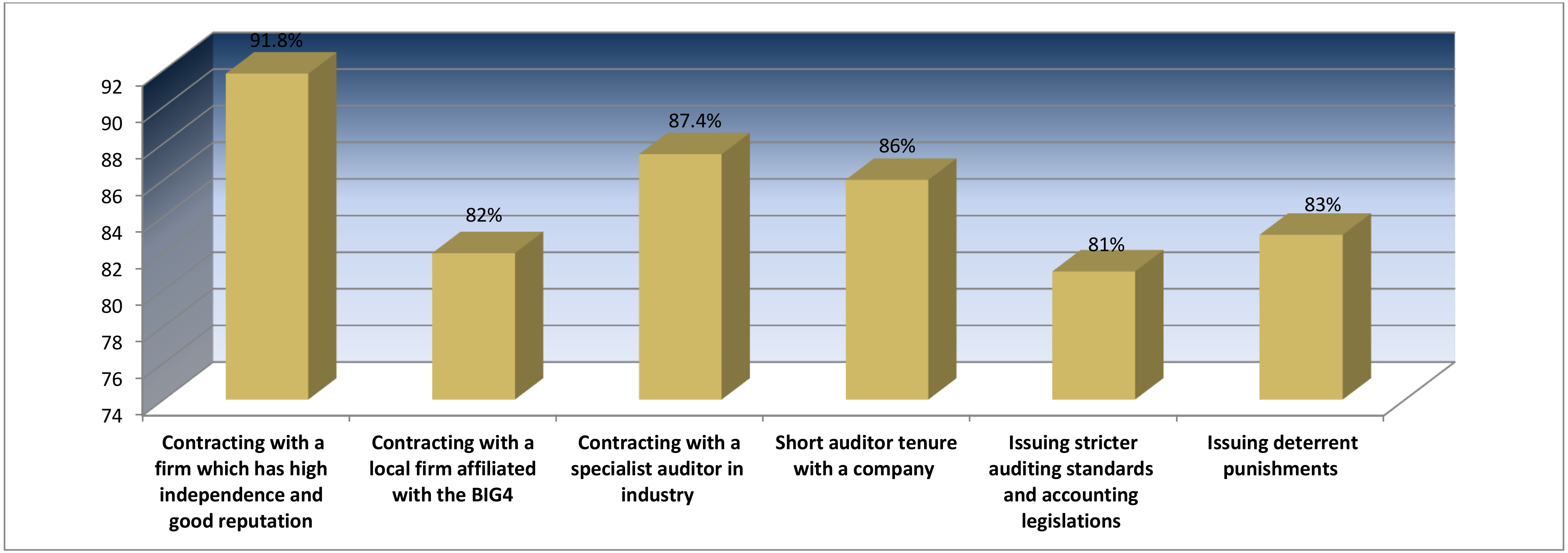


Table (7.13) Respondents' Perceptions of the Role of External Audit Factors on Constraining EM

Questions	Level of agreement (percentage) 1	2	3	4	5	Total Mean score	Rank	Standard Deviation	Corrected Item-Total Correlation	Cronbach's α (alpha) (Consistency)
1- Contracting with a firm which has high independence and good reputation	0	0	3	33.1	64.5	**4.59**	1	.632	.533	
2- Contracting with a local firm affiliated with BIG4	0	23	3	47	51	**4.10**	5	1.08	.388	
3- Contracting with a specialist auditor in industry	0	3.2	5.6	41.2	49.5	**4.37**	2	.737	.680	
4- Short auditor tenure with a company	0	2.4	4	54	39.5	**4.30**	3	.664	.673	**0.814**
5- Issuing stricter auditing standards and accounting legislations	1.6	6.5	2.4	64.5	25	**4.04**	6	.824	.584	
6- Issuing deterrent punishments	0	4	8	66.9	28.2	**4.19**	4	.646	.632	
1-strongly disagree 2- disagree 3-neutral 4- agree 5- strongly agree Likert Scale										

Table (7.14) Non- Parametric Test (Kruskal-Wallis) versus one-way Parametric Test ANOVA

	Kruskal-Wallis Non-Parametric Test P. value Sig	**One-way ANOVA Parametric Test P.value Sig**
Questions	**Less than 0.05**	**Less than 0.05**
1- Contracting with a firm which has high independence and good reputation		
2- Contracting with a local firm affiliated with BIG4	**	**
3- Contracting with a specialist auditor in industry	***	***
4- Short auditor tenure with a company	***	***
5- Issuing stricter auditing standards and accounting legislations	*	*
6- Issuing deterrent punishments		

***p < 0.05 **P < 0.01 *** P < 0.001**

Note: Using one way ANOVA is an additional or secondary test to verify the results

Table (7.15) Descriptive statistics of means for each groups and multiple comparison test

Questions	Mean				Mann-Whitney Test – Post Hoc test			
	Boards of directors	Sub-Committees	Auditors	Academics	Boards of directors (Sig) with	Sub-Committees (Sig) with	Auditors (Sig) with	Academics (Sig) with
1- Contracting with a firm which has high independence and good reputation	4.60	4.58	4.49	4.60				
2- Contracting with a local firm affiliated with BIG4	3.34	4.37	3.87	4.72	Academic Sub-committee	Boards of director	Academic	Board of directors Academics
3- Contracting with a specialist auditor in industry	4.52	4.29	4.02	4.72	Auditor	Academic	Board of directo Academics	Sub-committee Auditors
4- Short auditor tenure with a company	4.39	4.25	3.97	4.66	Auditor	Academic	Boards of direct Academic	Auditors Sub-committee
5- Issuing stricter auditing standards and accounting legislations	4.11	4.16	3.73	4.37				
6- Issuing deterrent punishments	4.22	4.20	4.02	4.43			Academic	Auditor

$*p < 0.05$ $**P < 0.01$ $*** P < 0.001$
Note: Using Post-Hoc is an additional or secondary test to verify the results

7.8 Conclusions

As mentioned earlier, the purpose of this study is twofold. The first goal is to illustrate additional evidence in terms of earnings management motivations and techniques in Saudi Arabia. Secondly, it contributes to the literature by investigating to what extent earnings management practices can be affected by a key feature of internal and external corporate governance mechanisms. For the former, 124 useable responses to the questionnaire and 15 semi-structured interviews conducted with members of boards of directors, sub-committee members and external auditors were obtained. The questions in the questionnaire and the interviews were aimed at eliciting the respondents' views on the objectives of current study.

In doing so, the assumptions of the current study can be attributed to four factors:

1- The existence of earnings management practice and its motivations in Saudi listed companies to manage earnings management.

2- The potentiality of using various techniques to engage in financial reporting manipulation.

3- The presence of good internal and external corporate governance mechanisms to reduce the practice of earnings management.

The findings indicate that the primary reasons for manipulating earnings in Saudi Arabia are: "to increase the amount of remuneration"; "to report a reasonable profit and avoid loss"; "to obtain a bank loan";" to increase share prices". Over three-quarters (80%) of questionnaire respondents from all the groups agreed or strongly agreed with the fourth factor as a reason for manipulation in Saudi Arabia. More interestingly, with regards to earnings management techniques, the results of the current research suggest that earnings management is largely committed by "manipulation of the provision of inventory"; "manipulation of the amount of receivable accounts"; "manipulation of the amount of depreciation accounts"; "manipulation of amount of expenses"; "manipulation on sales of assets"; "manipulation of internal transactions"; and "capitalising rather than expensing expenditure". The majority (80%) of all four groups of respondents agreed or strongly agreed with seven techniques that are used frequently. Previous findings are consistent with agency theory that the issues related to the separation between ownership and management might lead managers to collude against owners to increase their own personal wealth thus, opportunities are given for managers to practice their discretion regarding business in order to achieve many objectives. Moreover, institutional theory may justify earnings management practices in Saudi Arabia since more pressure from the legislator leads Saudi companies to manipulate earnings.

Moreover, the findings reveal consensus among respondents on the effectiveness of good internal corporate governance mechanisms in mitigating earnings management practice. In addition 80% of respondents viewed, that information asymmetry is widely expected to be mitigated by the following actions:

1- Frequent meetings by boards of directors.
2- Large board size.
3- High proportion of outside directors on boards of directors.
4- High proportion of shares held by boards of directors.
5- The separation between the functions of the CEO and the chair of boards.
6- Frequent meetings of audit committees.
7- Large audit committee size.
8- High proportion of outside directors on audit committees.
9- Sufficient financial expertise on audit committees.
10- CEO should not serve on remuneration and nomination committees

Previous perceptions are consistent with agency theory that an internal corporate governance including board of directors and sub-committees plays a significant role in enhancing financial reporting. However, interview surveys reveal many concerns regarding the role of corporate governance such as independence, nepotism, ineffective role of audit committee, weakened communication with external audit, less responsibility toward shareholders. This may be explained by institutional theory which views that these mechanisms as practices or regulations as a result of coercion from legislators who impose certain practices in order to improve organizational effectiveness or as result of imitation. Moreover, ownership concentration gain moderate support as monitoring mechanism in constraining earnings management in Saudi Arabia.

On the other hand, over 80% of respondents viewed that contracting with BIG4 auditors that have a good reputation and high audit quality with short auditor tenure and specialist auditors contributes to reducing earnings management. This is also consistent with agency theory that recognises auditing as one of the main monitoring mechanisms for regulating conflicts of interest and cutting agency costs. Finally, the majority of them were of the opinion that issuing stricter accounting and auditing standards with deterrent punishment might also constrain earnings management. However, interviews have revealed underlying issues regarding external auditing that can be summarised as follows: A reduction in audit fees in order to attract more clients, illegal competition between audit firms, monopoly of audit services by some audit firms, violation of auditing standards by some audit firms

Chapter Eight

SECONDARY DATA ANALYSIS AND FINDINGS

8.1 INTRODUCTION

The previous chapter provided the analysis and findings obtained from the questionnaire survey and semi-structured interviews that primarily aimed to answer the research questions concerning the potential incentives and techniques of earnings management in Saudi Arabia. In addition, the questionnaire survey and semi-structured interviews presented respondents' perceptions of the role of internal corporate governance mechanisms, ownership structure, and external auditing in mitigating earnings management. This chapter illustrates the decisive analysis and findings obtained from secondary data. The primary purpose of this chapter is to answer the research question regarding the impact of internal corporate governance, ownership structure and external audit factors on earnings management.

Based on the above discussion, two empirical research models were adopted to test the 21 hypotheses summarised in the methodology chapter (See pages 123 and 124). In order to perform the analysis of the data, the Modified-Jones Model, and a vast array of explanatory variables of external audit factors, ownership structure and internal corporate governance mechanisms were used. Also, control variables such as firm size, financial leverage, performance, operating cash flow, and complexity were included in the models. Therefore, this chapter is organised as follows: Section 8.2 presents the development of the variables for discretionary accruals. Section 8.3 provides and discusses the descriptive statistics, and univariate analysis. Section 8.4 explains the correlation matrix. Section 8.5 outlines and argues the findings of the examination of the hypotheses. Section 8.6 provides and discusses additional analysis and the robustness checks. Section 8.7 provides a concluding discussion.

8.2 EARNINGS MANAGEMENT (DAC)

As mentioned in the methodology chapter, the current study employs discretionary accruals as a measure of earnings management (See page 125). Discretionary accruals (DAC), used in the current study, are calculated as the difference between total accruals and non-discretionary accruals, where discretionary accruals are estimated utilizing the modified Jones model (1995) developed by Dechow *et al.* (1995). The modified-Jones model is the most important model, which posits that earnings management gives rise to all change in credit sales in the event period since manipulation of credit sales recognition might be more straightforward than that of cash flow (Dechow *et al.* 1995). Additionally, it differs from the Jones model (1991) solely by adjusting for the change in receivables in the event period since this method assumes that there is no systematic management. Absolute discretionary accruals are applied as the magnitude of the deviation of reported earnings rather than the direction of earnings management. Table 8.1 provides the descriptive statistics for the estimated coefficients of the earnings management model during the period 2006-2009 allocated for the current study.

In order to estimate, coefficients ($ά_1$,$ά_2$,$ά_3$ respectively) are designed in the above model, an ordinary least squares (OLS) regression with no intercept is applied to estimate the equation for a specific event period. Moreover, to calculate discretionary accruals, the difference between total accruals and non-discretionary accruals is calculated. The estimation of total accruals covers 13 industries over four financial years.

Table (8.1) Summary Statistics of Earnings Management Model Coefficients

Variables	Mean	Median	Max	Min
Total assets (000) ↑	78.6	630.6	175000	-195000
Sales (revenue) ↑	0.282	0.069	4.765	-1.317
PPE ↓	-0.067	-0.033	0.141	-0.418

Since it is important to differentiate between discretionary and non-discretionary accruals, the statistical properties of the model's coefficients outlined in Table 8.1 indicate that the sign of property, plant, and equipment (PPE) variable is negative (-0.067). This is consistent with expectations since it constitutes income-decreasing (i.e., depreciation and amortisation expense). However, the sign of the change in sales (revenues) is positive due the fact that the change in revenue is different from the change of (PPE), which may result in income-increasing or income-decreasing.

Dechow *et al.* (1995) argue that the modified-Jones model is more effective than its standard version at detecting revenue-based manipulation. In addition, as a calculation of earnings management, the modified Jones model (1995) has an explanatory power of 38%, (average of R^2) and is significant at the level of 1%. Hence, it seems that the model is well-developed and results in accurate calculation for separating total accruals into their discretionary and non-discretionary components.

8.3 DESCRIPTIVE STATISTICS AND UNIVARIATE ANALYSES

This section illustrates descriptive statistics and univariate analyses for all observations containing mean, median, minimum, maximum, skewness, and kurtosis for each model separately. However, control variables for the two models will be discussed together. For analytic purpose, all variables were divided based on the level of discretionary accruals into low and high discretionary accruals according to the firm's level of discretionary accruals that is lower or higher than the yearly cross-sectional median. The rationale behind dividing companies into two groups according to high EM and low EM is to enable the current study to have more insight regarding to what extent corporate governance mechanisms and external auditing may be effective and it is additionally anticipated that extra information will be presented with regard to companies' characteristics such as size, leverage, and growth.

The following section attempts to interpret and discuss the results obtained from descriptive statistics and the univariate tests for both models. Additionally, descriptive statistics according to sample years is provided in the appendix in Tables 9 and 10 (See pages 290 and 291). It is worth mentioning that a non-parametric test (Mann Whitney test) is used as the primary test since the data did not meet parametric test conditions; however, the parametric test (t-test) is also applied as a means of robustness.

8.3.1 Descriptive Statistics and Univariate Analyses for the First Model

8.3.1.1 Discretionary accruals

As indicated in Table 8.2 (See page 198) outlining general descriptive statistics concerned with the first model's variables, the magnitude of value of DAC has approximately the value of 0.103, while the minimum value reaches (0). The findings are consistent with Kao and Chen (2004) who found that DAC has a value of about 0.10. However, Klein (2002) shows that the mean of absolute DAC is higher than 0.11 for US companies compared to the finding of Othman and Zeghal (2006) who found that DAC is closer to 0.06 and 0.03 among

Canadian and French companies. In devolving countries such as Malaysia, Abdul Rahman and Ali (2006) found the value of DAC of companies has a small mean value of 0.04. Discretionary accruals are undoubtedly important, according to assumptions, since they constitute managers' discretion over accruals.

8.3.1.2 Board of directors' characteristics

Table 8.2 indicates (See page 198) a high mean representation of outside directors on the board (66.9%). These findings emphasise the high compliance rate by Saudi companies with corporate governance mechanisms that recommend that the majority of members of aboard of director should be non-executive. This compliance was reflected in the magnitude of DAC that is negatively related to the percentage of outside directors on the board as reported in Table 8.2 This result is consistent with that found by Klein (2002b), Xie *et al*. (2003), Peasnell *et al*. (2005), Davidson *et al*. (2005), Benkel *et al*. (2006), and Dimitropoulos and Asteriou (2010) where outside directors were found to be negatively related to earnings management.

Interestingly, no firms exist which have fewer than four board members. Table 8.2 (See page 198) shows that the average board size consists of about eight members (mean = 8.22). In comparison, board size in Saudi Arabia seems to be larger than that in Malaysian firms (e.g., mean size of about five reported by Abdul Rahaman and Ali, 2006) but is slightly smaller than firms in the UK and US where boards consist of about 9 and 11 respectively Bhagat and Black, 2002; Habbash, 2010). These findings also confirm that Saudi companies comply with recommendations of the code of corporate governance that state that each company should specify the number of members on the board of directors, provided that that number is not less than three and not more than eleven. As indicated in Table 8.2, firms with low discretionary accruals display higher means of board size than firms with a high level of discretionary accruals. The majority of the previous studies such as Peasnell *et al*., (2000a); Bedard *et al*.,(2004); Xie *et al*., (2003); Yu, (2008) argue that larger boards are strongly associated with lower levels of earnings management.

In relation to another characteristic, Saudi companies have recently announced the number of board meetings in the proxy statement, and the current study uses this as a measure of board activity. As indicated in Table 8.2, the average number of board meetings is about four (mean = 4.5). Board meetings in Saudi Arabia appear to be less frequent than board meetings in US firms e.g., mean meeting of about seven according to Uzun *et al* (2004) and more than six in

Malaysian firms according to Rahaman and Ali, (2006). The results shown in Table 8.2 reveal that discretionary accruals are not significantly associated with board meetings.

Even though the Saudi corporate governance Code prohibits combining the position of the chairman of the board of directors with any other executive position in the company, approximately, 76% of Saudi companies separate the position of the chairman of the board of directors from CEO function as opposed to only 34% of companies which have duality. However, the univariate analysis does not reveal any significant relationship between non-duality and DAC.

Interestingly, the study sample implies that the Saudi royal family dominates approximately 45.9% of boards of directors in Saudi firms. This result is not surprising since they originally held political positions or traded in investment. However, contrary to this study's hypothesis, the results show that there is a positive relationship between the existence of royal family members on the board and earnings management. This result is inconsistent with previous expectations which assumed that royal family members might have mitigated earnings management. As indicated in Table 8.2, in the low EM the percentage of royal family is about 40%, increasing to 49% in high EM. A potential justification may be that most royal family members are insider owners and the majority of previous research highlights a positive association between insider ownership and earnings management (Habbash, 2010).

8.3.1.3 Remuneration & nomination committee compositions

According to Table 8.2 (See page 198), Saudi listed companies have gradually established that remuneration & nomination committees were not a mandatory regulation. Even though this research finds a high commitment by formation of these committees (a mean of 0.87), it finds no support for the hypothesis that the existence of these committees reduces the level of earnings management. It has been found that there is negative relationship between the independence of the remuneration & nomination committee and the level of earnings management.

8.3.1.4 Ownership structure for the first model.

In relation to ownership structures, the study sample shows that Saudi listed companies have a mean managerial ownership of 17.9%, a mean institutional ownership of 14.3%, a mean family ownership of 13.2%, and a mean state-ownership of 8.8%, with 67.4% of the research sample obtaining at least one external blockholder whose stake exceeds 10%.

Contrary to this study's hypothesis, managerial ownership and family ownership are slightly higher in the high earnings management group, with significant difference as indicated in Table 8.2. These findings are consistent with previous research such as Peasnell *et al*. (2005), and Bergstresser and Philippon (2006) who present evidence that the use of DAC is more pronounced in firms with a high managerial ownership, more specifically where the CEO's potential total compensation is closely tied to the value of stock and option holdings. In terms of family ownership, and according to a second view suggested by Jaggi *et al*. (2009), in countries that have weak investor protection, earnings management is higher where family ownership concentration is higher.

However, consistent with previous assumptions, blockholder ownership is slightly higher in the low earnings management group, but no significant difference is reported. This result is consistent with Zhong *et al*. (2007) who suggest that large blockholders mainly adopt a long-term strategy and, hence, they need to control managers to obtain more advantages from their equity ownership. In terms of state-ownership and institutional ownership, they are slightly higher in the high earnings management group, but no significant difference is also reported. Yen *et al*., (2007) argue that companies with state-ownership have a tendency to manage earnings.

Table (8.2) Pooled Descriptive Statistics and Univariate Test for First Model															
Full Sample								Low EM		High EM		T-test		Mann Whitney test	
Variables	Mean	Min	Max	Median	Standard Deviation	Skewness	Kurtosis	Mean	Standard Deviation	Mean	Standard Deviation	t-value	Prob.	z-value	Prob.
DAC	0.103	0.000	0.782	0.062	0.140	2.958	13.399	0.021	0.020	0.186	0.159	14.140	***	16.966	***
OUTSIDE	0.669	0.450	0.791	0.771	0.471	-0.717	1.513	0.714	0.453	0.634	0.483	-1.578	*	-1.562	*
BRDSIZE	8.213	4.000	12.000	8.000	1.730	2.958	2.649	8.510	1.749	7.984	1.684	-2.785	***	-2.554	***
BRDMEET	4.533	2.000	9.000	4.000	1.826	0.246	3.127	4.544	1.848	4.524	1.815	-0.103		-0.295	
RFAMILY	0.459	0.000	1.000	0.000	0.499	0.166	1.028	0.408	0.493	0.497	0.501	1.637	**	1.630	*
Non-DUAL	0.766	0.000	1.000	1.000	0.424	-1.258	2.584	0.769	0.423	0.764	0.425	-0.093		-0.093	
RNEXIST	0.870	0.000	1.000	1.000	0.337	-2.198	5.831	0.871	0.337	0.869	0.338	-0.044		-0.044	
RNIDP	0.397	0.000	1.000	0.000	0.490	0.423	1.179	0.443	0.498	0.358	0.481	-1.613	*	-1.614	*
FAMOWN	0.132	0.000	0.950	0.080	0.210	1.802	5.687	0.110	0.194	0.149	0.220	1.710	*	1.481	
INSTOWN	0.143	0.000	0.750	0.110	0.198	1.276	3.443	0.141	0.202	0.145	0.196	0.213		0.242	
STATEOWN	0.088	0.000	0.830	0.070	0.187	2.546	8.774	0.083	0.202	0.096	0.174	0.621		0.789	
MANGOWN	0.179	0.000	0.890	0.079	0.211	1.512	4.594	0.154	0.190	0.198	0.225	1.932	**	1.834	*
BLOCKOWN	0.674	0.000	1.000	1.000	0.419	-1.307	2.708	0.712	0.392	0.643	0.438	-1.521		-1.498	
BIG4	0.608	0.000	1.000	1.000	0.489	-0.441	1.195	0.628	0.494	0.582	0.486	0.485		0.485	
LEVG	0.087	0.000	0.596	0.019	0.138	1.869	5.772	0.088	0.144	0.087	0.133	-0.023		1.054	
ROA	0.069	-0.137	0.299	0.058	0.087	0.482	3.433	0.056	0.082	0.081	0.091	2.815	***	3.139	***
CFO	0.086	-0.199	0.361	0.067	0.105	0.329	3.243	0.066	0.085	0.105	0.118	3.655	***	4.076	***
SIZE	9.239	7.869	11.473	9.186	0.709	0.677	3.486	9.335	0.736	9.153	0.673	-2.459	**	-2.201	**
COMPLEX	0.443	0.000	1.000	0.000	0.497	0.231	1.053	0.415	0.494	0.471	0.500	1.117		1.117	

8.3.2 Descriptive Statistics and Univariate Analyses for the Second Model

8.3.2.1 Discretionary accruals

Table 8.3 (See page 203) shows general descriptive statistic concerning second model variables. As is seen from the figures, the magnitude of value of DAC has approximately the value of 0.10, while the minimum value reaches (0). The findings are consistent with Kao and Chen (2004) who found that DAC has an approximate value of 0.10. However, Klien (2002) found that the mean of absolute DAC is higher than 0.11 for US companies compared to the findings of Othman and Zeghal (2006) that DAC is closer to 0.06 and 0.03 among Canadian and French companies respectively. In devolving countries such as Malaysia, Abdul Rahman and Ali (2006) found that the value of DAC of companies has a small mean value of 0.04

8.3.2.2 Audit committee characteristics

Table 8.3 (See page 203) provides the descriptive statistics of variables relative to audit committee characteristics. On average, 89.9% of audit committee members are outside directors and audit committee members hold approximately three meetings a year; that is smaller than the US firms of 4.53 documented by Xie *et al* (2003) and larger than Malaysian firms (2.8) reported by Iskandar and Saleh, (2009). Whereas audit committee size averages 3.1 which is similar to the UK firms which average 3.58 and Malaysian firm which average 3, as reported by Habbash (2010); Iskandar and Saleh, (2009), and 66.9% of Saudi firms have an audit committee possessing at least one financial expertise.

As expected, audit committee size and the existence of financial expertise are related to low levels of discretionary accruals. These results are significant in univariate tests and consistent with prior findings by Yang and Krishnan (2005), who report that audit committee size is negatively associated with earnings management. Moreover, Bedard *et al.* (2004) report that aggressive earnings management is negatively related to financial expertise of audit committee members.

However, contrary to this study's hypothesis, no significant relation has been detected in univariate tests with regard to audit committee meetings and the percentage of outside directors. Interestingly, the number of audit committee meetings is larger in the low earnings management level group than in the other group while, high percentage of outside directors is associated with high earnings management.

8.3.2.3 External audit factors

Table 8.3 (See page 203) also presents a summary of the descriptive statistics in terms of audit quality factors. It shows that 60.8% of the sample firms deal with BIG4 audit firms as opposed to only 38.2% which deal with non-BIG4 public accounting firms as their auditors. While no significant difference is found, the percentage of BIG4 is slightly higher in the low earnings management group. This is consistent with the interview survey which concluded that audit quality faces a hard time since many factors such as monopoly of audit services in some audit firms and illegal competition between audit firms are rather effective.

In the second model, Table 8.3 (See page 203) indicates that only 36.6% of the sample firms dealing with a specialised auditor measured by market share and SPEAUD means do not differ significantly regarding earnings management level.

In terms of the type of auditor report, Table 8.3 (See page 203) also shows that only 84.7% of the sample firms have a clear opinion (unqualified report) as opposed to only 15.3.% of companies with a qualified report. AUDOPIN variable shows a significant negative relationship with earnings management. Moreover, the study sample indicates that 23.3% of Saudi firms change their audit firms as opposed to only 76.7% of companies which keep the same audit firm for a long time. With no significant indicator, the percentage of change in auditor is higher in low earnings management. On average, Saudi companies take approximately 42 days to issue their report audit after the end of the fiscal year, which is shorter than Malaysian listed companies that need, on average, 116 days according to Che-Ahmad and Abidin (2008). This duration does not give any indication to the relationship with earnings management.

8.3.2.4 Ownership structure

As indicated in Table 8.3 (See page 203), this study also includes ownership concentration as control variables in the second model. The study sample shows that Saudi listed companies have a mean managerial ownership of 17.9%, a mean institutional ownership of 14.3%, a mean family ownership of 13.2% and a mean state-ownership of 8.8%, with 67.4% of the research sample obtaining at least one external blockholder whose stake exceeds 10%.

Contrary to this study's hypothesis, managerial ownership and family ownership are slightly higher in the high earnings management group, with a significant difference as indicated in Table 8.3. A possible explanation is presented by Chen *et al*. (2006) who suggest that agency problems might exist not only between owners and management but also between the controlling ownership group and other stockholders. These findings are consistent with previous research such as Peasnell *et al*. (2005), and Bergstresser and Philippon (2006) who present evidence that the use of DAC is more pronounced in firms with a high managerial ownership, more specifically where the CEO's potential total compensation is closely tied to the value of stock and option holdings. In terms of family ownership, and according to a second view suggested by Jaggi *et al*., (2009), in countries that have a weak investor protection, earnings management is higher where family ownership concentration is higher.

However, consistent with previous assumptions, blockholder ownership is slightly higher in the low earnings management group, but no significant difference is reported. This result is consistent with Zhong *et al*. (2007) who suggest that large blockholders mainly adopt a long-term strategy and, hence, they need to control managers to obtain more advantages from their equity ownership. Moreover, state-ownership is slightly higher in the high earnings management group, but no significant difference is reported. Overall, the results of the effect of ownership structure for the two models obtained from descriptive statistics and univariate analysis are similar.

In summary, the previous sections discuss the descriptive statistics and univariate analysis for the second models. The univariate analysis shows only negatively significant relationship between audit committee size and financial expertise and earnings management. As with the first model, family and managerial ownership are significantly associated with earnings management. However, blockholders are found to be negatively associated with earnings management but insignificant. The following section will discuss the control variables for both models.

8.3.3 Control Variables for Both Models:

In this section, the current study discusses the control variables for the two models. Like prior studies, the current study controls for the influence of potential confounding factors (Bartove *et al*., 2000) by comprising variables in the two models that have been found to be associated with earnings management. As is shown in both table 8.2 and 8.3, among the control variables, only ROA, CFO, and size are found to be significantly related to DAC. The average ROA is 6.9%, with a maximum of 29.9% and a minimum of -13.7%, while the average CFO is 8.6% with maximum of 36.1% and minimum of -19.9%. Moreover, the average size is 9.23% with a maximum of 11.4% and a minimum of 7.8%. In terms of audit firm and complexity, more than half of Saudi companies are audited by Big 4 audit firms and the percentage of study samples that have subsidiaries is 44.3%.

In comparison, with regard to ROA and CFO, the univariate analysis regression in Tables 8.2 and 8.3 (See page 198 and 203) show a positive relation between ROA, CFO and earnings management. This is not surprising since Abdul Rahman and Ali, (2006) obtained the same results in Malaysia, concluding that ROA and CFO have more incentive to engage earnings management. Bukit and Iskander (2009) found that there is positive relationship between surplus cash flow and earnings management. In terms of firm size, a number of studies such as Becker *et al*. (1998) suggest that large firms have less motivation to manage earnings since they are subjected to more monitoring by investors and financial analyst.

Moreover, the average leverage of sample firms is 8.8%, with a maximum of 59% and a minimum of 0%, with no significant difference found. However, firms with high slightly discretionary accruals appear to have high leverage. Finally, as indicated in Table 8.2, with no significant difference, the study sample shows that firms with a high percentage of subsidiary seem to engage in earnings management.

In conclusion, this section outlines the descriptive statistics and univariate analyses for both models that aim to show the effect of corporate governance, audit quality factors, and ownership structure on earnings management. Since the control variables for the two models have the same descriptive statistic, they have been discussed together in this section. Univariate analysis indicates that some characteristics of boards of directors, such as outside directors, and board size are significantly and negatively associated with earnings management. Also, audit committee size and financial expertise are negatively associated with earnings management. Surprisingly, the existence of royal family members on boards is positively related to earnings management. Moreover, family and managerial ownership are found to be significantly positive regarding earnings management. Among audit quality factors, only auditor opinion is found to be negatively associated with earnings management. .

Table (8.3) Pooled Descriptive Statistics and Univariate Test for Second Model

	Full Sample							Low EM		High EM		T-test		Mann Whitney test	
Variables	Mean	Min	Max	Median	Standard Deviation	Skewness	Kurtosis	Mean	Standard Deviation	Mean	Standard Deviation	t-value	Prob.	z-value	Prob.
DAC	0.10	0.000	0.782	0.062	0.140	2.958	13.399	0.021	0.020	0.186	0.159	14.140	***	16.966	***
ACINDEP	0.899	0.441	1.000	1.000	0.301	-2.656	8.053	0.898	0.304	0.901	0.300	0.077		-0.078	
ACSIZE	3.121	2.000	6.000	3.000	0.751	-0.286	6.570	3.238	0.686	3.031	0.787	-2.574	***	-2.229	**
ACMEET	3.251	0.000	13.000	3.000	2.173	0.664	3.918	3.320	2.218	3.199	2.143	-0.504		-0.327	
ACEXPERT	0.669	0.000	1.000	1.000	0.471	-0.717	1.513	0.721	0.450	0.628	0.485	-1.818	*	-1.795	*
BIG4	0.608	0.000	1.000	1.000	0.489	-0.441	1.195	0.628	0.494	0.582	0.486	-0.655		-0.657	
AUDSPEC	0.366	0.000	1.000	0.000	0.482	0.557	1.311	0.371	0.479	0.357	0.486	-0.485		-0.485	
AUDOPIN	0.847	0.000	1.000	1.000	0.361	-1.924	4.700	0.885	0.320	0.817	0.388	-1.778	*	-1.730	*
TIMELINESS	1.578	0.778	2.255	1.653	0.227	-0.688	4.226	1.572	0.228	1.583	0.226	0.421		0.858	
AUDSWITCH	0.233	0.000	1.000	0.000	0.423	1.263	2.595	0.243	0.430	0.225	0.419	-0.389		-0.391	
OUTSIDE	0.669	0.450	0.791	0.771	0.471	-0.717	1.513	0.714	0.453	0.634	0.483	-1.578	*	-1.562	*
FAMOWN	0.132	0.000	0.950	0.080	0.210	1.802	5.687	0.110	0.194	0.149	0.220	1.710		1.481	
INSTOWN	0.143	0.000	0.750	0. 110	0.198	1.276	3.443	0.141	0.202	0.145	0.196	0.213		0.242	
MANGOWN	0.179	0.000	0.890	0.079	0.211	1.512	4.594	0.154	0.190	0.198	0.225	1.932	**	1.834	*
STATEOWN	0.088	0.000	0.830	0.070	0.187	2.546	8.774	0.083	0.202	0.096	0.174	0.621		0.789	
BLOCKOWN	0.774	0.000	1.000	1.000	0.419	-1.307	2.708	0.712	0.392	0.643	0.438	-1.521		-1.498	
LEVG	0.087	0.000	0.596	0.019	0.138	1.869	5.772	0.088	0.144	0.087	0.133	-0.023		1.054	
ROA	0.069	-0.137	0.299	0.058	0.087	0.482	3.433	0.056	0.082	0.081	0.091	2.815	***	3.139	***
CFO	0.086	-0.199	0.361	0.067	0.105	0.329	3.243	0.066	0.085	0.105	0.118	3.655	***	4.076	***
SIZE	9.239	7.869	11.473	9.186	0.709	0.677	3.486	9.335	0.736	9.153	0.673	-2.459	**	-2.201	**
COMPLEX	0.443	0.000	1.000	0.000	0.497	0.231	1.053	0.415	0.494	0.471	0.500	1.117		1.117	

8.4 CORRELATION MATRIX

This section illustrates the correlation between variables of corporate governance, the external audit, and control variables by using the Pearson and Spearman tests (See Tables 8.4 in page 205 and 8.5 in page 207) for Pearson and appendix pages 294 and 295 for Spearman). A correlation coefficient analysis is important in order to test the relationship between dependent and independent variables (Rahman and Ali, 2006). Tables 8.4 and 8.5 present the correlation coefficients that are checked for the presence of high collinearity for the two models. Following prior studies, this section aims to provide information concerning collinearity among variables in empirical models.

8.4.1 First Model Correlation Coefficients

As indicated in Table 8.4 (See page 205), discretionary accruals (DAC) of modified Jones models are negatively correlated with outside directors, board size However, discretionary accruals (DAC) of modified Jones models are positively correlated with ROA, CFO. The Pearson correlations in Table 8.4 also indicate a significant association between cash flow (CFO) and return on assets (ROA) that constitute 0.64. Additionally, there is correlation between size and state-owned variables at a level of 0.50. Overall, collinearity does not seem to cause concern regarding the interpretation of regression coefficients of the independent variables in this model since this correlation, was anticipated, as reported by previous studies, such as that of Rahman and Ali (2006) who found higher collinearity (67%) but considered this collinearity to be harmless.

In conclusion, the correlations matrix in Table 8.4 shows that there is no multicollinearity because none of the variables correlates above 0.8 or 0.9. A number of previous studies such as Hair *et al*. (1995); Gujarati (2003) and Abdul Rahman (2006) suggest 0.8 as the beginning at which multicollinearity concerns may harm the regression analysis. Furthermore, Variance Inflation Factor (VIF) tests were conducted and these are illustrated in Table 8.6**,** which shows that there is no variance inflation greater than 10, confirming that collinearity is not an issue in this research.

Table (8.4) Pearson correlations coefficients for First Model

* denote significance at the 0.05 level

	DAC	OUTSIDE	BRDSIZE	BRDMEET	RFAMILY	DUAL	RNEXIST	RNIDP	FAMOWN	INSTOWN	STATEOWN	MANGOWN	BLOCKOWN	BIG4	LEVG	ROA	CFO	SIZE	COMPLE
DAC	1.000																		
OUTSIDE	-0.1438*	1.000																	
BRDSIZE	-0.2060*	0.1559*	1.000																
BRDMEET	-0.103	0.2573*	0.1509*	1.000															
RFAMILY	0.113*	0.042	-0.052	-0.070	1.000														
DUAL	-0.042	0.2944*	-0.1545*	0.012	-0.011	1.000													
RNEXIST	-0.039	-0.011	0.058	-0.099	0.056	-0.068	1.000												
RNIDP	-0.071	-0.2036*	0.1083*	-0.2382*	-0.014	-0.3414*	0.1687*	1.000											
FAMOWN	0.090	-0.045	-0.032	-0.067	0.064	-0.1624*	0.1320*	0.090	1.000										
INSTOWN	0.036	-0.107	0.020	-0.095	-0.087	-0.075	0.083	0.2267*	0.2239*	1.000									
STATEOWN	0.058	0.2486*	0.088	0.4215*	0.1122*	0.1883*	-0.2841*	-0.2441*	-0.2170*	-0.2560*	1.000								
MANGOWN	0.097	-0.089	-0.018	-0.030	0.047	-0.1635*	0.1526*	0.1189*	0.2668*	0.1340*	-0.096	1.000							
BLOCKOWN	-0.043	-0.033	0.1485*	-0.049	-0.059	-0.1635*	0.1075*	0.1839*	0.2720*	0.3899*	-0.3539*	0.2432*	1.000						
BIG4	-0.054	0.1406*	0.2080*	0.1389*	0.1457*	-0.016	0.012	0.068	0.1832*	0.2478*	0.1297*	0.1707*	0.2055*	1.000					
LEVG	-0.045	0.1155*	0.040	0.066	-0.065	0.077	-0.002	0.023	-0.004	0.2100*	0.063	-0.035	0.1540*	0.2351*	1.000				
ROA	0.1475*	0.084	0.060	0.089	0.2448*	-0.1119*	0.1887*	0.1283*	0.1308*	0.054	0.1293*	0.2234*	0.008	0.078	-0.1255*	1.000			
CFO	0.2107*	0.026	0.015	0.055	0.1794*	-0.1100*	0.096	0.1453*	0.089	0.015	0.2203*	0.1324*	-0.103	0.010	-0.067	0.6436*	1.000		
SIZE	-0.1072*	0.2597*	0.3534*	0.3095*	0.098	0.053	-0.106	-0.013	0.070	0.1871*	0.5000*	-0.058	0.1342*	0.3975*	0.4927*	0.004	0.059	1.000	
COMPLEX	0.037	-0.042	0.052	0.011	0.1319*	0.002	0.065	0.087	0.1713*	0.078	-0.011	0.1442*	0.074	0.2346*	0.1309*	0.091	-0.045	0.1333*	1.000

8.4.2 Second Model Correlation Coefficients

As illustrated in Table 8.5 (See page 207), audit committee size, financial expertise are negatively correlated to discretionary accruals (DAC) measured by modified Jones. However, ROA and CFO are positively related to discretionary accruals (DAC). In addition, it is obvious that there is no harmful correlation between the independent variables in the second model. As indicated, collinearity does not seem to cause concern in the interpretation of regression coefficients of the independent variables in the second model. The Pearson correlations in Table 8.5 show significant association between cash flow (CFO) and return on assets (ROA) that constitutes 0.64. Additionally, there is also positive correlation between size and state-owned variables at a level of 0.50.

Multicollinearity occurs when one or more independent variable are related to one another. Statistically, the correlation matrix in Table 8.5 indicates that no harmful multicollinearity is concerned because none of the variables correlate above 0.8 or 0.9. A more recent instance in which evidence of earnings management studies have been found is that of Gujarati (2003); Abdul Rahman and Ali (2006) who suggest 0.8 as the beginning at which multicollinearity concerns may harm the regression analysis.

Table 8.6 (See page 208) indicates that VIF for all variables are below 10, showing that multicollinearity is not a serious problem. The mean of VIF for each model is 1.59 and 1.60 respectively. Gujarati (2003); Abdul Rahman and Ali, (2006) confirm that there is no concern with a variance inflation factor less than 10. Therefore, multicollinearity does not constitute an issue in either of the two models.

Table (8.5) Pearson correlations coefficients for second model

* denote significance at the 0.05 level

	DAC	ACINDEP	ACSIZS	ACMEET	ACEXPERT	BIG4	AUDSPEC	AUDOPIN	REPTIME	AUDSWITCH	BRDINDP	FAMOWN	INSTOWN	MANGOWN	STATEOWN	BLOCKOWN	LEVG	ROA	CFO	SIZE	complex
DAC		**-.051**																			
ACINDEP	-0.055		.039																		
ACSIZE	-0.1313*	0.041																			
ACMEET	-0.100	0.1203*	0.2958*																		
ACEXPERT	-0.1212*	0.3288*	0.3318*	0.3423*																	
BIG4	-0.054	0.033	0.1868*	0.1101*	0.1406*																
AUDSPEC	-0.060	-0.072	-0.025	0.042	0.027	0.5726*															
AUDOPIN	-0.091	0.021	0.2002*	0.1212*	0.1179*	-0.007	-0.051														
REPTIME	0.052	0.012	-0.063	-0.034	-0.066	0.076	-0.049	-0.2299*													
AUDSWITCH	-0.051	0.069	-0.052	-0.022	0.032	-0.1573*	-0.1434*	0.022	0.007												
BRDINDP	-0.1438*	0.078	0.2564*	0.1945*	0.3457*	0.1406*	0.040	0.031	0.005	0.018											
FAMOWN	0.090	-0.030	0.041	0.028	-0.051	0.1832*	0.103	-0.023	0.086	-0.1404*	-0.045										
INSTOWN	0.036	-0.033	-0.020	-0.1284*	-0.066	0.2478*	0.1918*	0.1624*	0.058	-0.106	-0.107	0.2239*									
MANGOWN	0.097	-0.081	-0.082	0.005	-0.042	0.1707*	0.091	0.064	0.089	-0.099	-0.089	0.2668*	0.1340*								
STATEOWN	0.058	0.048	0.1161*	0.2267*	0.2139*	0.1297*	0.088	0.1455*	0.064	0.001	0.2486*	-0.2170*	-0.2560*	-0.096							
BLOCKOWN	-0.043	-0.086	0.1344*	-0.085	0.012	0.2055*	0.1292*	0.1637*	-0.023	-0.105	-0.033	0.2720*	0.3899*	0.2432*	-0.3539*						
LEVG	-0.045	0.083	0.076	-0.030	0.2124*	0.2351*	0.2273*	0.091	-0.1771*	0.001	0.1155*	-0.004	0.2100*	-0.035	0.063	0.1540*					
ROA	0.1475*	-0.027	0.059	0.007	-0.041	0.078	-0.046	0.2203*	-0.097	-0.092	0.084	0.1308*	0.054	0.2234*	0.1293*	0.008	-0.1255*				
CFO	0.2107*	-0.070	0.022	0.049	-0.055	0.010	-0.090	0.1494*	-0.053	-0.012	0.026	0.089	0.015	0.1324*	0.2203*	-0.103	-0.067	0.6436*			
SIZE	-0.1072*	0.042	0.3340*	0.1626*	0.2947*	0.3975*	0.3503*	0.1808*	-0.006	-0.064	0.2597*	0.070	0.1871*	-0.058	0.5000*	0.1342*	0.4927*	0.004	0.059		
COMPLEX	0.037	0.059	0.077	-0.005	0.072	0.2346*	0.035	-0.010	0.1900*	-0.099	-0.042	0.1713*	0.078	0.1442*	-0.011	0.074	0.1309*	0.091	-0.045	0.1333*	

Table (8.6) VIF Test Results

First Model				Second Model		
Variable	VIF	1/VIF		Variable	VIF	1/VIF
SIZE	3.110	0.322		SIZE	3.010	0.332
STATEOWN	2.710	0.370		STATEOWN	2.400	0.416
ROA	1.980	0.504		ROA	1.980	0.504
CFO	1.890	0.529		BIG4	1.910	0.523
LEVG	1.620	0.619		CFO	1.900	0.527
BLOCKOWN	1.570	0.638		LEVG	1.740	0.575
INSTOWN	1.460	0.686		AUDSPEC	1.740	0.576
BRDMEET	1.400	0.716		BLOCKOWN	1.600	0.625
BIG4	1.390	0.717		ACEXPERT	1.540	0.648
BRDSIZE	1.370	0.731		INSTOWN	1.480	0.676
RNIDP	1.360	0.735		ACSIZE	1.460	0.683
DUAL	1.350	0.741		AUDOPIN	1.310	0.762
BRDINDP	1.310	0.764		FAMOWN	1.300	0.771
FAMOWN	1.300	0.770		ACMEET	1.280	0.783
MANGOWN	1.250	0.802		BRDINDP	1.280	0.783
RFAMILY	1.200	0.830		MANGOWN	1.260	0.792
RNEXIST	1.190	0.841		REPTIME	1.250	0.798
COMPLEX	1.150	0.866		COMPLEX	1.230	0.814
				ACINDEP	1.180	0.849
				AUDSWITCH	1.080	0.930
Mean VIF	1.590			Mean VIF	1.600	

8.5 MULTIVARIATE ANALYSES (HYPOTHESES TESTS)

The previous section discussed the results highlighting descriptive statistic and univariate analysis. This section attempts to discuss an appropriate regression analysis and justifications for selecting relevant methods for testing. It commences with an analysis of the first model, followed by the findings for the second model. The findings related to control variables for both models will be discussed together because they indicate similar findings.

8.5.1 Relevant Method for Regression

This research employs regression analysis, which is considered the most common technique of multivariate analysis, in order to test the study's hypotheses by examining the effect of multi variables on earnings management as a dependent variable. Multiple regression is an appropriate approach in this research as well as ordinary least squares (OLS) regression subjected to many conditions, which is both a relevant and powerful technique, particularly when the model includes both dummy and continuous variables (Hutchinson and Sofroniou, 1999).

In relation to standard skewness and kurtosis and as indicated in Tables 8.2 and 8.3 (See page 198 and 203), data is not normally distributed. This is due that fact that the value of both skewness and kurtosis for some variables indicates high values. Previous studies such as Abdul Rahman and Ali, (2006) suggest that data can be normally distributed if standard skewness is within ±1.96 and standard kurtosis is ± 2 or ± 3 according to Haniffa and Hudib, (2006). Since most variables exceed the range of ± 2, relevant methods are used and some of the variables are still not normally distributed.

Moreover, prior research uses the Hausman (1978) specification test, to check for strict exogeneity, as a helpful means of selecting between random effect and fixed effect. In statistics, a fixed effects model is a statistical model that represents the observed quantities in terms of explanatory variables that are dealt as if the quantities were non-random however, random effects models in which either all or some of the explanatory variables are dealt as if they arise from the random causes. The result of the Hausman test shows insignificant finding as Chi-2 result is higher than 5% for both models which led the current study to use random effect. Although the parametric test, is a powerful method, requiring rigorous assumptions such as normality and homogeneity (Balian, 1982), a non-parametric test does not require the previous conditions, following the free-distribution method, and does not require the measurement of data.

on an interval scale (Zhang and Liu, 2009). According to the previous discussion, non-parametric statistical techniques should be applied as an alternative to parametric techniques, since some assumptions such as normality were not fulfilled (see page 136).

In summary, a multiple regression analysis is used to gauge the explanatory power on independent variables against dependent variable (DAC). Additionally, study data is not normally distributed, thus a non-parametric test is used to analyse the data as well as employing GLS instead of OLS regression adopted as a multivariate test technique. Moreover, Cross-

Sectional Panel Data is applied for main findings; however, Pooled Data is used as sensitivity analysis.

8.5.2 Findings and Discussion of the First Model

The first model aims to examine the relationship between board of directors' characteristics and ownership structure as independent variables with earnings management. Hence, GLS regression of discretionary accruals on board characteristics and ownership structure is presented in Table 8.7. Based on the statistical analysis shown in the same table, the adjusted R^2 value for the model is 14.48%. In comparison, Abdul Rahman and Ali, (2006) find the adjusted R^2 value for the model is 12.8 per cent and suggest that the low value of the adjusted R^2 for the model might be referred to the variation in the level of earnings management. Likewise, Iskandar and Saleh (2009) suggest that the low value of R^2 is common in studies examining corporate governance characteristics. The constant is negative and highly significant at $p<0.005$. Stepwise, also presented in the following section, is a procedure for statistical model selection.

8.5.2.1 Stepwise regression test for the first model

Even though the use of stepwise regression has been criticised by many scholars due to some problems such as incorrect degrees of freedom (Whitaker, 1997), it is still used to reveal the reliability of a model via the strength of R^2 in order to reach the appropriate model (Berenson *et al.*, 2009). Generally, the current study uses stepwise forward regression, commonly employed (Gujarati and Porter, 2009) to determine the appropriate model by eliminating variables conceived to downsize the value of R^2. As a whole, the results of stepwise regression do not support the exclusion of any variables in the first model since all variables contributed to increase the value of R^2. (See pages 292 and 293).

8.5.2.2 Board of directors' characteristics

8.5.2.2.1 Outside directors (OUTSIDE)

Agency theory expects that the presence of independent members on boards of directors will enhance boards' ability to monitor management (Young, 2008). In contrast to that, institutional theory expects these mechanisms as practices or regulations as a result of coercion from legislators who impose certain practices in order to improve organizational effectiveness or as a result of imitation. This study hypothesizes that there is a negative relationship between the proportion of outside directors on the board and earnings management. The findings support this assumption and the result obtained from the first model in Table 8.7 (See page 217) shows that there is a negative and significant association (coefficient = -0.029 and p> 0.10) between the proportion of outside directors on the board and the indicator of earnings management. Generally, this finding is consistent with that of Klein (2002), Xie *et al*. (2003), Peasnell *et al*. (2005), Davidson *et al*. (2005), Benkel *et al*. (2006), and Dimitropoulos and Asteriou (2010) in which outside directors are shown to be negatively related to earnings management.

However, the former finding is different from that of many studies carried out, notably in Asia, such as Malaysia (Abdul Rahman and Ali, 2006), Indonesia (Siregar and Utama, 2008) and Hong Kong (Jaggi *et al*., 2009), where no significant relationship was detected between outside directors and earnings management. In Saudi Arabia, perhaps the high percentage of compliance that reaches 0.66% outside directors on the board justifies the association compared to Abdul Rahman and Ali, *et al*., 2006) who found that only 0.38 % of the board were outside directors. Moreover, the culture and corporate governance practices are different dimensions that may distinguish the Saudi Arabian environment from that of the aforementioned countries. On top of that, the finding is consistent with agency theory projection that the presence of independent members on boards of directors will enhance the board's ability to monitor management

8.5.2.2.2 Board size (BRDSIZE)

Board size is considered another effective factor in board characteristics that may have an influence on earnings management. This research shows that board size is significantly and negatively associated with earnings management (coefficient =-0.012 and p<.0.05). This finding is consistent with the idea that larger boards are more effective in controlling the aggressive actions of top management (Zahra and Pearce, 1989). This result is also supported by prior studies such as Peasnell *et al*. (2005), Chtourou *et al*. (2001), Xie *et al*. (2003) and Yu (2008) which suggest that board size is strongly and negatively related to lower levels of earnings management.

On the other hand, numerous studies carried out on Asian markets such as Taiwan, Malaysia, and Indonesia conclude a significant positive relationship between board size and level of earnings management. For example Abdul Rahman and Ali, (2006) and Kao and Chen (2004) found that board size is positively associated with earnings management. Although Saudi Arabia is comparable to these countries as developing countries, the Saudi board does not necessarily have the same characteristics as the Asian market due to of a number of factors such as the differences in culture and corporate governance practice as well as having different political and economic aims. Moreover, Saudi board size seems to larger than Asian boards that make it to be more active and diligent.

8.5.2.2.3 Board meetings (BRDMEET)

The number of board meetings is an indication of the board's activity in urgent business or notable circumstances that make management feel shareholders are there. Generally, few studies pay heed to board meetings as a key characteristic of the board of directors. For example, Xie *et al*. (2003) and Sarkar *et al*. (2006) confirm that frequency of board meetings is associated with reduced levels of earnings management. Consistent with this study's assumption, the coefficient of board meetings are significant and negatively related to earnings management as reported in Table 8.7 (coefficient = -0.010 and $p<0.05$) (See page 217). Although the average number of board meetings, of about 4.5 times, with a minimum 2, and maximum 9, represents low activity compared to previous studies, it might be adequate to monitor needs in Saudi Arabia.

8.5.2.2.4 Royal family members (RFAMILY)

The current study assumes that the proportion of royal family members on the board is negatively associated with the level of earnings management. Inconsistent with this study's assumption, the coefficients of this relation are significant and positive (coefficient = 0.018 and $p<.0.05$). A plausible justification of this result is that most royal family members might be insider owners and the majority of previous research highlights a positive association between insider ownership and earnings management (Habbash, 2010). This finding is not consistent with agency theory which expects that managerial ownership may reduce agency cost.

8.5.2.2.5 Non-duality (*Non-DUAL*)

Concerning the separation between the role of CEO and chairperson, there is a negative relationship between non-duality and the level of earnings management, but it is not significant thus rejects *H5*. This finding is inconsistent with previous research such as Sarkar *et al*. (2006) who found that earnings management is higher when the chair of the board also holds the CEO position, but is consistent with results obtained by Abdul Rahman and Ali, (2006)' that could not detect a relationship.

8.5.2.2.6 Existence of a remuneration and nomination committee

Inconsistent with hypothesis 6, there is no significant relationship between earnings management and the existence of a remuneration and nomination committee (coefficient= -0.011 and p> 0.10). A possible explanation may be that this committee is new in Saudi Arabia and it needs more time to become effective. Prior studies such as Xie *et al.* (2003) found that compensation committees may affect the market's perception of golden parachute adoption. Also, concerns increased in particular when CEOs or executives served on remuneration committees as this led to agency problems between management and shareholders (Anderson and Bizjak, 2003).

8.5.2.2.7 Remuneration and nomination committee independence

As discussed earlier, concerns increase in particular when the CEO or executives serve on nomination and remuneration committees as this leads to agency problems between management and shareholders (Anderson and Bizjak, 2003). Regarding remuneration and nomination committee independence, there is a significant and negative relationship between the independence of a nomination and remuneration committee and the level of earnings management (coefficient = -0.041 and p<0.05). These findings also reinforce theoretical arguments in previous research that remuneration and nomination committees can play a key role in enhancing board members' independence and mitigating the influence of management (Jensen, 1993; Xie *et al*. (2003); Dahya and McConnell, (2007).

However, this finding is inconsistent with that of Klein (2002) that concluded that there is no relationship between the presence of the CEO on the nomination committee and the incidence of earnings management. The dissimilarity between the result of the current study and Klein (2002b) may be due to the fact that Saudi Arabia's regulations integrate the role of the remuneration and nomination committee in one role which results in this committee being more active and effective.

In summary, from the results, it is found that the board has a significant effect on earnings management practice carried out by the company. In other words, from the seven board characteristics: outside directors, board meetings, board size, non-duality, royal family member, remuneration, nomination committee existence, and independence, only outside directors, board meetings, board size, remuneration and nomination committee independence have significant and negative relationship in terms of earnings management. In Saudi Arabia, the formation of a board of directors has been the primary focus of companies and plays a vital role in improving the performance or preventing potential wrongdoings.

8.5.2.3 Ownership structure

The previous studies added to the literature by addressing different findings regarding the effect of ownership concentration on earnings management. The current research addresses the hypotheses in terms of ownership structure, based on the theory that ownership concentration might mitigate agency problems leading to reduced agency cost by aligning the interests of controlling owners with those of the company (Ang *et al*., 2000). This section discusses the finding in respect of the impact of ownership structure on earnings management in Saudi Arabia.

8.5.2.3.1 Managerial ownership (MANGOWN)

Agency theory suggests that high insider ownership provides better corporate governance structure, which leads to a high quality of financial reporting (Sanchez and Meca, 2005). However, the majority of empirical research concludes a positive association between insider ownership and earnings management (Habbash, 2010). A potential justification for the positive relationship suggested by Ang *et al*., (2000) is that insiders might attempt to protect their benefits by manipulating earnings to conceal the corporate performance from outsiders.

The regression analysis shows that the coefficient on MANGOWN is positive, but insignificant (coefficient = -0.025 and p> 0.10). This result is inconsistent with the study's expectation in *H12* that assumes a negative association between insider ownership and the level of earnings management. These results are not surprising since a number of empirical studies such as Peasnell, *et al* (2005); Laux and Laux, (2009) did not find an effect of managerial ownership on earnings management.

8.5.2.3.2 Institutional investors' ownership (INSTOWN)

Prior studies highlight that institutional investors pay attention to the long-term value of stocks (Bushee, 1998). Empirical studies also show that institutional investors are more intelligent and have beneficial access to financial reporting (El-Gazzar, 1998; Bartov *et al*., 2001). Hence, institutional ownership in a firm plays a vital role in preventing wrongdoings by offering an extra monitoring mechanism in the financial information process.

A large number of empirical studies, such as those conducted by Yu, (2008); Osma and Noguer (2007); Charitou *et al*. (2007); Park and Shin (2004); and Rajgopal and Venkatachalam (1998), indicate that institutional ownership negatively affects earnings management. However, the findings of the current study do not reinforce this stream of research since INSTOWN is detected to be insignificantly positive in the testing of this model.

These findings are similar to those of a study carried out by Peasnell *et al*. (2000b) and Peasnell *et al*. (2005) who claim that there is no relationship between earnings management and institutional investors. A possible explanation for this result may be that most Saudi institutional investors are short-term investors since the lack of protection leads to not providing adequate monitoring. Another potential justification for the dissimilarity between the results of this research and those of previous studies is that Saudi institutional investors do not have the same characteristics, such as culture and experience, as British institutional investors, American institutional investors, or European institutional investors that make them monitoring mechanisms.

8.5.2.3.3 Family ownership (FAMOWN)

There is a heated debate among studies concerning the effect of family control by ownership. Two different views have emerged as a result of this dichotomy. The first view argues that a founding family that has a long-term interest in the firm will constrain the capability of managers to manipulate earnings. However, opponents of this view argue that family control may lead to expropriation of the minority shareholders' interests (Jaggi *et al*., 2009). The findings of the current study reveal that there is a positive but insignificant relationship between family ownership and discretionary accruals. The insignificant positive coefficient of family control does not reinforce this (*H15*) study's hypothesis. Thus, the current study does not support the view that a high proportion of family ownership constrains earnings management.

The results of the study are inconsistent with previous research conducted by Jaggi *et al*., (2009) who looked at Hong Kong firms, or Anderson *et al*, (2004) and Ali *et al*., (2007) who argue that a concentration of family ownership affects firms' performance and earning quality, but it is consistent with that of Yen *et al*. (2007) who found that family control tends to manage earnings downwards. On top of that, a possible explanation for the previous result shown by Jaggi *et al*., (2009) is that in developing countries, where controlling family ownership is widespread, the protection of minority shareholders is weaker and financial reporting is less transparent which causes the use of earnings management as mean of maximizing the private benefit of the majority of shareholders.

8.5.2.3.4 State-Ownership **(STATEOWN)**

Although there is a shortage of studies on the effect of state-ownership on earnings management, the current study adapts the theme of the agency theory to suggest that lower opportunistic earnings management is associated with the existence of large shareholders (Jensen and Meckling, 1976). Hypothesis (*H14*) expects that the proportion of state-ownership (STATEOWN) is negatively associated with earnings management. The coefficient on STATEOWN is positive and significant (coefficient = 0.155 and $p < 0.05$).

The former result is consistent with previous studies such as Chen *et al*. (2006) and Firth, (2007) which use data from China, and suggest that no type of ownership structure, even state-ownership has any effect in constraining earnings management. Extending this study, Bozec *et al*. (2002) argue that there is no relationship between state-ownership and performance and suggest that it is not a question of who owns the firm, but the goals pursued by the firm. However, the finding is soundly consistent with that of Yen *et al*., (2007) who found that Chinese companies with state-ownership tend to manage their earnings upwards.

8.5.2.3.5 Blockholder Ownership **(BLOCKOWN)**

Inconsistent with hypothesis (*H16*) that assumes a negative relationship between blockholder ownership and discretionary accruals, there seems to be a relationship between earnings management and blockholder ownership, but it is not significant. This is inconsistent with the assumption that blockholders benefit the firm by aligning the interests of shareholders and directors. Jensen and Meckling (1976), who develop the agency theory, highlight that lower opportunistic earnings management is associated with the existence of large shareholders. Therefore, the result of this current research does not support the assumption propagated by the agency theory in mitigating agency problems, and particularly in reducing earnings management. It is not surprising that no significant effect result was obtained, since numerous studies, such as those of Park and Shin, (2004); Abdul Rahman and Ali, (2006) were unable to detect any effect of the blockholder in constraining opportunistic earnings management. Moreover, a positive relationship between blockholder ownership and earnings management has been found by many empirical studies, including Zhong *et al*. (2007) and Habbash, (2010), which conclude that earnings management is increased by large blockholder ownership.

Overall, the effect of ownership concentration, managerial ownership, family control, institutional ownership, state-ownership, and blockholder ownership is found to be less likely to mitigate earnings management in Saudi Arabia. This result is consistent with a study conducted by Chen *et al*. (2006) in China that found that all types of ownership structure have no effect on fraud. Managerial ownership and family ownership are significant in the univariate analysis of earnings management; however the significance of these variables disappears in the multivariate analysis.

Table (8.7) Multivariate Analyses for the First Model

Notes: indicate significant at * 0.001, ** 0.05, * 0.10**

First Model Main Regression (GLS)				
DAC	Exp Signe	Coef.	z	P>z
Board Composition				
OUTSIDE	-	-.0297	-1.69	*
BRDSIZE	-	-0.012	-2.330	**
BRDMEET	-	-0.010	-2.150	**
RFAMILY	-	0.018	1.340	**
Non-DUAL	-	-0.022	-1.060	
RNEXIST	-	-0.012	-0.490	
RNIDP	-	-0.041	-2.330	**
Ownership Structures				
MANGOWN	-	0.026	0.660	
INSTOWN	-	0.060	1.330	
FAMOWN	-	0.053	1.310	
STATEOWN	-	0.155	2.360	**
BLOCKOWN	-	0.008	0.360	
Control Variables				
BIG4	-	- 0.001	-0.040	
LEVG	-	-0.001	-0.010	
ROA	+	0.021	0.180	
CFO	-	0.243	2.540	
SIZE	+	-0.028	-1.520	**
COMPLEX	-	0.008	0.520	
_cons		-0.520	-3.520	***
Adj R^2 Within	**0.637**			
Adj R^2 Overall	**14.48%**			
Wald chi2	**47.87*****			

8.5.3 Findings and Discussion of the Second Model

The previous model aimed to examine the relationship between discretionary accruals as a dependent variable, on the one hand, and board of directors' characteristics, and ownership structure, on the other. This section presents the findings and provides a discussion concerning the second model which examines the relationship between discretionary accruals as an indicator of earnings management, audit committee characteristics and external audit factors. Thus, GLS regression results are shown in Table 8.8 (See page 226) which shows that the adjusted R^2 gained in this model is comparable with the study conducted by Abdul Rahman and Ali, (2006) which finds that adjusted R^2 is about 12.8 and justifies that the low value of adjusted R^2 is attributed to the variation in the level of earnings management. Moreover, other studies conducted by Frankel *et al.* (2002), and Dimitropoulos and Asteriou (2010) report approximately the same level of adjusted R^2. The constant is negative and highly significant at (p<0.01).

8.5.3.1 Stepwise regression test for the second model

Even though the use of stepwise regression has been criticised by many scholars due to some problems such as incorrect degrees of freedom (Whitaker, 1997), it is still used to reveal the reliability of the model via the strength of R^2, in order to reach to appropriate model (Berenson et al., 2009). Generally, the current study uses stepwise forward regression, commonly employed to determine the appropriate model by eliminating variables conceived to downsize the value of R^2 (Gujarati and Porter, 2009). As a whole, the results of stepwise regression do not support excluding any variables in the second model since all variables contribute to increase the value of R^2. (See page: 293 in the appendix for the result of the use of the stepwise test).

8.5.3.2 Audit committee characteristics

8.5.3.2.1 Audit committee independence (ACINDEP)

The current study assumes that audit committee independence (ACINDEP) will be negatively associated with the level of earnings management. As predicted, a negative association between (ACINDEP) and the empirical indicator of earnings management was found but it is not significant. Prior studies have generally shown that audit committee independence is not only negatively related to earnings management (Klein, 2002; Bedard *et al.*, 2004; Bradbury (2006); Piot and Janin, 2007), but that it is also positively associated with the quality of financial reporting (Felo *et al.*2003. Even though there is global acceptance of the idea that that audit committee independence helps to constrain earnings management, this result is consistent with the study conducted by Abdul Rahman and Ali (2006) which looked at 97 Malaysian firms and found no significant association between earnings management and independent audit committees. Moreover, Yang and Krishnan (2005), using a sample of 896 firms, reported that there is no significant association between audit committee independence and quarterly discretionary accrual. Likewise, Peasnell *et al*. (2005) did not show sufficient evidence of the impact of audit committee on constraining earnings management.

8.5.3.2.2 Audit committee size (ACSIZE)

The test for hypothesis (*H8*) concerning the relationship between the size of the audit committee (ACSIZE) and the level of discretionary accruals indicates an insignificant relationship. This finding could support the theme that larger audit committees do not necessarily enhance the quality of financial reporting (Habbash, 2010).

This finding is inconsistent with previous studies that showed that audit committee size is another important element in audit committee characteristics. For example, a study conducted by Yang and Krishnan, (2005) concluded that larger audit committees are related to lower quarterly earnings management. Likewise, as indicated by a study conducted by Lin *et al.* (2006) larger audit committees are related to fewer earnings restatements and the findings of a study presented by Felo *et al.* (2003) reports that larger audit committees enhance financial reporting quality.

These findings are similar to those of Xie *et al.* (2003), Abbott *et al.* (2004), Bedard *et al.*(2004), Davidson *et al.* (2005) and Baxter and Cotter (2009) which showed no significant relationship between audit committee size and the level of earnings management.

8.5.3.2.3 ***Audit Committee Meetings (ACMEET)***

Even though the current study posits that there is a relationship between audit committee meetings and earnings management, no significant relationship is found between audit committee meetings (ACMEET) and the level of discretionary accruals.

This finding is not surprising since most studies which have investigated the association between earnings management and audit committee meetings have found that no relationship exists. These findings are consistent with the study by Davidson *et al.* (2005) which claims an insignificant relationship between the number of audit committee meetings and earnings management. Moreover, the study conducted by Abdul Rahman and Ali *et al.* (2006) could not find sufficient evidence for a negative relationship between earnings management and the frequency of audit committee meetings. Likewise, Baxter and Cotter (2009) who used two measures of earnings quality, found no relationship between earnings management and the frequency of audit committee meetings.

One possible explanation of this (ACMEET) is provided by Habbash (2010) who states that audit committee meetings may not be a beneficial proxy of the audit committee's diligence and activity; this reflects earlier comments in this and other research that neither board meetings nor NEDs' private meetings show a significant effect on earnings management. Moreover, Spira (1999) claims that audit committee meetings are largely ineffective in enhancing financial reporting since the meetings are largely ceremonial.

8.5.3.2.4 Audit Committee Financial Expertise (ACEXPERT)

The current study also posits that audit committee expertise (ACEXPERT) is negatively associated with the level of discretionary accruals. Even though the univariate analysis reports a significant relationship, multivariate analysis shows no significant relationship.

These findings do not support the recommendations of the Saudi Corporate Governance Code (2006) that audit committees should comprise at least one member with relevant financial experience in order to effectively control the financial reporting process. Hence, the findings could not reinforce the idea that audit committees that comprise at least one member with accounting or financial expertise are likely to dissuade managers from manipulating the earnings numbers in financial reporting.

Numerous studies such as those of Song and Windram (2004); Choi *et al.* (2004); Park and Shin (2004); Carcello *et al.* (2006); Chen (2007) and Baxter and Cotter (2009) suggest that financial literacy is a key determinant of the audit committee's effectiveness. However, a few studies are consistent with the results of the current study, (Abdul Rahman and Ali *et al.* 2006; Yang and Krishnan, 2005) which found no significant association between audit committee expertise and level of earnings management.

In summary, the current study finds that there is no relationship between audit committee characteristics and earnings management. In other words, a Saudi audit committee is less likely to dissuade management from manipulating earnings figures in their annual report. Thus, the prediction made about a good audit committee mitigating opportunistic earnings management activity was found to be inaccurate in Saudi Arabia.

A plausible interpretation for the insignificant relationship between audit committee characteristics and earnings management may be attributed to institutional theory, focusing on the processes and systems by which theme acquire collective meaning and legitimisation, DiMaggio and Powell (1983) suggest that companies might adopt practices or regulations as a result of coercion come from a legislator who imposes some practices by force in order to improve organizational effectiveness. However, there is no prediction that the adoption of these regulations will improve organizational effectiveness.

8.5.3.3 External Audit Factors

Worldwide, recent financial scandals have increased the question of whether external auditing is effective in constraining earnings management and the wave of audit failure in the Capital Market has also increased concerns about audit quality (Velury, 2003). The separation of management and control may create a catalyst for managers to increase their own personal wealth and not act in owners' interest. Therefore, managers might manipulate the figures used by shareholders to monitor management performance. External auditing is an important instrument for shareholders to ensure the transparency and credibility of financial reporting. Table 8.8 (See page 226) presents the results of the impact of external audit factors on earnings management.

8.5.3.2 1 Auditor size (Big4)

Companies that select Big4 auditors will make management change its behaviour to align its interests with shareholders' interests. Hypothesis (*H17*) anticipates that BIG4 auditors are negatively associated with the level of discretionary accruals. The finding indicates that there is no significant relationship found between BIG4 auditors and earnings management, thus the hypothesis is rejected.

Empirically, a large number of studies have provided evidence for the use of auditor size as a proxy for audit quality. These include DeAngelo (1981**);** Hoitash *et al* (2007); Chen *et al*. (2005) and Dye (1993) who confirm that large auditors will be more accurate because they have greater wealth that is exposed to risk in case of any litigation. Moreover, Healy and Lys (1986); Lennox (1999) and Colbert and Murray (1999) suggest that the variations between Big8 (now Big4) and non-Big audit firms lie in differences in specialization of services and in reputation.

However, the result of the current study is consistent with Abdul Rahman and Ali *et al.* (2006) who found no significant relationship between Big5 (now Big4) and earnings management. Also, a study by Piot and Janin (2007) states that the presence of a Big5 auditors makes no difference regarding earnings management activities. Likewise, Kanagaretnam *et al.* (2010) found that auditor type has no effect on income-decreasing. In Saudi Arabia, a plausible explanation for the insignificant relationship between Big4 auditors and earnings management may be based on Francis (2004)'s argument which suggests that Big4 audits are not necessarily always superior since cases of audit failure by Big4 can and do occur. He also suggests that a counter-argument is that the large accounting firms are not the best; they just have more resources which enable them to fight litigation and regulators. Moreover, Lowensohn *et al.*, (2007) raise the question concerning audit firm size and audit quality and highlight that although Big5 auditors often used as proxy of audit quality in prior studies, are not uniformly related to increased perceived audit quality. Likewise, Beasley and Kathy (2000) argue that specialization is considered to be a key factor in audit quality but not auditor size.

*8.5.3.2.2 Specialised auditors (***AUDSPEC)**

The current study presumes that auditor industry specialisation is negatively associated with the level of earnings management. This result is inconsistent with evidence which suggests that auditor industry specialisation is negatively associated with discretionary accruals (Krishnan, 2003; Zhou and Elder, 2002; Almutairi, 2009) but positively related to financial reporting (Balsam *et al.*, 2003; Bloomfield and Shackman, 2008; Gul *et al.*, 2009).

In contrast, a study by Johl *et al.* (2007) found no significant relationship between auditor industry specialisation and abnormal accruals. Moreover, Chen *et al.* (2005), apart from the non-executive proportion, found no relationship between audit committee characteristics and specialist auditor. Interestingly, Carcello and Nagy (2004) document that there is no relationship between industry specialization and fraud for larger clients.

8.5.3.2.3 Auditor opinion **(AUDOPIN)**

Types of audit opinion also can be used as proxy for audit quality. DeAngelo, (1981) suggests that audit opinion is an independent verification of manager-prepared financial reports provided by auditors. One of the hypotheses addressed, concerning the impact of audit quality on earnings management is that auditor opinion is negatively associated with the level of discretionary accruals. As expected, AUDOPIN (Coff.=-0.050, z= -2.110, $p<0.10$) shows a negative significant association with the level of discretionary accruals. Auditor opinion is measured based on unqualified report (clean opinion), which is considered to be more sophisticated and has been used extensively in the prior research.

In Saudi Arabia, the auditor issues an unqualified report when they consider the audited financial statements provide a true and fair view in line with the financial reporting framework. However, the auditor will issue a modified report depending on the circumstances and the effect of materiality.

The result is consistent with prior studies that investigated audit qualifications, auditor opinion and discretionary accruals. For instance, Chen *et al.* (2001) demonstrate that management's propensity to manipulate earnings is positively associated with modified audit opinions reported by auditors. Also, a study by Bradshaw *et al*. (2001) indicates that there is a relationship between firms with any type of audit opinion and working capital accruals. Likewise, a study by Johl *et al*. (2007) shows that companies showing unqualified audit opinion are likely to receive low levels of discretionary accruals. A study by Herbohn and Ragunathan (2008) found that there is a negative relationship between accruals and opinion modifications. However, Butler *et al*. (2004) contend that there is no evidence linking a modified audit report to discretionary accruals or earnings management level.

*8.5.3.2.4 Timeliness (*TIMELINESS)

Timeliness is measured by the number of days from end of the fiscal year to audit the report date; an inordinate period, which is defined as audit delay, reflects the quality of financial reporting by not presenting timely information to shareholders. The current study assumes that an inordinate (long) period between the end of the fiscal year and the audit report leads to high earnings management. It is found that there is a positive, but not significant, relationship between the number of days from the fiscal year to the audit report date.

Previous studies such as Givoly and Palmon (1982); Kross and Schroeder, (1984) and Chambers and Penman, (1984) argue that audit delay is a key determinant of timeliness in earnings announcement, which in turn, influences the market’s reaction to earnings announcement. Additionally, Knechel and Payne (2001) report that inordinate delay in reporting may be related to lower quality information. Likewise, Mohd-Sulaiman, (2008) views that Malaysian fraudulent financial reporting is associated with audit delay.

The result of the current study is inconsistent with prior research. One possible explanation for the insignificant result may be associated with the weak role of the audit committee in Saudi Arabia. In others words, Afify (2009) suggests that the voluntary establishment of the audit committee reduces audit delay in Egypt. Theoretically, the role of the audit committee is to mitigate the conflict between external auditor and management leading to reducing the lengthy period and increasing the quality of the external audit. Mohamad-Naimi *et al.* (2010) using 628 annual reports for the year ending 2002 suggests that active and larger audit committees shorten audit delay.

8.5.3.2.4 Change in auditor (AUDSWITCH)

Change in auditor has been paid considerable attention by both regulators and academics. The regulators' concern has increased since management might change auditor for opportunistic reasons which will enable them to accomplish their objective. Theoretically, Francis and Wilson (1988) argue, agency costs may sometimes lead to a decision to switch auditor and be affected by different factors. DeFond and Jiambalvo (1993) state that most cases of auditor change result in disagreement when the auditor insists on applying specific accounting methods. Kluger and Shields (1991) also views that managers attempt to change auditor to delay or suppress the announcement of unfavourable information. They conclude that most companies that have financial problems have changed auditors to obtain a more cooperative auditor. Johnson *et al.* (2002) provide evidence of lower audit quality (larger abnormal accruals) in the following three years engagements after auditor changes. Wallace (2005) finds that auditor changes frequently occur around restatements.

Previous studies suggest that changing auditors signifies a lower-quality audit and a greater likelihood of earnings management (Habbash, 2010). Following a study by DeFond and Subramanyam (1998), this current study predicts a significant relationship between the occurrence of earnings management and auditor change by indicating a dummy variable taking the value of one of the auditor which changed during the period of a sample. The result in Table 8.8 indicates that there is no relationship between the level of discretionary accruals and auditor change.

This result is consistent with studies conducted by DeFond and Subramanyam (1998) and Davidson *et al.* (2006) which concluded that there is no evidence of pervasive income-increasing earnings management and auditor change in their sample firms.

In summary, in Saudi Arabia, a lower audit quality might be attributed to a weak role performed by the audit committee, as concluded previously. Importantly, the performance of Big4 might be different in Saudi Arabia than in developed countries since all Big4 auditors are affiliated to local auditors so as not to be faced with rigorous litigation in case of failure of the audit in protecting shareholders' interests. This is due to the fact that most devolving countries have a lack of protection for investors and a volume of litigation, that is resolved privately, compared to developed countries which might not be a deterrent. In addition, the reputation, in case of failure, will be attributed to the local auditor rather than to the Big4 auditor. Francis (2004) states that "we do not know if the US evidence on audit quality generalizes to audits in other countries that have different legal systems and particularly to non-common-law countries with weaker investor protection and less ability to sue auditors for negligence and misconduct". Finally, the nature of culture may increase companies' threats to dismiss auditors and their encouragement in opinion shopping affect auditors independence and audit quality as reported by Al-Thenaian and Al-Angari (2010).

8.5.3.3 Ownership Structure

As mentioned previously, current research addresses the hypotheses in terms of ownership structure based on the theory that ownership concentration might mitigate agency problems leading to reducing agency cost by aligning the interests of controlling owners with those of the company (Ang *et al*., 2000). In the second model, ownership structure is used as a control variable and the result shows that family ownership is significantly (coefficient = 0.076 and $p<0.10$) and positively related with the earnings management indicator. On top of that, state-ownership, is consistent with the same result as the first model; it seems to be positive and significant with earnings management. However, in comparison with the first model, institutional, blockholder, and managerial ownership are still positive and insignificant with earnings management. The findings generally indicate that discretionary accruals as proxy for earnings management is not negatively and significantly related to ownership concentration. The results suggest that the presence of managerial, state-owned, family, blockholder, and institutional ownership might not effectively monitor the management to avoid opportunistic behaviour of the management including earnings management in Saudi Arabia.

Table (8.8) Multivariate Analyses for the Second Model

Notes: indicate significant at * 0.001, ** 0.05, * 0.10**

Second Model Main Regression (GLS)				
DAC	Exp Signe	Coef.	z	P>z
Audit committee influence				
ACINDEP	-	-0.011	-0.410	
ACSIZE	-	-0.003	-0.230	
ACMEET	-	-0.004	-1.020	
ACEXPERT	-	-0.001	-0.050	
Eternal audit factors				
BIG4	-	-0.017	-0.95	
AUDSPEC	-	-0.011	-0.540	
AUDOPIN	-	-0.050	-2.110	*
TIMELINESS	-	- 0.000	-0.010	
AUDSWITCH	-	-0.012	-0.640	
Control variables				
FAMOWN	-	0.076	1.850	*
INSTOWN	-	0.072	1.540	
MANGOWN	-	0.013	0.320	
STATEOWN	-	0.202	3.240	***
BLOCKOWN	-	0.010	0.420	
BRDINDP	-	-0.031	-1.690	*
LEVG	-	0.048	0.070	
ROA	+	0.024	0.120	
CFO	-	0.247	0.097	
SIZE	+	-0.045	-0.018	*
COMPLEX	-	0.006	0.017	
_cons	-	0.565	3.510	***
Adj R^2 between	0.63			
Adj R^2. overall	12.6%			
Wald chi2	43..11***			

It should be noted that despite using a large set of variables in both models, there was a lack of significant results due to the weakening role of corporate governance and external audit in preventing financial reporting from earnings management in Saudi Arabia. As mentioned in the previous chapter, the interview survey shows inherent issues in the Saudi market which restrict the role of monitoring mechanisms. Moreover, 'institutional theory' provides a plausible explanation as it views these mechanisms as practices or regulations resulting from coercion by legislators who impose certain practices in order to improve organizational effectiveness or as a result of imitation. Further discussion on this is provided in the next chapter.

8.5.3.5 Control Variables: Results and Discussion for Both Models

In regression, the current study seeks to control for other factors that could be expected to affect the level of discretionary accruals. This section presents the findings for the control for the influence of potential confounding factors (Bartove *et al*., 2000) by comprising variables in the two models that have been found to be associated with earnings management. The control variables in the two models have been introduced together because they are the same control variables and they show somewhat similar findings.

Among the control variables, only SIZE is statistically significant in both models as well as BRDINDP in the second model**,** while LEVG, ROA, CFO, BIG4 and COMPLEX do not show any statistically significant differences in either model.

8.5.3.5.1 Firm size (SIZE)

Several studies present evidence suggesting that large firm size may be an incentive for managers to engage in earnings management (Pincus and Rajgopal, 2002); however, from a different perspective Becker *et al*. (1998) suggest that large firms have less motivation for earnings management since they are subjected to closer monitoring by investors and financial analysts. Consistent with the findings of prior studies such as Becker *et al*. (1998); Abdul Rahman and Ali, (2006) and Xie *et al*. (2003), SIZE is found to have a significant negative relationship with earnings management in both models at level 0.10 and 0.05. This reinforces the theory that smaller firms that are subjected to less monitoring by investors and regulators are more inclined to manipulate earnings.

8.5.3.5.2 Leverage (LEVG)

Numerous studies such as Elayan *et al.* (2008) use leverage as a measure for debt covenant violations that represent the debt structure of a firm. Most studies argue that highly leveraged companies are less likely to be involved in wrongdoings, such as earnings management. In both models, LEVG exhibits an insignificant relationship with earnings management, which is consistent with the finding of Jiang *et al.* (2008) who highlight that leverage changes may have various effects on earnings management. Similar to the results of the current study, Abdul Rahman and Ali, (2006) found the leverage is insignificant to earnings management.

8.5.3.5.3Firm performance (ROA)

The findings for ROA present similar results for the influence of performance on the earnings management indicator in both models. An insignificant positive relationship is found which reinforces the suggestion of Abdul Rahman and Ali, (2006); Kothari *et al.* (2005) and Habbash, (2010) that accounting discretions that do not control for the effect of performance are often mis-specified.

8.5.3.5.4 Cash flow from operations (CFO)

The result shows that CFO is insignificantly positively related to the earnings management indicator. This finding is consistent with the study by Abdul Rahman and Ali, (2006) which found no relationship between CFO and the level of earnings management, while Bukit and Iskander (2009) found that there is a positive relationship between surplus cash flow and earnings management.

8.5.3.5.5 Complexity (COMPLEX)

The number of subsidiaries measures complexity expressing firm complicity. No significant relationship is found between COMPLEX and the level of discretionary accruals in both models. Previous studies such as Chen *et al* (2005) argue that the more complex the firm's operation, the greater the need for good audit quality. Moreover, Simunic (1980) suggests that audit quality is sensitive to risky conditions such as client size and complexity. In relation to fraud, Dyreng *et al*. (2010) found earnings management to be less when a firm has subsidiary operations in foreign countries that have a strong rule of law.

8.6 ADDITIONAL ANALYSES AND ROBUSTNESS

Several further tests were performed to ascertain the credibility of the primary findings. The first set of tests, comprising the main results, was reported by the main model with alternative proxy or model for earnings management. Moreover, in accordance with prior studies, the signed earnings management test was conducted as an additional test that focused on upwards and downwards earnings management. On top of that, the type of industry in which the company belongs may also drive the association between discretionary accruals as proxy for earnings management, on the one hand, and corporate governance and the external audit factors, on the other; thus, conducting analysis according to industry is useful to the findings. Finally, parametric test (OLS) or fixed effect and pooled test are conducted as robustness checks for the findings.

8.6.1 Alternative measurement of earnings management

Consistent with prior studies (Xie *et a,*. 2003; Peasnell *et al.* 2001 and Abdul Rahman and Ali, 2006), the modified Jones model (1995) is used in this study as the main proxy for earnings management. In addition to applying the modified Jones model (1995) of estimating DAC using Cash flow approach, this study also applies the Jones model (1991) as an alternative measurement of earnings management. One influential way of measuring earnings management is discretionary accruals which has been considered by a large number of studies (e.g., Healy, 1985; DeAngelo, 1986; Jones, 1991; Dechow *et al.*, 1995). Measurement of earnings management has been improved dramatically in response to a fruitful research presented by studies that use different approaches to estimate accruals such as balance sheet and cash flow (Aljifri, 2007).

As mentioned earlier in the literature review chapter, prior studies have concluded that managers practise their discretion over accruals items to engage earnings management; therefore, it is widely conceived that discretionary accruals solely reflect earnings management practices. The Jones model (1991) presents efficient methods to estimate non-discretionary accruals that include a plant, property and equipment variables to control any change in non-discretionary accruals. Using two variables (REV and PPE) to control for changes in non-discretionary accruals makes this model more accurate for earnings management practice (Aljifri, 2007). The following section will present the findings according to alternative proxy (Jones, 1991) for earnings management.

1- First model results using the Jones model (1991)

Table 8.9 (See page:232) shows the GLS regression of the Jones model on board composition and ownership structure variables. The adjusted R^2 obtained in this model is comparable with prior studies such as Yang *et al.*, (2005); Xie *et al.*, (2003); Iskander and Seleh, (2009). The constant is negative and highly significant at $p<0.001$.

The results shown in Table 8.9 using the Jones model (1991) are fairly consistent with the main test; (OUTSIDE) is negative and significant (β= -0.034, z= -1.400, $p<0.05$), concluding that, as the number of outside directors in a firm increases, the level of earnings management decreases.

The results also indicate that board size (BRDSIZE) and board meetings (BRDMEET) shows a significant negative relationship with the level of earnings management at level $p<0.001$). Moreover, number of members of the royal family on the board (RFAMILY) is found to be positively associated with the level of earnings management as the same level of (P)value compared to the modified Jones model. Among nomination and remuneration committee characteristics, only independence is found to be negatively associated with discretionary accruals at level $p<0.05$) as the modified Jones previously reported.

Consistent with the main test, apart from state-ownership being positively related to earnings management at level $p<0.05$), no type of ownership structure is found to be associated with earnings management. The findings suggest that no type of ownership structure in Saudi Arabia has been effective as a monitoring mechanism. Arguably, the insignificant relationship between ownership structure and earnings management concluded in this research point out that concentrated ownership is not as effective as propagated by agency theories in constraining agency problems found by prior studies.

As the main results indicate, among the control variables, only size is found to be significantly related to DAC as the modified Jones reported. This reinforces the theory that smaller firms that are subject to less monitoring are more likely to engage in earnings management.

2- Second model results using the Jones Model (1991)

Table 8.9 (See page 232) also shows the GLS regression of the Jones Model on audit committee characteristics and external audit. The adjusted R^2 in this model seems to be comparable with prior studies conducted by Osama and Niguer, (2007); Yang *et al*., (2005); Xie *et al*., (2003); Iskander and Seleh, (2009) and the constant is negative and highly significant at $p<0.001$.

Consistent with the primary findings, there is no significant relationship between audit committee characteristics and the level of earnings management detected. The findings suggest that outside directors on audit committees in Saudi Arabia have not been effective in carrying out their monitoring functions. In terms of audit quality factors, consistent with the main test, the coefficient on auditor opinion (AUDOPIN) is negative and significant ($\beta=-0.048$, $z=1.500$, $p<0.10$), concluding that, as the accurate opinion presented by auditor express the level of earnings management. Consistent with primary results and in respect of other external audit factors, the second model using the Jones (1991) method does not show any significant findings.

Additionally, consistent with the main test, the results also show a significant and positive relationship between family ownership structure and the level of earnings management at level ($p<0.05$). In terms of state-ownership, it is found to be positively associated with the level of earnings management at level ($p<0.001$). However, other types of ownership structure are found not to be associated with earnings management. Arguably, the insignificant and positive relationship between ownership structure and earnings management concluded in this research suggests that concentrated ownership is not as effective as propagated by agency theories in constraining agency problems found by prior studies.

In terms of the control variables, similar to the main results concluded by Modified Jones (1995), only size is found to be significant and negative with earnings management. As mentioned previously, this reinforces the theory that smaller firms that are subject to less monitoring are more likely to engage in earnings management.

Overall, the findings of this analysis are fairly consistent with the main results obtained from the modified Jones model (1995). Generally, applying an attentive proxy for earnings management has been a common approach among prior studies. For example, Osama and Niguer, (2007) applied different proxies for earnings management studying the effect of board composition and their committees on earnings management. Thus, applying alternative proxy aims to provide more accurate findings concerning the impact of external and internal corporate governance on earnings management. It is worth noting that some results obtained from the Jones model provide strong significance for numerous variables that were less significant in the modified Jones models. This is not surprising, since most studies which use different proxies for earnings management have different significance of (*P)*.value and sometimes in findings.

Table (8.9) The Finding by applying Jones Model (1991) Notes: indicate significant at (*** 0.001, ** 0.05, * 0.10)

First Model					Second Model				
DAC -	**Exp Signe**	**Coef.**	**z**	**P>z**	**DAC+**	**Exp Signe**	**Coef.**	**z**	**P>z**
BRDINDP	-	-0.034	-1.400	**	**ACINDEP**	-	-0.034	-0.930	
BRDSIZE	-	-0.017	-2.480	***	**ACSIZE**	-	-0.004	-0.220	
BRDMEET	-	-0.013	-1.940	***	**ACMEET**	-	-0.005	-1.030	
RFAMILY	-	0.013	01.58	**	**ACEXPERT**	-	-0.004	-0.160	
DUAL	-	-0.029	-1.070		**AUDSPEC**	-	-0.014	-0.510	
RNEXIST	-	-0.016	-0.500		**AUDOPIN**	-	-0.048	-1.500	*
RNIDP	-	-0.040	-1.680	**	**TIMELINESS**	-	-0.035	-0.700	
FAMOWN	-	0.091	1.660		**AUDSWITCH**	-	-0.023	-0.940	
INSTOWN	-	.002	0.040		**FAMOWN**	-	0.124	2.240	**
STATEOWN	-	0.061	0.990	**	**MANGOWN**	-	0.005	0.090	
MANGOWN	-	0.192	2.170		**INSTOWN**	-	0.095	1.500	
BLOCKOWN	-	0.025	0.820		**STATEOWN**	-	0.074	1.890	***
BIG4	-	-0.013	-0.550		**BLOCKOWN**	-	-0.019	-0.620	
LEVG	-	0.007	0.080		**BIG4**	-	-0.065	-0.680	
ROA	+	-0.012	-0.080		**LEVG**	-	-0.138	-0.850	
CFO	-	0.328	2.540		**ROA**	+	0.358	2.720	
SIZE	+	-0.031	-1.260	**	**CFO**	-	0.064	2.540	
COMPLEX	-	-0.034	0.040		**SIZE**	+	-0.064	-2.540	**
					COMPLEX	-	0.005	0.230	
_cons	**0.614**	**0.200**	**3.070**	***	**_cons**		**0.251**	**4.420**	***
Adj R^2. 14%		R2.= 0.66			**Adj** R^2. 13.1%		R2.= 0.64		
Wald chi2		47.21***			Wald chi2		44.14***		

8.6.2 Signed Earnings Management Test

Prior research such as Gul *et al.* (2006); Habbash, (2010); Ashbaugh *et al.* (2003) attempt to divide the earnings management sample into positive (income-increasing) discretionary accruals and negative (income-decreasing) discretionary accruals. The rationale of this division lies in exploring potential different discretions used by managers to engage earnings management. What is more, this division presents additional evidence on whether or not there is any differential association between the internal and external corporate governance variables and they use a measure of discretionary accruals, conditional on income-increasing or income-decreasing accruals. Thus, this section presents regression analysis for two models according to positive and negative earnings management.

1- The first model results of signed earnings management test

The GLS estimate of both income-increasing and income-decreasing discretionary accruals on board characteristics and ownership structures is shown in Table 8.10 (See page 235). The adjusted R^2 obtained in the first model is consistent with previous studies such as Frankel *et al.* (2002); Habbash, (2010); Ashbaugh *et al.* (2003) and Dimitropoulos and Asteriou (2010). The constant is negative and significant at level $p<0.001$ and $p<0.05$, respectively.

Consistent with the primary test findings for the absolute value of discretionary accruals, both the positive earnings management and negative earnings management models show a negative coefficient on board characteristics, particularly BRDINP, BRDSIZE, and BRDMEET. These results can be interpreted as follows: BRDINP is more effective in reducing earnings management concerned with income-decreasing and BRDSIZE is effective in constraining income-increasing; however, BRDMEET is more effective in constraining both income-decreasing and income-increasing.

Interestingly, RFAMILY is found to be positively related to income-increasing (positive earnings management). This result signifies that royal family members contribute to engaging in earnings management to obtain high compensation by increasing income and show good performance in their firms.

Table 8.10 also implies that nomination & remuneration committees' independence is more effective in constraining income-decreasing (negative earnings management). This is not surprising since income-decreasing will not benefit the members of this committee notably in relation to compensation. Consistent with the main results, however, Non-DUAL and RNEXIST do not show any effect in either positive or negative earnings management.

In relation to ownership structure, interesting findings are shown in Table 8.10. Even though institutional ownership does not demonstrate any effect in the main results, it is found to be positively related to income-decreasing. This could support the view that the majority of ownership might collude with management to expropriate the interests for a minority of shareholders. STATOWN shows positive significant relationship with income-decreasing. This result is consistent with the study conducted by Yu *et al*. (2007) who found that Chinese government companies tend to manage their earnings downwards. This may be attributed to that companies that Saudi government own large shares tend to manipulate earnings downward to change dividend policy or reduce Zakat.

Among the control variables, only cash flow is found to be positively associated with income-decreasing; however, other control variables do not show any effect as can be seen from Table 8.10. Surprisingly, in the main result and in both the modified Jones model (1995) and the Jones model (1991), size show a significant relationship with earnings management; however, in this case, it is found to be an ineffective variable in both positive and negative earnings management.

Table (8.10) First Model Signed Earnings Management Test Notes: indicate significant at *** 0.001, ** 0.05, * 0.10

Negative Earnings Management (Decreasing)					**Positive Earnings Management (Increasing)**			
DAC -	**Exp Signe**	**Coef.**	**z**	**P>z**	**DAC+**	**Coef.**	**z**	**P>z**
BRDINDP	-	-0.058	-2.140	**	**BRDINDP**	-0.010	-0.420	
BRDSIZE	-	-0.006	-0.840		**BRDSIZE**	-0.011	-1.550	*
BRDMEET	-	-0.012	-1.520	*	**BRDMEET**	-0.010	-1.590	*
RFAMILY	-	-0.017	-0.650		**RFAMILY**	0.000	1.490	*
DUAL	-	-0.032	-1.070		**DUAL**	-0.001	-0.030	
RNEXIST	-	-0.045	-1.200		**RNEXIST**	0.000	0.010	
RNIDP	-	-0.078	-2.720	***	**RNIDP**	-0.013	-0.580	
FAMOWN	-	0.049	0.830		**FAMOWN**	0.076	1.330	
INSTOWN	-	0.171	2.430	**	**INSTOWN**	-0.047	-0.740	
STATEOWN	-	0.219	2.210	**	**STATEOWN**	0.071	0.820	
MANGOWN	-	0.004	0.070		**MANGOWN**	0.021	0.340	
BLOCKOWN	-	0.025	0.730		**BLOCKOWN**	0.010	0.340	
BIG4	-	-0.010	-0.390		**BIG4**	0.013	0.570	
LEVG	?	0.005	0.050		**LEVG**	0.012	0.130	
ROA	?	0.075	0.430		**ROA**	-0.042	-0.250	
CFO	?	0.315	2.380	***	**CFO**	0.201	1.400	
SIZE	?	-0.039	-1.420		**SIZE**	-0.022	-0.870	
COMPLEX	?	0.020	0.800		**COMPLEX**	0.000	-0.020	
_cons		0.638	2.950	***	**_cons**	0.405	1.970	**
Number of observation		177			Number of observation	160		
Adj R^2.		23%			Adj R^2.	15%		
Wald chi2		49.21***			Wald chi2	30.14***		

2- The second model results of signed earnings management test

The GLS estimate of both income-increasing and income-decreasing discretionary accruals on audit committee characteristics and external audit factors for the second model is shown in Table 8.11(See page 238). The adjusted R^2 obtained in the second model is consistent with prior research such as Frankel *et al.* (2002); Habbash, (2010); Ashbaugh *et al.* (2003) and Dimitropoulos and Asteriou (2010). The constant is negative and highly significant at p<0.001 and p<0.05, respectively.

With respect to the audit committee's characteristics, it is interesting that income increasing earnings management is significantly associated with audit committee size (ACSIZE) and meetings (ACMEET) at p.value=0.10. However, this effect disappears against income decreasing earnings management. This is inconsistent with the claim by prior studies such as Habbash (2010) that audit committees are generally more effective in reducing downward earnings management. Consistent with the main results, ACINDEP and ACXPERT have no effect in either direction of earnings manipulation.

Regarding external audit factors and consistent with primary findings, income decreasing earnings management is found to be significantly associated with auditor opinion (AUDOPIN). This is not surprising since auditor opinion plays a vital role in integrity of financial reporting. Becker *et al.*, (1998) observe that clients of brand name auditors are associated with income-decreasing discretionary accruals. However, Big4, AUDSPEC, AUDSPEC TIMELENESS, and AUDSWITCH have no effect in either direction on earnings manipulation as reported in main findings.

As concluded in the main findings, Table 8.11 shows that income increasing earnings management is found to be positively associated with family ownership (FAMOWN). However, institutional (INSTOWN) and state ownership (STATEOWN) are found to be positively associated with negative earnings management. Blockholder (BLOCKOWN) and managerial ownership (MANGOWN) show no significant relationship with negative or positive discretionary accruals.

Among the control variables, SIZE, and CFO are found to be significantly associated with income-decreasing earnings management. This result supports claims in prior research that higher discretionary accruals are associated with smaller sized firms, since small firms are less likely to have effective monitoring. Moreover, Bukit and Iskander (2009) suggest that there is a positive relationship between surplus cash flow and earnings management. In relation to board independence (BRDINDP), the result shows that BRDINDP is negatively related to income decreasing earnings management.

Table (8.11) Second Model Signed Earnings Management Test Notes: indicate significant at *** 0.001, ** 0.05, * 0.10

Negative Earnings Management (Decreasing)					**Positive Earnings Management (Increasing)**			
DAC -	**Exp Signe**	**Coef.**	**z**	**P>z**	**DAC+**	**Coef.**	**z**	**P>z**
ACINDEP	**-**	-0.014	0.340		**ACINDEP**	-0.002	-0.050	
ACSIZE	**-**	-0.012	0.660		**ACSIZE**	-0.026	-1.490	*
ACMEET	**-**	-0.004	0.650		**ACMEET**	-0.008	-1.570	*
ACEXPERT	**-**	-0.010	-0.310		**ACEXPERT**	-0.012	-0.480	
BIG4	**-**	-0.036	-1.100		**BIG4**	0.023	0.810	
AUDSPEC	**-**	-0.003	-0.080		**AUDSPEC**	-0.024	-0.850	
AUDOPIN	**-**	-0.078	-2.180	***	**AUDOPIN**	-0.022	-0.690	
TIMELINESS	**-**	0.028	0.540		**TIMELINESS**	-0.007	-0.120	
AUDSWITCH	**-**	-0.006	-0.240		**AUDSWITCH**	-0.027	-1.010	
BRDINDP	**-**	-0.066	-2.410	***	**BRDINDP**	0.003	0.130	
FAMOWN	**-**	0.057	0.930		**FAMOWN**	0.078	1.410	*
INSTOWN	**-**	0.183	2.570	***	**INSTOWN**	0.032	0.490	
MANGOWN	**-**	0.016	0.280		**MANGOWN**	0.035	0.550	
STATEOWN	**-**	0.324	3.370	***	**STATEOWN**	0.085	1.050	
BLOCKOWN	**-**	0.044	1.140		**BLOCKOWN**	-0.009	-0.320	
LEVG	**?**	0.130	1.240		**LEVG**	-0.001	-0.010	
ROA	**?**	0.084	0.470		**ROA**	-0.023	-0.140	
CFO	**?**	0.272	2.040	**	**CFO**	0.123	0.830	
SIZE	**?**	-0.070	-2.570	***	**SIZE**	-0.019	-0.780	
COMPLEX	**?**	0.012	0.460		**COMPLEX**	-0.009	-0.420	
_cons		0.681	2.920	***	**_cons**	0.412	1.860	**
Number of observation		174			**Number of observation**	160		
Adj R^2		21%			**Adj** R^2	12.10%		
Wald chi2		41.06***			**Wald chi2**	28.13***		

8.6.2 Analysis of Findings According to Industry

This test is performed for additional analysis and to ascertain the credibility of the main findings. The type of industry to which a company belongs may also drive the association between discretionary accruals as proxy for earnings management on the one hand and internal/external corporate governance on the other. The rationale of conducting industry analysis is to investigate this potential problem of whether or not this study's findings would differ based on industry type.

As mentioned earlier in the methodology chapter, many industries are represented by fewer than six companies and are integrated to other industries and the nature of those industries have been taken in consideration during the integration. Based on this integration, five industries are involved as follows: Building, Industrial Investment, Food, Retail, and Regulated.

1- Descriptive statistics according to industry

Tables 8.12, 8.13, and 8.14 (See pages 241, 242, and 243 respectively) provide the descriptive statistics for the variables in the two models according to industry. As is seen from the figures, the magnitude of value of DAC has reached the maximum value of 0.22 in the Transport, Media & Publishing sectors, while minimum value reaches the value of 0.06 in the Petrochemical and Real Estate sectors.

In terms of board characteristics, the Petrochemical, Telecommunication and Energy sectors generally seem to have active boards of directors compared to other industries; however, royal family members are concentrated in the media sector (100%) and cement sector (87%), while they are not interested in being members of boards of directors in the hotel and energy sectors.

Audit committee characteristics are fairly similar between industries; however, most industries with fully independent audit committees can be confined to three industries: telecommunications, agriculture, and petrochemicals. Additionally, the role of the audit committee seems to be weak in the hotels sector according to the characteristics.

According to ownership structure, Saudi families prefer to invest in the multi-investment (23.7%), and retail (23.6%) sectors rather than other investments, while the Saudi government invests considerably in the energy (42%), and telecommunication (38%) sectors. Institutional investors are interested in different types of investment which are concentrated in telecommunications (21%), publishing (29%), petrochemicals (23%), and retail (19%) whereas blockholder ownership dominates most industries.

Regarding external audit factors, all firms in the publishing and telecommunication sectors and 88% of the firms belonging to the petrochemical sector deal with Big4 audit firms. Specialist auditors are used considerably by the publishing (70%) and telecommunication sectors (55%). Audit change frequently occurs in the multi-investment sector (42%). Unqualified opinion is commonly given for firms belonging to the real estate sector (100%). The media and publishing sector is considered the industry most likely to issue its financial reports behind schedule.

Among the control variables, the cement sector has the highest percentage of performance (19%) while the telecommunications sector involves the largest companies in the Saudi Market. The petrochemical sector seems to take more risks rather than other industries since it has approximately 27% of financial leverage, while the building & construction and media & publishing sectors are the industries which have most subsidiaries (70% and 100% respectively).

2- The findings for the first model relative to industry

Table 8.15 (See page245) presents the findings of regression analysis relative to industry for the first model. Consistent with the main results, it is found that outside directors, board size, and board meetings are negatively associated with earnings management in all industries. Additionally, nomination and remuneration independence is effective in constraining earnings management as the main results indicated. This result reinforces the idea posited by agency theory which expects that boards will enhance the integrity of their financial reporting via monitoring management (Peasnell *et al*., 2005).

Table (8.12) Descriptive Statistics according to Industry

Variable	TELC.IT			TRANSPORT			HOTEL&TOURISOM		
	Men	Med	SD	Men	Med	SD	Men	Med	SD
DAC	0.100	0.016	0.222	0.225	0.091	0.269	0.176	0.150	0.136
BRDSIZE	9.333	9.000	0.500	7.875	8.500	1.544	8.750	9.000	0.463
BRDMEET	5.111	6.000	2.369	5.313	5.000	2.938	3.375	4.000	1.685
MANGOWN	0.009	0.010	0.009	0.123	0.060	0.198	0.230	0.230	0.160
OUTSIDE	1.000	1.000	0.000	0.500	0.500	0.516	0.500	0.500	0.535
RFAMLY	0.667	1.000	0.500	0.250	0.000	0.447	0.000	0.000	0.000
Non-DUAL	1.000	1.000	0.000	0.500	0.500	0.516	1.000	1.000	0.000
ACSIZE	3.444	3.000	0.527	2.938	3.000	0.998	2.000	3.000	1.690
ACMEET	3.444	2.000	3.432	3.750	3.500	3.396	1.125	1.000	1.246
ACINDEP	1.000	1.000	0.000	0.813	1.000	0.403	0.375	0.000	0.518
ACEXPERT	0.556	1.000	0.527	0.625	1.000	0.500	0.500	0.500	0.535
RENEXIST	1.000	1.000	0.000	0.750	1.000	0.447	0.625	1.000	0.518
RNIDP	0.600	1.000	0.516	0.750	1.000	0.447	0.125	0.000	0.354
FAMOWN	0.000	0.000	0.000	0.158	0.000	0.282	0.000	0.000	0.000
INSTOWN	0.213	0.380	0.202	0.098	0.000	0.174	0.000	0.000	0.000
STATEOWN	0.380	0.050	0.427	0.108	0.075	0.121	0.116	0.116	0.123
BLOCKOWN	0.556	1.000	0.527	0.500	0.500	0.516	0.500	0.500	0.535
AUDOPIN	0.667	1.000	0.500	0.875	1.000	0.342	0.500	0.500	0.535
REPTIME	1.606	1.699	0.200	1.550	1.523	0.195	1.664	1.648	0.066
BIG4	1.000	1.000	0.000	0.438	0.000	0.512	0.000	0.000	0.000
AUDITSWITH	0.222	0.000	0.441	0.438	0.000	0.512	0.125	0.000	0.354
LEVG	0.127	0.095	0.143	0.121	0.072	0.139	0.015	0.011	0.017
ROA	0.063	0.074	0.106	0.070	0.062	0.054	0.037	0.029	0.089
CFO	0.128	0.120	0.106	0.130	0.108	0.132	0.038	0.020	0.120
SIZE	10.588	10.467	0.283	9.084	9.060	0.605	8.564	8.553	0.708
COMPLEX	0.000	0.000	0.000	0.250	0.000	0.447	0.500	0.500	0.535
AUDSPEC	0.556	1.000	0.527	0.125	0.000	0.342	0.375	0.000	0.518

Table (8.13) Descriptive Statistics According to Industry

Variable	ACRI-FOOD			BULDING& CONSTRUCTION			CEMENT			ENERGY&UTLITIES			INDUSTRIAL INVESTMENT		
	Men	Med	SD	Men	Med	SD	Men	Med	SD	Men	Med	SD	Men	Med	SD
DAC	0.114	0.085	0.120	0.101	0.089	0.099	0.094	0.099	0.056	0.055	0.039	0.053	0.090	0.029	0.165
BRDSIZE	7.288	7.000	1.696	8.372	9.000	1.254	9.250	9.000	1.741	9.125	9.000	0.835	7.514	7.000	1.644
BRDMEET	4.115	4.000	1.916	4.605	5.000	1.664	5.375	5.000	1.338	7.625	8.000	1.506	4.432	4.000	1.094
MANGOWN	0.167	0.070	0.168	0.246	0.170	0.239	0.265	0.150	0.280	0.014	0.009	0.014	0.150	0.055	0.231
OUTSIDE	0.654	1.000	0.480	0.605	1.000	0.495	0.781	1.000	0.420	0.750	1.000	0.463	0.757	1.000	0.435
RFAMLY	0.519	1.000	0.505	0.442	0.000	0.502	0.875	1.000	0.336	0.000	0.000	0.000	0.459	0.000	0.505
DUAL	0.923	1.000	0.269	0.814	1.000	0.394	0.750	1.000	0.440	0.500	0.500	0.535	0.919	1.000	0.277
ACSIZE	2.981	3.000	0.700	3.233	3.000	0.841	3.188	3.000	0.644	3.625	4.000	0.518	3.108	3.000	0.658
ACMEET	3.654	3.000	2.308	3.442	4.000	1.906	3.375	4.000	1.561	5.125	6.000	1.642	2.622	3.000	1.497
ACINDEP	1.000	1.000	0.000	0.907	1.000	0.294	1.000	1.000	0.000	0.625	1.000	0.518	0.865	1.000	0.347
ACEXPERT	0.731	1.000	0.448	0.558	1.000	0.502	0.875	1.000	0.336	0.500	0.500	0.535	0.703	1.000	0.463
RENEXIST	0.904	1.000	0.298	1.000	1.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.946	1.000	0.229
RNIDP	0.352	0.000	0.482	0.476	0.000	0.505	0.375	0.000	0.492	0.000	0.000	0.000	0.400	0.000	0.496
FAMOWN	0.180	0.050	0.256	0.166	0.140	0.191	0.037	0.000	0.099	0.000	0.000	0.000	0.135	0.000	0.247
INSTOWN	0.112	0.000	0.195	0.189	0.140	0.200	0.013	0.000	0.034	0.035	0.035	0.037	0.179	0.145	0.201
STATEOWN	0.055	0.000	0.117	0.015	0.000	0.055	0.229	0.174	0.184	0.425	0.425	0.337	0.049	0.000	0.150
BLOCKOWN	0.692	1.000	0.466	0.841	1.000	0.370	0.625	1.000	0.492	1.000	1.000	0.000	0.838	1.000	0.374
AUDOPIN	0.865	1.000	0.345	0.886	1.000	0.321	0.938	1.000	0.246	1.000	1.000	0.000	0.919	1.000	0.277
REPTIME	1.653	1.703	0.256	1.606	1.672	0.176	1.503	1.484	0.211	1.658	1.672	0.068	1.489	1.568	0.207
BIG4	0.442	0.000	0.502	0.636	1.000	0.487	0.719	1.000	0.457	0.375	0.000	0.518	0.459	0.000	0.505
AUDITSWITH	0.423	0.000	0.499	0.136	0.000	0.347	0.188	0.000	0.397	0.250	0.000	0.463	0.135	0.000	0.347
LEVG	0.046	0.000	0.095	0.076	0.048	0.093	0.061	0.047	0.075	0.021	0.014	0.026	0.041	0.006	0.072
ROA	0.039	0.034	0.091	0.090	0.089	0.070	0.194	0.195	0.059	0.037	0.011	0.056	0.082	0.087	0.057
CFO	0.086	0.074	0.104	0.069	0.057	0.093	0.219	0.219	0.067	0.103	0.127	0.069	0.087	0.082	0.082
SIZE	8.833	8.721	0.574	9.114	9.098	0.353	9.398	9.403	0.157	10.14	10.139	1.083	8.929	8.946	0.545
COMPLEX	0.411	0.000	0.496	0.708	1.000	0.459	0.250	0.000	0.440	0.000	0.000	0.000	0.438	0.000	0.501
AUDSPEC	0.154	0.000	0.364	0.295	0.000	0.462	0.281	0.000	0.457	0.375	0.000	0.518	0.243	0.000	0.435

Table (8.14) Descriptive statistics according to industry

Variable	MIDIA & PUPLISHING			MULTI-INVESTMENT			PETROCHEMICAL			REAL ESTATE& DEV			RETAIL		
	Men	Med	SD	Men	Med	SD	Men	Med	SD	Men	Med	SD	Men	Med	SD
DAC	0.221	0.162	0.227	0.118	0.065	0.154	0.069	0.029	0.118	0.068	0.028	0.094	0.080	0.056	0.090
BRDSIZE	8.200	8.000	2.573	7.556	8.000	1.649	8.622	9.000	1.762	9.375	9.000	1.245	7.815	7.000	1.777
BRDMEET	4.100	3.500	1.287	3.852	4.000	1.537	4.267	4.000	1.452	5.042	6.000	2.116	3.963	4.000	1.698
MANGOWN	0.353	0.260	0.235	0.115	0.070	0.163	0.073	0.042	0.084	0.206	0.165	0.148	0.306	0.240	0.255
OUTSIDE	0.000	0.000	0.000	0.704	1.000	0.465	0.733	1.000	0.447	0.792	1.000	0.415	0.556	1.000	0.506
RFAMLY	1.000	1.000	0.000	0.704	1.000	0.465	0.222	0.000	0.420	0.333	0.000	0.482	0.259	0.000	0.447
DUAL	0.400	0.000	0.516	0.444	0.000	0.506	0.911	1.000	0.288	0.792	1.000	0.415	0.481	0.000	0.509
ACSIZE	3.000	3.000	0.000	2.889	3.000	0.751	3.267	3.000	0.495	3.458	3.000	0.779	3.074	3.000	0.550
ACMEET	3.300	1.000	4.596	2.481	2.000	2.007	2.733	3.000	1.421	4.375	4.000	2.060	3.222	4.000	1.761
ACINDEP	0.900	1.000	0.316	0.963	1.000	0.192	1.000	1.000	0.000	0.833	1.000	0.381	0.704	1.000	0.465
ACEXPERT	0.200	0.000	0.422	0.556	1.000	0.506	0.933	1.000	0.252	0.708	1.000	0.464	0.407	0.000	0.501
RENEXIST	1.000	1.000	0.000	0.852	1.000	0.362	0.778	1.000	0.420	0.708	1.000	0.464	0.963	1.000	0.192
RNIDP	0.200	0.000	0.422	0.296	0.000	0.465	0.313	0.000	0.468	0.120	0.000	0.332	0.857	1.000	0.356
FAMOWN	0.095	0.060	0.088	0.237	0.132	0.301	0.083	0.000	0.146	0.081	0.000	0.103	0.236	0.210	0.193
INSTOWN	0.290	0.300	0.290	0.094	0.000	0.176	0.230	0.149	0.239	0.194	0.160	0.174	0.122	0.075	0.174
STATEOWN	0.016	0.000	0.025	0.000	0.000	0.000	0.102	0.000	0.213	0.126	0.000	0.237	0.000	0.000	0.000
BLOCKOWN	0.909	1.000	0.302	0.704	1.000	0.465	0.911	1.000	0.288	0.833	1.000	0.381	0.889	1.000	0.320
AUDOPIN	0.800	1.000	0.422	0.370	0.000	0.492	0.889	1.000	0.318	1.000	1.000	0.000	0.926	1.000	0.267
REPTIME	1.745	1.698	0.148	1.668	1.699	0.210	1.489	1.556	0.253	1.506	1.623	0.269	1.610	1.623	0.205
BIG4	1.000	1.000	0.000	0.630	1.000	0.492	0.889	1.000	0.318	0.542	1.000	0.509	0.593	1.000	0.501
AUDITSWITH	0.100	0.000	0.316	0.259	0.000	0.447	0.156	0.000	0.367	0.333	0.000	0.482	0.185	0.000	0.396
LEVG	0.008	0.002	0.011	0.095	0.000	0.137	0.271	0.292	0.198	0.033	0.000	0.091	0.024	0.000	0.047
ROA	0.102	0.094	0.049	0.006	0.008	0.085	0.031	0.010	0.060	0.044	0.046	0.047	0.091	0.080	0.117
CFO	0.072	0.076	0.082	0.025	0.020	0.064	0.039	0.023	0.082	0.060	0.044	0.089	0.108	0.112	0.132
SIZE	8.928	8.971	0.356	9.092	8.882	0.844	9.931	9.775	0.621	9.680	9.557	0.343	8.733	8.842	0.332
COMPLEX	1.000	1.000	0.000	0.571	1.000	0.504	0.536	1.000	0.503	0.286	0.000	0.460	0.313	0.000	0.471
AUDSPEC	0.700	1.000	0.483	0.296	0.000	0.465	0.069	0.029	0.118	0.458	0.000	0.509	0.370	0.000	0.492

In terms of royal family members, the result shows a statistically positive and significant level of (P >0.10) with earnings management in all industries that leads us to conclude that the presence of royal family members on boards of directors increases earnings management.

As Table 8.15 shows, inconsistent with the expectation, but consistent with the main result, state-ownership seems to increase earnings management in all industries. Overall, in relation to ownership structure, the results are not consistent with agency theory which suggests that lower opportunistic earnings management is associated with the existence of large shareholders (Jensen and Meckling, 1976), but they are consistent with results obtained by Chen *et al.* (2006) and Firth, (2007) using Chinese data, which suggests that no type of ownership structure, even state-ownership, has an effect on constraining earnings management.

Among the control variables, apart from the building industry, the findings are consistent with the main results that indicate a negatively significant relationship (P>0.10) between firm size and earnings management. This result supports the study by Becker *et al.* (1998) who suggest that large firms have less motivation to manage earnings since they are subjected to more monitoring by investors and financial analyst. As concluded in the main results, none of the other variables seem be effective relative to industry.

3- Findings for the second model according to industry

Table 8.16 (See page 247) reveals the findings of regression analysis relative to industry for the second model. As the table indicates, contrary to expectations all audit committee characteristics appear to be ineffective in constraining earnings management in all industries. These findings seem to show that there is no meaningful direct relationship between earnings management and the presence of an audit committee which has been suggested by prior studies such as (Klein, 2002) or that the audit committee's role prevents fraudulent accounting statements as well as suggesting, according to agency theory, that the role of the audit committee is to monitor and oversee the integrity of financial reporting.

Table (8.15) Summary of Results for First Model Relative to Industry

	BUILDING			INDUSTRIAL			FOOD			RETAIL			REGULATED		
DAC	Coef.	z	P>z	Coef.	z	P>z	Coef.	z	P>z	Coef.	z	P>z	Coef.	z	P>z
Outside	-0.030	-1.650	*	-0.029	-1.620	*	-0.030	-1.650	*	-0.030	-1.630	*	-0.030	-1.650	*
BRDSIZE	-0.012	-2.300	**	-0.012	-2.350	***	-0.012	-2.380	***	-0.012	-2.310	**	-0.012	-2.330	**
BRDMEET	-0.010	-2.140	**	-0.010	-2.180	**	-0.010	-2.170	**	-0.010	-2.150	**	-0.010	-2.150	**
RFAMILY	0.019	1.540	*	0.018	1.500	*	0.019	1.550	*	0.018	1.510	*	0.018	1.510	*
Non-DUAL	-0.023	-1.110		-0.020	-0.980		-0.025	-1.220		-0.022	-1.080		-0.022	-1.090	
RNEXIST	-0.011	-0.470		-0.011	-0.460		-0.014	-0.600		-0.011	-0.460		-0.013	-0.520	
RNIDP	-0.042	-2.350	***	-0.041	-2.290	**	-0.040	-2.260	**	-0.042	-2.340	***	-0.041	-2.310	**
FAMOWN	0.054	1.320		0.055	1.350		0.056	1.380		0.052	1.290		0.051	1.250	
INSTOWN	0.061	1.350		0.058	1.290		0.052	1.150		0.062	1.360		0.060	1.330	
STATEOWN	0.154	2.350	**	0.155	2.380	***	-0.145	2.230	***	0.155	2.370	**	0.154	2.350	***
MANGOWN	0.025	0.640		0.024	0.610		0.027	0.680		0.025	0.620		0.026	0.670	
BLOCKOWN	0.008	0.340		0.008	0.350		0.008	0.350		0.008	0.350		0.008	0.370	
BIG4	-0.001	-0.060		-0.001	-0.070		0.000	-0.010		-0.001	-0.070		-0.001	-0.040	
LEVG	0.000	0.000		-0.003	-0.040		-0.008	-0.120		-0.001	-0.020		-0.003	-0.050	
ROA	0.024	0.200		0.030	0.250		0.035	0.300		0.021	0.180		0.014	0.120	
CFO	0.243	2.530		0.231	2.390		0.219	2.290	***	0.243	2.530		0.245	2.550	
SIZE	-0.028	-1.520		-0.028	-1.510	*	-0.023	-1.260	*	-0.028	-1.520	*	-0.027	-1.470	*
COMPLEX	0.008	0.510		0.008	0.520		0.007	0.430		0.008	0.490		0.008	0.470	
INDUSTRY	-0.008	-0.460		-0.017	-1.110		0.044	2.070	**	0.008	0.380		-0.012	-0.450	
_cons	-0.030	3.520	***	0.524	3.550	***	0.479	3.230	***	0.519	3.510	***	0.515	3.470	***
AdjR-2	14%			15.05%			15.08%			14.57%			14.77%		
Wald-Chi	54.95***			56.14***			59.73***			54.87 ***			54.90***		

Notes: indicate significant at * 0.001, ** 0.05, * 0.10**

Contrary to studies examining the effect of external audit factors on earnings management, which found a significant relationship between external audit and earnings management, the findings according to industry seem to show that there is no meaningful direct relationship between the variables of external audit factors proposed by prior studies (Mohd-Sulaiman, 2008; Krishnan, 2003 and DeAngelo 1981 and earnings management. Only auditor opinion is found to be negatively associated with earnings management.

Regarding ownership structure, the result shows that family ownership is positively associated with the earnings management indicator in all industries. This result is consistent with the view that family control may lead to expropriating minority shareholders' interests (Jaggi *et al*., 2009). Additionally, state-owned structure is found to be positively associated with earnings management in all industries in the second model. This result is not consistent with the assertion of the agency theory which proposes that lower opportunistic earnings management is associated with the existence of large shareholders (Jensen and Meckling, 1976; Comes, 2000).

Among the control variables, only size and BRDINDP are found to be significantly related to DAC. Also, CFO is shown to be significantly related to DAC in three industries. Additionally, board independence as a control variable seems to be significantly associated to DAC.

Table (8.16) Summary of Results for Second Model According to Industry

	BUILDING			INDUSTRIAL			FOOD			RETAIL			REGULATED		
DAC	Coef.	z	P>z	Coef.	z	P>z	Coef.	z	P>z	Coef.	z	P>z	Coef.	z	P>z
ACINDEP	-0.013	-0.480		-0.009	-0.350		-0.012	-0.450		-0.011	-0.420		-0.011	-0.400	
ACSIZE	-0.003	-0.210		-0.004	-0.290		-0.003	-0.250		-0.003	-0.230		-0.003	-0.220	
ACMEET	-0.004	-1.040		-0.004	-1.080		-0.004	-1.060		-0.004	-1.030		-0.004	-0.990	
ACEXPERT	-0.001	-0.040		0.001	0.070		-0.001	-0.050		0.000	-0.020		-0.001	-0.070	
BIG4	-0.011	-0.510		-0.009	-0.440		-0.008	-0.360		-0.011	-0.500		-0.010	-0.480	
AUDSPEC	-0.011	-0.520		-0.013	-0.650		-0.015	-0.730		-0.011	-0.540		-0.011	-0.540	
AUDOPIN	-0.050	-2.110	**	-0.050	-2.120	*	-0.053	-2.230	**	-0.050	-2.100	**	-0.050	-2.110	**
Timeliness	0.001	0.040		-0.004	-0.110		-0.003	-0.080		0.000	-0.010		0.000	0.000	
AUDSWITCH	-0.011	-0.590		-0.011	-0.620		-0.010	-0.520		-0.011	-0.620		-0.012	-0.640	
FAMOWN	0.076	1.870	*	0.077	1.890	**	0.080	1.970	*	0.075	1.820	**	0.074	1.810	*
INSTOWN	0.072	1.550	*	0.071	1.530	*	0.064	1.380		0.073	1.560	*	0.072	1.540	*
MANGOWN	0.013	0.310		0.011	0.270		0.015	0.360		0.012	0.300		0.013	0.330	
STATEOWN	0.200	3.210	**	0.201	3.230	***	0.193	3.110	***	0.201	3.220	**	0.201	3.220	***
BLOCKOWN	0.009	0.410		0.009	0.410		0.010	0.430		0.009	0.420		0.010	0.430	
BRDINDP	-0.031	-1.700	*	-0.030	-1.680	*	-0.032	-1.770	*	-0.031	-1.700	*	-0.031	-1.700	*
LEVG	0.049	0.700		0.041	0.590		0.039	0.560		0.046	0.650		0.046	0.660	
ROA	0.017	-0.140		0.017	-0.140		0.008	-0.070		0.024	-0.200		0.027	0.220	
CFO	0.245	2.520	**	0.234	2.390		0.221	2.270	**	0.246	2.530	**	0.248	2.540	
SIZE	-0.045	-2.440	**	-0.044	-2.400	**	-0.039	-2.130	*8	-0.045	-2.430	***	-0.045	-2.400	***
COMPLEX	0.006	0.360		0.006	0.380		0.005	0.280		0.006	0.350		0.006	0.350	
Industry	-0.010	-0.590		-0.020	-1.220		0.048	2.240	**	0.007	0.300		-0.006	-0.230	
_cons	0.566	3.510	***	0.572	3.550	***	0.517	3.200	***	0.563	3.490	***	0.561	3.460	***
AdjR-2	12.77%			14.06%			13.09%			12.69%			12.68%		
Wald-Chi	45.66***			51.89***			46.98***			45.37 ***			45.32***		

Notes: indicate significant at * 0.001, ** 0.05, * 0.10**

8.6.4 Parametric Test (OLS), pooled test results, and non-linear test

It is widespread practice to use non-parametric tests in earnings management. This current study employs a non-parametric test since the data did not meet parametric test conditions. As mentioned earlier, the assumptions of OLS regression were argued and GLS regression was considered to be more relevant for this research. Previous studies emphasise that the three assumptions of OLS tests (normality, homoscedasticity, and linearity) should be provided before using parametric tests. Habbash, (2010) states that numerous studies assess the effect of samples with non-normal distributions and unequal variances on the values of parametric tests. The findings presented by him suggest that violation of these two assumptions generally has a slight effect on the values of these tests. On the other hand, many studies claim that parametric tests could be applied with ordinal variables because tests apply to numbers and not to what those numbers relate to (Wilcox, 1987).

Table 8.17 (See page 250) presents the findings of the first and second models according to parametric tests. A number of studies (e.g. Peasnell *et al.*, 2005; Davidson *et al.*, 2005; Abdul Rahman and Ali, 2006; Benkel *et al.*, 2006 and Jaggi *et al.*, 2009) used the parametric test even though their data did not meet parametric test conditions and they noted that in their limitations.

Homogeneity of variance of the residuals is a key assumption for OLS regression that plays a vital role in giving the model more credibility; therefore, any non-constant of variance of the residuals leads to heteroskedasticity. One appropriate method to treat heteroskedasticity is to adapt Robust Standard Errors that addresses the issue of errors that are not independent and identically distributed. Clearly, applying Robust Standard Errors cannot correct coefficient estimates provided by OLS, but they may change the standard errors and significance result.

Generally, following Dimitropoulos and Asteriou (2010), as Table 8.17 shows a parametric test using Robust Standard Errors OLS with fixed effect used as a robustness check of the main findings for the two models. Statistically, apart from institutional ownership in the second model found to be significant with earnings management, there is no variation in results between the primary analysis adopting the non-parametric test and the findings of the parametric test for the two models. Additionally, R square value is found to be quite similar and the findings also show approximately the same level of significance and coefficients for most variables compared to the main results.

Another sensitivity analysis used in the current study is the pooled test. The primary tests apply a panel data test; thus, in order to check the sensitivity of findings a pooled test that assumes that all observations have taken place at the same time. This analysis uses a panel of a firm-level, fixed effects specification. Table 8.18 (See page 251) provides the findings of the pooled test. The findings are considerably similar to panel data-cross sectional.

Finally, in regression analysis, there is a dependent variable and more independent variables that are related to it. The relation between them can be expressed by a linear equation, such as: $\mathbf{y = a + bx}$. The previous findings are expressed by linear regression; however; Table 8.19 (See page 252) presents the findings according to non-linear regression between variables. Generally, the results do not reflect a significant indication for using non-linear regression which is quite similar to linear regression.

Table (8.17) Parametric Test (OLS) Regression

First Model				Second Model			
DAC	**Coef.**	**t**	**P>t**	**DAC**	**Coef.**	**t**	**P>t**
BRDINDP	-0.030	-1.650	*	**ACINDEP**	-0.010	-0.380	
BRDSIZE	-0.012	-2.290	**	**ACSIZE**	-0.002	-0.160	
BRDMEET	-0.010	-2.010	***	**ACMEET**	-0.003	-0.770	
RFAMILY	0.019	1.540	*	**ACEXPERT**	-0.003	-0.140	
DUAL	-0.021	-1.040		**BIG4**	-0.011	-0.510	
RNEXIST	-0.006	-0.230		**AUDSPEC**	-0.010	-0.470	
RNIDP	-0.041	-2.320	*	**AUDOPIN**	-0.049	-2.040	**
FAMOWN	0.054	1.330		**REPTIME**	-0.008	-0.220	
INSTOWN	0.063	1.390		**AUDSWITCH**	-0.014	-0.750	
STATEOWN	0.154	2.350	***	**BRDINDP**	-0.031	-1.680	*
MANGOWN	0.029	0.730		**FAMOWN**	0.075	1.840	**
BLOCKOWN	0.007	0.330		**INSTOWN**	0.076	1.630	*
BIG4	0.000	-0.020		**MANGOWN**	0.016	0.400	
LEVG	0.009	0.140		**STATEOWN**	0.200	3.210	***
ROA	-0.016	-0.130		**BLOCKOWN**	0.009	0.410	
CFO	0.265	2.730		**LEVG**	0.054	0.770	
SIZE	-0.028	-1.530	*	**ROA**	-0.063	-0.510	
COMPLEX	0.008	0.490		**CFO**	0.272	2.750	
_cons	0.511	3.450	***	**SIZE**	-0.046	-2.480	***
				COMPLEX	0.007	0.430	
				_cons	0.577	3.570	***
Adj R-2	14.65%			**Adj R-2**	12.58%		
F-statistics	35.31***			**F-statistics**	31.31***		

Table (8.18) Pooled Regression

First Model				Second Model			
DAC	Coef.	t	P>t	DAC	Coef.	t	P>t
OUTSIDE	-0.030	0.018	*	ACINDEP	-0.011	0.015	
BRDSIZE	-0.012	0.005	**	ACSIZE	-0.003	0.004	
BRDMEET	-0.010	0.006	***	ACMEET	-0.004	0.020	
RFAMILY	0.019	0.015	*	ACEXPERT	-0.001	0.019	
DUAL	-0.022	0.017		BIG4	-0.010	0.027	
RNEXIST	-0.012	0.029		AUDSPEC	-0.050	0.030	
RNIDP	-0.041	0.016	*	AUDOPIN	-0.050	0.030	**
FAMOWN	0.053	0.042		TTIMELIENSS	-0.012	0.017	
INSTOWN	0.060	0.040		AUDSWITCH	-0.031	0.016	
STATEOWN	0.155	0.081	***	BRDINDP	-0.031	0.016	*
MANGOWN	0.026	0.042		FAMOWN	0.076	0.044	**
BLOCKOWN	0.008	0.022		INSTOWN	0.013	0.047	*
BIG4	-0.001	0.018		MANGOWN	0.013	0.047	
LEVG	-0.001	0.053		STATEOWN	0.010	0.022	***
ROA	0.021	0.165		BLOCKOWN	-0.010	0.023	
CFO	0.243	0.159		LEVG	0.048	0.060	
SIZE	-0.028	0.018	*	ROA	-0.024	0.175	
COMPLEX	0.008	0.016		CFO	0.247	0.162	
_cons	0.520	0.141	***	SIZE	-0.045	0.018	***
				COMPLEX	0.006	0.015	
				_cons	0.565	0.155	***
Adj R-2	14.72%			Adj R-2	12.67%		
F-statistics	40.30***			F-statistics	32.31***		

Table (8.19) Non-linear Analysis

First Model				Second Model			
DAC	Coef.	z	P>z	**DAC**	Coef.	z	P>z
OUTSIDE	-0.032	-1.79	**	**ACSIZE**	-0.0085	-0.68	
BRDSIZE	-0.011	-2.16	**	**ACMEET**	-0.004	-1.01	
BRDMEET	0.190	2.04	**	**ACEXPERT**	-0.0071	-0.37	
RFAMILY	-0.071	-0.43	*	**AUDSPEC**	-0.0111	-0.53	
DUAL	-0.023	-1.14		**ACINDEP**	-0.008	-0.32	
RNEXIST	-0.012	-0.53		**AUDOPIN**	-0.0449	-1.84	**
RNIDP	-0.038	-2.14	**	**TIMELIENSS**	-0.0003	-0.01	
FAMOWN	0.102	0.81		**AUDSWITCH**	-0.01261	-0.68	
N.FAMOWN	-0.038	-0.39		**FAMOWN**	0.080587	0.63	*
INSTOWN	-0.025	-0.18		**N.FAMOWN**	-0.00597	-0.06	
N. INSTOWN	0.062	0.61		**INSTOWN**	-0.00633	-0.04	
STATEOWN	0.207	1.41	**	**N. INSTOWN**	0.055894	0.52	
N. STATEOWN	0.035	0.34		**STATEOWN**	0.341251	2.47	**
MANGOWN	0.016	0.64		**N. STATEOWN**	-0.11483	-1.14	
N. MANGOWN	-0.149	-1.25		**MANGOWN**	0.146087	1.08	
BLOCKOWN	0.184	1.4		**N. MANGOWN**	-0.11857	-0.96	
N.BLOCKOWN	-0.193	-1.03		**BLOCKOWN**	0.241251	2.17	
BIG4	-0.001	-0.08		**N.BLOCKOWN**	-0.21483	-1.24	
LEVG	0.004	0.07		**BIG4**	-0.01365	-0.63	
ROA	0.030	0.26		**LEVG**	0.044513	0.63	
CFO	0.230	2.38		**ROA**	-0.03704	-0.31	
SIZE	-0.03	-1.66	**	**CFO**	0.251571	2.57	
COMPLEX	0.010	0.63		**SIZE**	-0.04591	-2.43	*
_cons	0.562	3.69	***	**COMPLEX**	0.011116	0.64	
				_cons	0.582709	3.51	***
Adj R-2	14%			Adj R-2	12%		
Wald-Chi	53.19***			Wald-Chi	45.66***		

8.7 CONCLUSION

The objective of this chapter has been to examine statistically the relationship between earnings management and internal/external corporate governance characteristics, mainly boards of directors, audit committees, audit quality factors, and ownership structure. The expectation of beneficial external and internal corporate governance practices constraining opportunistic earnings management activities was, to a large extent, found to be inaccurate in Saudi Arabia. All internal corporate governance variables apart from outside director, board size and board meetings examined in this research have no significant effect on earnings management. With the exception of auditor opinion, none of the audit quality factors and ownership structure affects earnings management. Moreover, ownership concentration was not effective in constraining earnings management. Accordingly, most findings are not consistent with agency theory's prediction.

One plausible explanation for the insignificant relationship may be that audit committees are less responsive to their duties and, indeed, less attentive to controlling needs. In respect of external audit factors, audit quality faces a hard time since many factors, such as monopoly of audit services by a few audit firms and illegal competition between audit firms are rather effective. Additionally, since there is weak investor protection in Saudi Arabia the concentration of ownership structure is less likely to be a monitoring mechanism. In addition to that, corporate governance mechanisms in Saudi Arabia are at a preliminary phase and there is a lack of knowledge of the importance of corporate governance; thus, corporate governance needs more time to be effective in the near future. Additionally, the concept of corporate governance in Saudi Arabia is still quite unclear.

In terms of a theoretical explanation, the findings may be referred to institutional theory which predicts that companies might adopt practices or regulations as a result of coercion from a legislator who imposes some practices in order to improve organizational effectiveness. However, there is no prediction that the adoption of these regulations will improve organizational effectiveness.

Chapter Nine:
SUMMARY AND CONCLUSION

9.1 INTRODUCTION

The primary purpose of this thesis is twofold. Firstly, it aims to investigate the motivations and techniques of aggressive earnings management practices in Saudi Arabia. To achieve that, a questionnaire survey is used for primary data collection and semi structured interviews as support. Secondly, it aims to investigate the role of corporate governance and external audit on constraining manipulation or aggressive earnings management. Logistic regression is mainly used to conduct the investigation and questionnaire survey and semi-structured interviews are adopted as a supplementary tool in order to obtain a deep understanding of the phenomena. This thesis is expected to contribute to the existing literature by providing new evidence from a country characterized by a typical legal system, regulations, and environment.

Accordingly, this thesis has provided a comprehensive view of prior studies that have discussed earnings management practices and the role of corporate governance, ownership structure and external audit factors in constraining manipulation. Moreover, an overview of Saudi Arabia has been introduced to provide an understanding of the fundamental underlying issues in order to help the researcher to employ some determinants and measurements; then the focus of this research is to obtain an understanding regarding earnings management practices and the role of monitoring mechanisms in mitigating manipulation. The thesis also reviews the different theories that could provide a scientific base for controlling earnings management and offers a conceptual framework showing the relationship between monitoring mechanisms and aggressive earnings management. It employs agency theory as the main theory for its argument because agency theory is the most relevant theory to the research questions of this study. The literature related to the effectiveness of corporate governance on earnings management conceives that the board of directors is the apex of internal corporate governance and the main means of decreasing agency problems by aligning the interests of shareholders with managers' interests. Additionally, agency theory predicts that the board of directors and its committees will enhance the integrity of their financial reporting through monitoring management. Moreover, internal corporate governance and external auditing as monitoring costs on one hand, and earnings management as residual costs, converge in agency cost. Moral hazard is caused by different factors such as firm size and its complexity which lead to difficulty in monitoring which in turn increases agency cost; thus, it plays a role, as a monitoring mechanism, in reducing agency cost. In terms of ownership structure, previous studies suggest that agency costs increase as firms move from a single owner/single manager ownership structure to more complicated ownership structures and suggest that agency costs are significantly higher when firms are not managed by owners. On the other hand, this thesis does not disregard institutional theory which has been helpful in interpreting some of the findings. Previous studies also suggest that using agency theory alone in the examination of duality and performance does not adequately explain the effect. Moreover, they confirm that institutional theory and agency theory are complementary approaches to corporate governance effectiveness; so, using both as a framework might be helpful in providing a deeper understanding of corporate governance and board functions.

Regarding methodological process, this study will contribute to the literature by using combined methods (quantitative and qualitative) which may not have been adopted previously and will attempt to examine new characteristics of monitoring mechanisms.

Overall, this thesis has provided findings that draw attention to earnings management practices and the role of monitoring mechanisms in Saudi Arabia. Chapters Seven and Eight report the findings of the questionnaire, interviews survey, and secondary data analysis respectively and this chapter presents the summary of the findings and the conclusion. This chapter is organised as follows: section 9.2 provides a review of the findings. Section 9.3 outlines potential limitations, while section 9.4 gives the implications and suggests areas of future research. Finally, section 9.5 provides areas for future research.

9.2 REVIEW OF THE FINDINGS

9.2.1 Questionnaire Survey and Semi-Structured Interview

9.2.1.1 Earnings management practices

9.2.1.1.1 Earnings management motivations

The investigation into earnings management motivations in Saudi Arabia is the first of this study's objectives. Accordingly, the following hypothesis is addressed:

H1: *There is a significant difference among respondents regarding earnings management motivations in Saudi Arabia.*

The findings of the questionnaire survey reveal that the above hypothesis is true, confirming that there is a significant difference among respondents regarding motivations for earnings management in Saudi Arabia. The Kruskal-Wallis analysis of respondents' perceptions reveals that there are significant differences in perceptions with regard to increasing the amount of Zakat, increasing the amount of remuneration, increasing share price, reducing buyout compensation and retaining stable performance. These statistically significant differences are outlined in the following table (9.1).

Generally, the results show that there is a consensus (and hence on statistically significant differences) on the following **four main incentives** for Saudi managers to manage earnings: ***to increase the amount of remuneration, to report a reasonable profit and avoid loss, to obtain a bank loan and to increase share price***. The present findings seem to be consistent with prior studies such as Baker *et al*. (2003); Bergstresser and Philippon (2006); Roychowdhury (2006); Louis and Sun (2008) and Kamel and Elbanna (2010). In addition, the interview survey supports the questionnaire survey's findings. Interestingly, the interviews survey shows that ownership structure and company size may be crucial factors in determining the motivations in Saudi Arabia.

Theoretically, previous motivations may be justified by agency theory, as an economic model of behaviour, which expects that, as long as the objectives of the principal and agent are aligned, the agent will attempt to maximize the objectives of the principal. However, when their objectives are conflicted, agency theory views that the agent will attempt to maximize his/her self-interest over the principal's interests. According to institutional theory, earnings management incentives may be effected by formal or informal pressure, and the change created by organisations in order to model themselves on other organisations.

Table: (9.1) The Significant Differences in Respondents' Perceptions Regarding Motivations

Motivation	Board of directors	Sub-committee	External auditor	Academic Staff
1- To increase the amount of Zakat	D. Agree	D. Agree	Moderate	Moderate
2- To increase the amount of remuneration	Agree	Agree	Moderate	Agree
3- To reduce buyout compensation	Moderate	S. Agree	Moderate	Moderate
4- To retain stable performance	S. Agree	Do not agree	Moderate	Moderate
5-To increase share price	Moderate	Moderate	S. Agree	S. Agree

*S. Agree: strongly agree, Moderate: slightly agree, D. Agree: do not agree

9.2.1.1.2 Earnings management techniques

The investigation into earnings management techniques in Saudi Arabia is the second of this study's objectives. Accordingly, the following hypothesis is addressed:

H2: *There is a significant difference among respondents regarding earnings management techniques in Saudi Arabia.*

The findings of the questionnaire survey show that the above hypothesis is true and confirm that there is a significant difference among respondents regarding earnings management techniques in Saudi Arabia. The findings indicate that the majority (80%) of all four groups of respondents agreed or strongly agreed with seven techniques which they believed were used frequently. These techniques were reflected in overall mean for each technique as follows: ***manipulation of the provision of inventory (4.07); manipulation of the amount of receivable accounts (4.04); manipulation of the amount of depreciation accounts (4.09); manipulation of amount of expenses (4.07); manipulation of sales of assets (4.10); manipulation of internal transactions (4.10); and capitalising rather than expensing expenditure (4.01).*** These findings are consistent with prior literature such as Kamel and Elbanna, (2010); Markarian *et al* (2008); Nigrini *et al* (2005).

In addition, the findings show a significant difference between the groups with regard to manipulation of the provision of inventory, manipulation of the amount of depreciation accounts, manipulation of the amount of revenue; manipulation of the amount of cash flow; manipulation of the amount of reserves. These differences are outlined in the following table (9.2).

Table: (9.2) Significant Differences in Respondents' Perceptions Regarding Techniques

Motivation	Board of directors	Sub-committee	External auditor	Academic Staff
1- Manipulation of the provision of inventory inventory	Moderate	Agree	S. Agree	Agree
2- Manipulation of the amount of depreciation accounts	S. Agree	Moderate	Moderate	S. Agree
3- Manipulation of the amount of revenue	Moderate	Agree	Agree	Moderate
4- Manipulation of the amount of cash flow	Agree	Moderate	Moderate	Agree

*S. Agree: strongly agree, Moderate: slightly agree, D. Agree: do not agree

Investigation with the interview participants indicates additional evidence and information with regard to earnings management techniques in Saudi Arabia. For instance, one interviewee from among the academics expressed his concerns about Saudi accounting standards. Another interviewee suggested that the motivation for earnings management determines the technique.

These findings are not surprising since agency theory predicts that a separation between ownership and management encourages managers (agents) to act in an opportunistic manner in order to increase their personal wealth at the expense of the owners (principal) of an organisation (Jensen and Meckling, 1976). Therefore, prior studies indicate that the contract between agent and principal should comprise bonding and monitoring provisions that can be beneficial in reducing agency costs. Only positive accounting theory shows that discretionary accounting accrual choices have been employed as an instrument to manipulate earnings (Aljifri, 2007).

9.2.1.2 Internal and external corporate governance

9.2.1.2.1 Internal corporate governance

Questionnaire respondents were shown a number of board characteristics that might constrain earnings management. These characteristics were mainly derived from the previous literature as discussed earlier. The findings indicate that more than 80% of the respondents viewed that frequent meetings, large board size, a high proportion of outside directors and separation between the position of chairperson and CEO are key characteristics of boards of directors in constraining earnings management. However, the existence of royal family members on the board was not seen as a possible factor in constraining earnings management.

In terms of audit committee characteristics, the questionnaire survey reveals that over three-quarters of respondents agreed or strongly agreed that the following characteristics are useful in restricting earning management: frequent meetings by audit committees (86%), a high proportion of outside directors (89%) and the existence of financial experts (93%). However, less than half (45%) of respondents did not agree that a small audit committee might be effective in reducing earnings management. In relation to remuneration and nomination committee, the majority of respondents showed a low level of agreement compared to audit committee characteristics as being effective in the prevention of earnings management. In addition, the findings of respondents' opinions related to ownership concentration and earnings showed that almost three-quarters of respondents (71%) agreed that controlling shareholders might constrain earnings management. However, this result represents a slightly lower percentage than others.

The Kruskal-Wallis analysis of respondents' perceptions reveals that there are significant differences in perceptions with regard to the role of corporate governance in constraining earnings management. These differences are summarised in Table 9.3.

Table 9.3 The Significant Differences in Respondents Perceptions Regarding Characteristics of Internal Corporate Governance

Motivation	Board of directors	Sub-committee	External auditor	Academic Staff
1- Separation between functions of CEO and chair of board	Agree	S. Agree	Agree	S. Agree
2- Frequent meetings of audit committee	Agree	Agree	moderate	S. Agree
3- Small size of audit committee (no more than 3)	D. Agree	Moderate	D. Agree	D. Agree
4- Sufficient expertise in accounting, auditing and/or finance on audit committee	S. Agree	Agree	Agree	Agree
5- Frequent meetings of remuneration and nomination committee.	Moderate	Agree	D. Agree	Moderate
6 - Small size of remuneration and nomination committee	D. Agree	Moderate	D. Agree	Moderate
7- High proportion of outside directors on remuneration and nomination committee	Agree	Moderate	D. agree	Agree
8- CEO should serve on remuneration and nomination committee	D. Agree	D. Agree	S.D. Agree	D. Agree

*S. Agree: strongly agree. Moderate: slightly agree. D. Agree: do not agree. S.D. Agree: Strongly do not agree.

According to the interview survey, many issues have been raised that may impair the role of internal corporate governance in Saudi Arabia. These issues can be outlined as follows:

1- Corporate governance is modern, a new concept in Saudi Arabia.
2- There is nepotism in selecting members of boards of directors and other committees.
3- Most members, whether on the board or committees, are unaware of their duties and responsibilities toward shareholders.
4- There is weakness in communication between the audit committee and external auditors.
5- The members of the audit committee feel no sense of legal responsibility toward shareholders.
6- There are numerous issues that impair the independence of members that are affected by culture or habits.
7- Although there is a legal separation between the function of CEO and chairman, there is still a strong relationship (friendship or blood relationship) between them that leads to an impairment of the role of chairman, notably in accountability.

In addition, the concentration of ownership is perceived differently by interviewees, which suggests that concentrated ownership may be a monitoring mechanism in some companies but not in others.

9.2.1.2.2 External audit factors

In relation to external audit factors, the majority of respondents (more than 80%) agreed and strongly agreed with many factors, such as: contracting a firm which has high independence and good reputation, contracting a local firm affiliated with Big4, contracting a specialist industry auditor, short auditor tenure with a company, issuing stricter auditing standards and accounting legislations, and issuing deterrent punishments that contribute to reducing earnings management practices. However, there are significant differences between respondents regarding some factors which are outlined in Table 9.4.

Table 9.4: The significant Differences in Respondents' Perceptions Regarding External Audit Factors

Motivation	Board of directors	Sub-committee	External auditor	Academic Staff
1- Contracting a local firm affiliated with the BIG4	Moderate	S. Agree	Moderate	S. Agree
2- Contracting a specialist auditor in industry	S. Agree	Agree	Agree	S. Agree
3- Short auditor tenure with a company	Agree	Agree	Moderate	S. Agree
4-Issuing stricter auditing standards and accounting legislations	Agree	Agree	Moderate	Agree

*S. Agree: strongly agree. Moderate: slightly agree. D. Agree: do not agree. S.D. Agree: Strongly do not agree.

In the case of Saudi Arabia, interviews have revealed underlying issues regarding external auditing that can be summarised as follows:

1- A reduction in audit fees in order to attract more clients.
2- Illegal competition between audit firms.
3- Monopoly of audit services by some audit firms.
4- Violation of auditing standards by some audit firms.
5- A lack of confidence in the performance of Saudi audit firms.

Overall, the findings of the questionnaire survey are more or less consistent with agency theory and the link between the theory and findings on the one hand and the finding of the survey on the other will be discussed in detail in the section on secondary data.

9.2.2 Secondary Data

The objectives of the study are to examine:

1- The relationship between internal corporate governance characteristics, mainly the board of directors and sub-committees characteristics and earnings management practices.
2- The relationship between ownership structure and earnings management practices.
3- The relationship between external audit factors and earnings management practices.

The secondary data mainly attempts to answer the research questions in relation to the above objectives. The discussion of the findings is organised as follows:

9.2.2.1 The role of internal corporate governance

9.2.2.1.1 Board characteristics

The prediction made regarding board characteristics reducing opportunistic earnings management activity was found to be fairly accurate. In other words, most board characteristics (board size, frequency of board meetings, outside directors, remuneration and nomination independence) were found to be negatively associated with earnings management practice. These finding are consistent with agency theory prediction that boards will enhance the integrity of their financial reporting through monitoring management (Peasnell *et al*., 2005).

On the other hand, the number of members of the royal family on the board was found to be positively associated with earnings management. A possible explanation for this positive relationship is that most members of the royal family are managerial owners and their percentage of shares are low; thus, most previous studies found a positive relationship between managerial ownership and earnings management. A study conducted by Warfield *et al*. (1995) found that earnings management is higher when managerial ownership is low. Also, most respondents in the questionnaire and interviews survey do not agree that the existence of members of the royal on the board family will mitigate earnings management. Thus, the study's expectation is not found to be accurate.

Table 9.5: Outline of Hypotheses and Findings according to Board Characteristics

N	Hypothesis	Findings
H1	*There is a negative relationship between outside directors and EM*	Supported and significant at $p < 0.10$
H2	*There is a negative relationship between board size and EM.*	Supported and significant at $p < 0.05$
H3	*The number of board meetings is negatively associated with EM.*	Supported and significant at $p < 0.05$
H4	*There is a negative relationship between the existence of royal family members on the board of directors and EM.*	Not supported and positive at $p < 0.05$
H5	*There is a negative relationship between non-duality and EM.*	Not supported
H6	*There is a negative relationship between the existence of a nomination and remuneration committee and EM.*	Not supported
H7	*There is a negative relationship between nomination and remuneration committee independence and EM.*	Supported and significant at $p < 0.05$

9.2.2.1.2 Audit committee attributes

The prediction made regarding audit committee characteristics reducing opportunistic earnings management practices was found to be inaccurate. None of the audit committee variables examined in this study have a significant association with earnings management. These finding are not consistent with agency theory, but a plausible explanation for the insignificant relationship between audit committee variables and earnings management may be based on institutional theory. This theory suggests that companies might adopt practices or regulations as a result of coercion from a legislator who imposes some practices by force in order to improve organizational effectiveness. However, there is no prediction that the adoption of these regulations will improve organizational effectiveness. Another possible explanation suggested by the interviews survey is that audit committees are seen as ineffective in discharging their monitoring duties due to many reasons such as: nepotism in selecting members, low independence, lack of awareness of legal responsibilities toward shareholders, low payment and working part time.

Table 9.6: Outline of Hypotheses and Findings Regarding Audit Committee

N	Hypothesis	Findings
H8	*There is a negative relationship between audit committee size and earnings management.*	Not supported
H9	*There is a negative relationship between audit committee meetings and earnings management.*	Not supported
H10	*There is a negative relationship between audit committee independence and earnings management.*	Not supported
H11	*There is a negative relationship between financial expertise and earnings management.*	Not supported

9.2.2.2 Ownership structure

The prediction made regarding ownership structure reducing opportunistic earnings management practices was found to be inaccurate. None of the types of ownership examined in this study showed a negative association with earnings management which is not consistent with agency theory. However, family ownership was found to be positively associated with earnings management. A plausible explanation could be offered by agency theory which suggests that majority of ownership might collude with management to expropriate the interests of a minority of shareholders. Moreover, state-ownership was found in both models to be positively associated with earnings management. In other words, signed earnings management findings indicate that state-owned companies tend to manage earnings by decreasing income. A plausible explanation for managing earnings downward is the wish to maintain stock price, avoid political cost or indirectly affect the amount of Zakat. Generally, a potential explanation for a weak role of ownership structure as a monitoring mechanism may be that the nature of ownership in developed countries differs from developing countries not only in the percentage but also in the characteristics such as experience, knowledge and other factors such as efficiency of market, and investor protection make the structure of ownership a monitoring mechanism; however, this may not be the case in developing countries.

Table 9.7: Outline of Hypotheses and Findings according to Ownership Structure

N	Hypothesis	Findings
H12	H12: *There is a negative relationship between board managerial ownership and EM.*	Not supported
H13	H13: *There is a negative relationship between institutional ownership and earnings EM.*	Not supported
H14	H14: *There is a negative relationship between governmental ownership and EM.*	Not supported
H15	H15: *There is a negative relationship between family ownership and EM.*	Not supported
H16	H16: *There is a negative relationship between blockholder ownership and EM*	Not supported

9.2.2.3 External audit factors

The prediction made regarding external audit factors (variables) reducing opportunistic earnings management practices was found to be inaccurate. None of the external audit variables examined in this study, except for auditor opinion, showed a significant association with earnings management. Previous findings are not consistent with agency theory; thus, a plausible explanation for the insignificant relationship between external audit variables and earnings management could be explained by the interview survey's suggestions. The interview survey revealed that the Saudi audit market has suffered from serious and inherent issues such as the reduction of audit fees, illegal competition between audit firms, the monopoly of audit services by a small number of audit firms and violation of auditing standards by some audit firms. All these issues will undoubtedly impair audit quality in Saudi Arabia.

Theoretically, institutional theory may justify the role of external audit as compulsory regulation that imposed by regulator to protect shareholders in Saudi Arabia. However , there is no prediction that the adoption of this regulation will improve organizational effectiveness.

Table 9.8: Outline of Hypotheses and Findings according to External Audit Factors

N	Hypothesis	Findings
H17	**H17**: ***Firms with a BIG4 auditor are likely to be associated with low earnings management.***	Not supported
H18	**H18:** ***Firms with a specialist auditor are likely to be associated with low earnings management.***	Not supported
H19	**H19:** ***Firms with an unqualified opinion report are likely to be associated with low earnings management.***	Supported at $p < 0.10$
H20	**H20:** ***There is a positive relationship between timeliness and earnings management.***	Not supported
H21	**H21:** ***There is a relationship between auditor change and earnings management.***	Not supported

9.3 IMPLICATIONS

The aims of this thesis are to advance the earnings management practices research agenda by describing the motivations and techniques and to examine the corporate governance, external audit, and earnings management practices, and any relationship between them, in the context of Saudi Arabia. Fundamentally, the current study provides new evidence from a developing country that contributes to the existing literature on the effect of monitoring mechanisms on earnings management and on enhancing the quality of reported earnings in general. This section attempts to discuss the implications of the main findings for theory and practice.

9.3.1 Implications for Theory

Prior studies have documented the strong and consistent links between corporate governance and the quality of financial reporting, under agency theory (Jensen and Meckling, 1976), stakeholder and the resource-dependence theory (Undaysankar *et al*. 2003), managerial hegemony (Rahman and Ali, 2006), and institutional theory (DiMaggio and Powll, 1983, but the theories are not without contradictions. Agency theory has been a dominant approach in corporate governance and earnings management practices. Adequate monitoring or control mechanisms need to be established to protect shareholders from management's conflict of interest – so-called agency cost of modern capitalism is the most important implication for corporate governance and external audit stems from agency theory. Accordingly, normative recommendations provided by agency theory such as a majority of outside directors, independent directors, the positions of chairman and CEO should be held by different people or related to external audit such as independence. From a completely different perspective, institutional theory views these mechanisms as practices or regulations resulting from coercion by legislators who impose certain practices in order to improve organizational effectiveness, or as a result of imitation.

In terms of earnings management practices associated with motivation and techniques, numerous theories have presented a clear justification for these practices such as positive theory (Watts and Zimmerman, 1986), agency theory (Rahman and Ali, 2006), and institutional theory (DiMaggio and Powll, 1983). Both theories (agency and institutional theory) have been a focus in the investigation of earnings management practices. In other words, agency theory suggests that the issues related to the separation between ownership and management might lead managers to collude against owners to increase their own personal wealth (Rahman and Ali, 2006). However, institutional theory suggests that earnings management incentives may be affected by formal or informal pressure, and change may be created by an organisation in order to model itself on other organisations (Kury, 2007).

The use of two theories in our investigation in order to interpret the study's findings has been employed due to the fact that Saudi Arabia has a different legal system and religious framework from other countries that could affect the practices of monitoring mechanisms such as internal corporate governance and external audit or the practices of earnings management. Moreover, it appears that the development of corporate governance is another intricate area associated with several factors such as regulation, culture, religion, ownership structure (Mallin, 2007).

The findings reveal that that the four main incentives for Saudi managers to manage earnings are 'to increase the amount of remuneration' 'to report a reasonable profit and avoid loss', 'to obtain a bank loan' and 'to increase share price'. The findings also indicate that only seven statements relating to earnings management that received support from respondents were techniques of earnings management in Saudi companies. Both agency theory and institutional theory may provide a sensible explanation for earnings management practices in Saudi Arabia. For example, to increase the amount of remuneration as motivation for earnings management could be interpreted by agency theory as suggesting that several factors, including job security or increasing personal wealth, may be a catalyst for managers to manipulate reported earnings. In terms of others motivations such as 'to increase share price', 'report a reasonable profit and avoid loss', and 'obtain a bank loan' these may be a result of the formal or informal pressure that comes from the regulator or society as suggested by institutional theory.

Moreover, the expectation of beneficial corporate governance practices and external audit constraining opportunistic earnings management activities was to a large extent found to be inaccurate in Saudi Arabia. That is, no internal corporate governance variables, apart from outside director, board size and board meetings, examined in this research have any significant effect on earnings management. With the exception of auditor opinion, none of the external audit factors and ownership structure affects earnings management. Furthermore, the interview survey shows many issues and interesting findings related to previous investigations such as nepotism, illegal competition, and lack of independence. Generally, the findings are not consistent with agency theory that ownership concentration, audit committee, and external audit might mitigate agency problems leading to reduced agency cost by aligning the interests of controlling owners with those of the company. These findings can be interpreted in relation to the institutional theory that views these mechanisms as practices or regulations resulting from coercion by legislators who impose certain practices in order to improve organizational effectiveness, or as a result of imitation.

Overall, this study provides theoretical validity by suggesting that institutional theory may be more appropriate than agency theory in describing the practices of corporate governance and external audit in developing countries such as Saudi Arabia. In terms of earnings management practices, institutional theory is a complementary theory for agency theory and other theories regarding why managers engage in earnings management.

9.3.2 Professional Implications

The findings could be useful to external auditors, regulators, and investors in their attempts to constrain the incidence of earnings management and enhance the quality of monitoring mechanisms. Accordingly, these findings have implications for regulators such as CMA attempting to increase the quality of financial reporting. In other words, regulators may satisfy investors by providing more effective legal action and imposing penalties on those who commit aggressive earnings management and encourage firms to comply with ethics standards by increasing their awareness of the importance of investor protection. Moreover, these findings may contribute to reducing earnings management practices by identifying motivations and techniques. Therefore, CMA is called on to find solutions to mitigate the motivations and protect financial reporting from techniques used for managing earnings by developing national accounting standards or other regulations.

The findings of this study are also useful for exploring which corporate governance attributes are likely to affect financial reporting quality. In addition, the findings could be helpful to improve and develop the Code of Corporate Governance Practices in Saudi Arabia by revising requirements and applying practical guidelines to maintain the actual and perceived independence of outside directors. Although the findings of the secondary data reveal good performance by members of boards of directors this could be because the board represents the main body of a company; however, the interview survey highlights many issues related to independence, responsibilities, and duties. Thus, action may be taken to enhance the skills and abilities of board members by organising training courses to define their responsibilities toward the integrity of financial reporting and increase their awareness of the importance of investor protection.

In addition, the current findings reveal that audit committees play no effective role in monitoring the integrity of financial reporting; this may refer to some issues suggested by interviewees such as nepotism in selecting members, lack of independence, working part time, less compensation and unclear responsibilities. Thus, these findings also have implications for developing the role of audit committees in Saudi Arabia.

Importantly, these findings show that external auditing also plays an ineffective role in monitoring the integrity of financial reporting; this may be due to many issues indicated by the interview survey such as illegal competition between audit firms, the reduction of audit fees, and the monopoly of audit services by a small number of audit firms. Therefore, the findings have beneficial implications for the development of the Saudi auditing and accounting profession by enhancing the auditor's independence and competence and solving the issues that exist in the Saudi audit market.

The findings demonstrate that there is no relationship between ownership structure and earnings management in Saudi Arabia. This may be due to a lack of awareness and a lack of insight of most investors in the Saudi market in terms of their role or perhaps to the fact that most investors in Saudi prefer short-term investment that does not require great attention. Thus, regulators can improve and enhance the awareness and skills of investors by holding business conferences, on one hand, and at the same time increase the protection of investors in order to create a stable investment environment that leads to long-term investment and increases reassurances.

Overall, this research contributes to the continuing debate on the feasibility of harmonising monitoring mechanisms around the globe. Theoretically in the literature review chapter, and empirically in the findings and discussion chapter, this thesis indicates that the efficiency of monitoring mechanisms differs from country to country, perhaps as a result of different macro and micro economic characteristics such as stock market regulations, disclosure requirements, firms' ownership structures, culture and other factors.

9.4 RECOMMENDATIONS

According to findings presented by this study, it can be concluded that earnings management exists in Saudi Arabia and is expected to remain for the foreseeable future. Accordingly, the regulator can only attempt to constrain it by, for instance, requiring companies to activate the role of internal corporate governance and audit firms by enhancing the audit quality. In general, the following recommendation may contribute to limiting the practices of earnings management and increase the quality of corporate governance and external audit.

1- Develop the Code of Corporate Governance Practices in Saudi Arabia by revising requirements and applying practical guidelines to maintain the actual and perceived independence of outside directors.
2- Increase the awareness of the concept of corporate governance mechanisms and its role in developing the Saudi economy and market.
3- Eliminate obstacles and shortcomings associated with the implementation of internal corporate governance.
4- Enable the CMA to oversee Saudi firms whose financial reporting involves aggressive earnings management or lacks legality by identifying earnings management practices.
5- Accelerate the application of International Financial Reporting Standards (IFRS) in all listed companies in Saudi Arabia which would lead to enhancing the quality of financial reporting and reducing earnings management practices.
6- Activate the role of audit committees by enhancing the skills and abilities of members by organizing training courses to define their responsibilities toward the integrity of financial reporting and increase their awareness of the importance of investor protection.

7- Increase the importance of having financial expertise on audit committees and of having independent members and compulsory communication with external auditors.
8- Enhance the auditor’s independence and competence and solve the issues that exist in the Saudi audit mark.
9- Audit firms should acknowledge their legal responsibilities toward shareholders by increasing the skills and abilities of their audit teams to detect earnings management or any transaction which includes illegal action in financial reporting.
10- Facilitate the vital role of SOCPA in developing the audit market by monitoring the performance of audit firms and holding practical courses in order to offer modern skills to the audit profession.
11- Encourage SOCPA in exploring the issues in the audit market and introducing appropriate solutions. In addition, it is time for Saudi companies to disclose audit service fees and non-audit service fees since this could contribute to resolving the issue of audit fees reduction.
12- Improve and enhance the awareness and skills of investors by holding business conferences, on one hand, and at the same time increase the protection of investors in order to create a stable investment environment that leads to long-term investment and increases reassurances.

9.5 LIMITATIONS

Under systemic stages and qualified supervision, this thesis was undertaken taking into account that the objectives of the research were met and the research question were answered. However, there were certain limitations which may be faced by any study in social science. These study limitations are divided into two categories according to research methods.

9.5.1 Questionnaire and interview survey

Since this thesis was based on a small number of participants and respondents, caution should be applied as the results may be not generalised. Only 15 interviews were conducted and 124 usable questionnaires were returned and analysed; as is normal when adopting such approaches this may not reflect the perspective of the entire population in Saudi Arabia regarding the study’s topic. Moreover, it is difficult to include all board of director and sub-committee members since they work part-time and do not stay in the same place for a company. Accordingly, this study has attempted to select a balanced number of respondents and participants for each group in order to ensure equal findings. Many participants and respondents were not involved in the study's survey due to their lack of awareness and knowledge about corporate governance and earnings management.

Furthermore, some interviewees in developing countries do not like to have their opinions tape-recorded or they are worried if notes are taken during the interview as it appears like an interrogation to them; that is why this research included only 15 interviews. Also, the area of earnings management is a very sensitive topic related to manipulation, so respondents or participants may feel this study to be an indirect investigation which would make many of them very careful or hesitant when answering.

Although attempts were made to explain the objectives of this research, another important limitation related to the questionnaire and semi-structured interview is that they could be deceptive in some cases as interviewees might not wish to reveal their incompetence in providing beneficial information or might not wish give a bad impression of their organisation which may lead them to provide "perfect" answers. Although the questionnaire employed in the study was not long, using a questionnaire may sometimes make some respondents bored, so they may provide random answers to finish quickly rather than thinking about their answers. Another limitation related to the qualitative method is that it can be impressionistic and subjective rather than based on reality or specific fact. The investigation of perceptions is limited to specific listed companies and does not involve financial and insurance companies which are characterized by having special practice and operations. Since Saudi Arabia is a large country, the investigation focuses on the main cities: Jeddah, Riyadh and Dammam which contain the headquarters of most Saudi companies.

9.5.2 Secondary data

Although this study uses the whole population in the Saudi market, some companies are excluded for a number of reasons:

1-Companies which have a lack of disclosure regarding corporate governance or missing data.

2-Companies which operate in the financial and insurance sectors since they have special practices and operations.

Accordingly, the findings can not be generalised to all sectors in Saudi market however, the generalisation is possible in other sectors involved in this study.

In respect of dependent variables, using discretionary accrual models should be treated with caution since this model, as proxy for EM, has many limitations (see methodology chapter page 127). Moreover, the indicator of earnings management is often used as opportunistic rather than informative.

In relation to independent variables, although there are many criticisms of the measurement of audit quality such as Big4 and specialist auditors, this study had no choice due to the lack of disclosure regarding audit fees, non-audit service fees, audit hours and other possible measurements. Indeed, the existing literature suggests that no better measures and previous measurement are used extensively in auditing research. Due to a lack of disclosure this study has ignored the short-term and long-term related to ownership structure.

Some control variables affecting earnings management (corporate governance and external auditing) may not be involved in empirical models; however as the aim of this study is not to examine causality, but rather the association between earnings management and attributes of monitoring mechanisms, the effect of this limitation on the results may be considered to be of minor consequence.

During collecting the data, differences were found in the numbers related to financial statements between the data shown on a company site and that shown in the Saudi market, so the study focused on the data shown in the Saudi market since it is more official and accurate.

Finally, since corporate governance is modern regulation and is in its early phase, findings may not reflect its an effective role in status quo properly.

9.6 AREAS FOR FURTHER RESEARCH

This study makes a considerable contribution to the exploration of earnings management practices in Saudi Arabia and the role of monitoring mechanisms in constraining these practices. However, there are several areas that have not been covered by this research which may useful for further study in Saudi Arabia. Thus, there are numerous possible ways in which the research study as a whole could be extended.

One possible avenue for future research is to examine the motivations and techniques by employing logistic regression in order to provide in-depth understanding of earnings management practices. Moreover, it is recommended that future studies specifically investigate earnings management by banks and financial institutions to obtain a better understanding of manipulation and the role of monitoring mechanisms, especially by those parties following IFRS. Despite not involving compulsory monitoring mechanisms, it might be worthwhile investigating earnings management practices in non-listed companies in Saudi Arabia in order to obtain a comprehensive understanding.

Since corporate governance was in its early stages during the study period, future research is recommended to extend our research by examining the role of corporate governance in the coming years, particularly when most listed companies are fully compliant with the regulations and disclosure.

Finally, investigation of the study topic might be extended to other Gulf countries such as Kuwait, Qatar, Bahrain, UAE, and other Arab countries that have similar characteristics to Saudi Arabia in order to provide more evidence of earnings management and monitoring mechanisms across economies.

Although the research question regarding the role of internal corporate governance in constraining earnings management is mainly answered by database, questionnaires and interviews will be helpful particularly in discussing whether accrual-based models employed in the studies to compute earnings management are complicated by the difficulty of calculating discretionary and non-discretionary accruals (Aljifri, 2007). Moreover, it is argued that where there is a lack of theory, it is difficult to ensure that all variables that influence manipulation or accounting choices are included in one model which means that the findings that obtained from earnings management may not be reliable and accurate (McNichols, 2000; Aljifri, 2007). Accordingly, the findings of the questionnaire and interview will contribute to reinforcing the findings obtained from the secondary data.

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APPENDICES

Table (1) Test of Normality for first group of questions

Questions	Kolmogorov-Smirnov	Shapiro-Wilk
1- To increase the amount of Zakat	.000	.000
2- To increase the amount of remuneration	.000	.000
3- To retain stable dividends	.000	.000
4-To report a reasonable profit and avoid loss	.000	.000
5-To increase the confidence of investors	.000	.000
6- To obtain a bank loan	.000	.000
7- To increase share price	.000	.000
8-To obtain position and reputation in the business market	.000	.000
9- To reduce buyout compensation	.000	.000
10- To fulfil the stock market's expectations	.000	.000
11- To retain stable performance	.000	.000

Table (2) Test of Homogeneity of Variance for first groups of questions

Questions	Levene-Statistics
1- To increase the amount of Zakat	.000
2- To increase the amount of remuneration	.001
3- To retain stable dividends	.02
4-To report a reasonable profit and avoid loss	.75
5-To increase the confidence of investors	.01
6- To obtain a bank loan	.001
7- To increase share price	.004
8-To obtain position and reputation in the business market	.07
9- To reduce buyout compensation	.178
10- To fulfil the stock market's expectations	.436
11- To retain stable performance	.000

Table (3) Test of Normality for second group of questions

Questions	Kolmogorov-Smirnov	Shapiro-Wilk
1- Manipulation of the provision of inventory	.000	.000
2- Manipulation of the amount of receivable accounts	.000	.000
3- Manipulation of the amount of accounts depreciation	.000	.000
4- Manipulation of the amount of various expense maintenance expenses) (such as development costs	.000	.000
5- Manipulation of the amount of revenue	.000	.000
6- Manipulation of the amount of cash flow	.000	.000
7- Manipulation of the amount of reserves	.000	.000
8- Manipulation on sales of assets	.000	.000
9- Manipulation of internal transactions related to business combination	.000	.001
10- Capitalizing rather than expensing expenditure	.000	.000

Table (4) Test of Homogeneity of Variance for second groups of questions

Questions	Levene-Statistics
1- Manipulation of the provision of inventory	.265
2- Manipulation of the amount of receivable accounts	.040
3- Manipulation of the amount of accounts depreciation	.870
4- Manipulation of the amount of various Expense (such as development costs, and maintenance expenses	.040
5- Manipulation of the amount of revenue	.050
6- Manipulation of the amount of cash flow	.000
7- Manipulation of the amount of reserves	.040
8- Manipulation on sales of assets	.039
9- Manipulation of internal transactions related to business combination	.001
10- Capitalizing rather than expensing expenditure	.309

Table (5) Test of Normality for Third group of questions

Questions	Kolmogorov-Smirnov	Shapiro-Wilk
1- Frequent meetings of board of directors	.000	.000
2- Small size of board of directors	.000	.000
3- High proportion of outside directors on board of directors	.000	.000
4- High proportion of shares owned by board of directors	.000	.000
5- Existence of royal family members on the board of directors	.000	.000
6- Separation between functions of CEO and chair of board	.000	.000
7- Shorter CEO tenure	.000	.000
8- Frequent meetings audit committee	.000	.000
9- Small size of audit committee (no more than 3)	.000	.000
10- High proportion of outside directors on audit committee	.000	.000
11- Sufficient expertise in accounting, auditing and/or finance and/or finance on audit committee	.000	.000
12- Frequent meetings of remuneration and nomination committee	.000	.000
13 - Small size of remuneration and nomination	.000	.000
14- High proportion of outside directors on remuneration and nomination committee	.000	.000
15- CEO should not serve on remuneration and nomination committee	.000	.000
16- - Ownership concentration	.000	.000

Table (6) Test of Homogeneity of Variance for Third groups of questions

Questions	Levene-Statistics
1- Frequent meetings of board of directors	.098
2- Small size of board of directors	.005
3- High proportion of outside directors on board of directors	.082
4- High proportion of shares owned by board of directors	.044
5- Existence of royal family members on the board of directors	.001
6- Separation between functions of CEO and chair of board	.012
7- Shorter CEO tenure	.084
8- Frequent meetings audit committee	.017
9- Small size of audit committee (no more than 3)	.179
10- High proportion of outside directors on audit committee	.015
11- Sufficient expertise in accounting, auditing and/or finance and/or finance on audit committee	.000
12- Frequent meetings of remuneration and nomination committee	.000
13 - Small size of remuneration and nomination	.758
14- High proportion of outside directors on remuneration and nomination committee	.000
15- CEO should not serve on remuneration and nomination committee	.000
16- High proportion of family ownership	.000

Table (7) Test of Normality for Forth group of questions

Questions	Kolmogorov-Smirnov	Shapiro-Wilk
1- Contracting with a firm which has high independence and good reputation	.000	.000
2- Contracting with a local firm affiliated with the BIG4	.000	.000
3- Contracting with a specialist auditor in industry	.000	.000
4- Short auditor tenure with a company	.000	.000
5- Issuing stricter auditing standards and accounting legislations	.000	.000
6- Issuing deterrent punishments	.000	.000

Table (8) Test of Homogeneity of Variance for Forth groups of questions

Questions	Levene-Statistics
1- Contracting with a firm which has high independence and good reputation	.000
2- Contracting with a local firm affiliated with the BIG4	.384
3- Contracting with a specialist auditor in industry	.000
4- Short auditor tenure with a company	.000
5- Auditor should be changed after 5 years	.000
7- Issuing stricter auditing standards and accounting legislations	.349
8- Issuing deterrent punishments	.000

Table (9) Descriptive statistics according to largest industries

Variable	MIDIA & PUPLISHING			MULTI-INVESTMENT			PETROCHEMICAL			REAL ESTATE& DEV			RETAIL		
	mean	P50	SD	mean	P50	SD	mean	P50	SD	mean	P50	SD	mean	P50	SD
DAC	0.221	0.162	0.227	0.118	0.065	0.154	0.069	0.029	0.118	0.068	0.028	0.094	0.080	0.056	0.090
BRDSIZE	8.200	8.000	2.573	7.556	8.000	1.649	8.622	9.000	1.762	9.375	9.000	1.245	7.815	7.000	1.777
BRDMEET	4.100	3.500	1.287	3.852	4.000	1.537	4.267	4.000	1.452	5.042	6.000	2.116	3.963	4.000	1.698
MANGOWN	0.353	0.260	0.235	0.115	0.070	0.163	0.073	0.042	0.084	0.206	0.165	0.148	0.306	0.240	0.255
OUTSIDE	0.000	0.000	0.000	0.704	1.000	0.465	0.733	1.000	0.447	0.792	1.000	0.415	0.556	1.000	0.506
RFAMLY	1.000	1.000	0.000	0.704	1.000	0.465	0.222	0.000	0.420	0.333	0.000	0.482	0.259	0.000	0.447
DUAL	0.400	0.000	0.516	0.444	0.000	0.506	0.911	1.000	0.288	0.792	1.000	0.415	0.481	0.000	0.509
ACSIZE	3.000	3.000	0.000	2.889	3.000	0.751	3.267	3.000	0.495	3.458	3.000	0.779	3.074	3.000	0.550
ACMEET	3.300	1.000	4.596	2.481	2.000	2.007	2.733	3.000	1.421	4.375	4.000	2.060	3.222	4.000	1.761
ACINDEP	0.900	1.000	0.316	0.963	1.000	0.192	1.000	1.000	0.000	0.833	1.000	0.381	0.704	1.000	0.465
ACEXPERT	0.200	0.000	0.422	0.556	1.000	0.506	0.933	1.000	0.252	0.708	1.000	0.464	0.407	0.000	0.501
RENEXIST	1.000	1.000	0.000	0.852	1.000	0.362	0.778	1.000	0.420	0.708	1.000	0.464	0.963	1.000	0.192
RNIDP	0.200	0.000	0.422	0.296	0.000	0.465	0.313	0.000	0.468	0.120	0.000	0.332	0.857	1.000	0.356
FAMOWN	0.095	0.060	0.088	0.237	0.132	0.301	0.083	0.000	0.146	0.081	0.000	0.103	0.236	0.210	0.193
INSTOWN	0.290	0.300	0.290	0.094	0.000	0.176	0.230	0.149	0.239	0.194	0.160	0.174	0.122	0.075	0.174
STATEOWN	0.016	0.000	0.025	0.000	0.000	0.000	0.102	0.000	0.213	0.126	0.000	0.237	0.000	0.000	0.000
BLOCKOWN	0.909	1.000	0.302	0.704	1.000	0.465	0.911	1.000	0.288	0.833	1.000	0.381	0.889	1.000	0.320
AUDOPIN	0.800	1.000	0.422	0.370	0.000	0.492	0.889	1.000	0.318	1.000	1.000	0.000	0.926	1.000	0.267
REPTIME	1.745	1.698	0.148	1.668	1.699	0.210	1.489	1.556	0.253	1.506	1.623	0.269	1.610	1.623	0.205
BIG4	1.000	1.000	0.000	0.630	1.000	0.492	0.889	1.000	0.318	0.542	1.000	0.509	0.593	1.000	0.501
AUDITSWITH	0.100	0.000	0.316	0.259	0.000	0.447	0.156	0.000	0.367	0.333	0.000	0.482	0.185	0.000	0.396
LEVG	0.008	0.002	0.011	0.095	0.000	0.137	0.271	0.292	0.198	0.033	0.000	0.091	0.024	0.000	0.047
ROA	0.102	0.094	0.049	0.006	0.008	0.085	0.031	0.010	0.060	0.044	0.046	0.047	0.091	0.080	0.117
CFO	0.072	0.076	0.082	0.025	0.020	0.064	0.039	0.023	0.082	0.060	0.044	0.089	0.108	0.112	0.132
SIZE	8.928	8.971	0.356	9.092	8.882	0.844	9.931	9.775	0.621	9.680	9.557	0.343	8.733	8.842	0.332
COMPLEX	1.000	1.000	0.000	0.571	1.000	0.504	0.536	1.000	0.503	0.286	0.000	0.460	0.313	0.000	0.471
AUDSPEC	0.700	1.000	0.483	0.296	0.000	0.465	0.069	0.029	0.118	0.458	0.000	0.509	0.370	0.000	0.492

Table (10) Descriptive statistics according to years

Variable	2006			2007			2008			2009		
	Mean	Median	SD	mean	Median	SD	Mean	Median	SD	Mean	Median	SD
DAC	0.098	0.034	0.149	0.097	0.064	0.140	0.120	0.058	0.165	0.097	0.081	0.096
BRDSIZE	8.075	8.000	1.795	8.195	8.000	1.739	8.247	8.000	1.761	8.292	8.000	1.666
BRDMEET	4.418	4.000	1.971	4.573	4.000	1.931	4.452	4.000	1.598	4.656	5.000	1.857
MANGOWN	0.170	0.075	0.216	0.174	0.077	0.214	0.179	0.080	0.206	0.189	0.080	0.214
OUTSIDE	0.657	1.000	0.478	0.683	1.000	0.468	0.667	1.000	0.474	0.667	1.000	0.474
RFAMLY	0.507	1.000	0.504	0.463	0.000	0.502	0.441	0.000	0.499	0.438	0.000	0.499
DUAL	0.776	1.000	0.420	0.732	1.000	0.446	0.774	1.000	0.420	0.781	1.000	0.416
ACSIZE	3.015	3.000	0.807	3.134	3.000	0.750	3.108	3.000	0.800	3.198	3.000	0.659
ACMEET	2.657	3.000	2.049	3.073	3.000	2.340	3.301	3.000	2.037	3.771	4.000	2.145
ACINDEP	0.866	1.000	0.344	0.915	1.000	0.281	0.914	1.000	0.282	0.896	1.000	0.307
ACEXPERT	0.627	1.000	0.487	0.659	1.000	0.477	0.688	1.000	0.466	0.688	1.000	0.466
RENEXIST	0.776	1.000	0.420	0.866	1.000	0.343	0.882	1.000	0.325	0.927	1.000	0.261
RNIDP	0.394	0.000	0.492	0.387	0.000	0.490	0.387	0.000	0.490	0.417	0.000	0.496
FAMOWN	0.126	0.000	0.195	0.126	0.000	0.206	0.135	0.000	0.217	0.139	0.000	0.218
INSTOWN	0.110	0.000	0.169	0.132	0.000	0.196	0.156	0.068	0.205	0.163	0.069	0.211
STATEOWN	0.100	0.000	0.200	0.086	0.000	0.184	0.084	0.000	0.184	0.085	0.000	0.183
BLOCKOWN	0.725	1.000	0.450	0.780	1.000	0.416	0.785	1.000	0.413	0.792	1.000	0.408
AUDOPIN	0.853	1.000	0.357	0.878	1.000	0.329	0.785	1.000	0.413	0.875	1.000	0.332
REPTIME	1.650	1.672	0.205	1.588	1.672	0.218	1.570	1.653	0.217	1.526	1.602	0.246
BIG4	0.544	1.000	0.502	0.585	1.000	0.496	0.645	1.000	0.481	0.635	1.000	0.484
AUDITSWITH	0.147	0.000	0.357	0.256	0.000	0.439	0.333	0.000	0.474	0.177	0.000	0.384
LEVG	0.040	0.000	0.090	0.087	0.008	0.145	0.107	0.032	0.147	0.115	0.043	0.152
ROA	0.071	0.055	0.095	0.079	0.061	0.081	0.068	0.066	0.090	0.057	0.042	0.082
CFO	0.081	0.065	0.115	0.080	0.065	0.108	0.083	0.060	0.100	0.098	0.092	0.095
SIZE	9.128	9.066	0.675	9.207	9.136	0.691	9.291	9.243	0.719	9.314	9.255	0.740
COMPLEX	0.385	0.000	0.489	0.448	0.000	0.500	0.469	0.000	0.502	0.469	0.000	0.502
AUDSPEC	0.279	0.000	0.452	0.341	0.000	0.477	0.398	0.000	0.492	0.417	0.000	0.496

Table (11) Stepwise Regression For First Model

BRDINDP	BRDSIZE	BRDMEET	RFAMILY	DUAL	MANGOWN	RNEXT	RNIDP	FAMOWN	INSTOWN	STATEOWN	BLOCKOWN	BIG4	LEVG	ROA	CFO	SIZE	COMPLE	R^2.
-.0436066																		0.02
-0347652	-.055828																	.055
-.0312092	-0151236	-038312																.0574
-.03167798	-0150325	-/0316798	0.062558															.0579
-.0270924	-.0157763	-.0386	.057580	-.0150098														.0596
-.026229	-,01556	-037956	.047581	-.0108455	.0530976													.0655
-.025772	-015274	-.042303	.053903	-0115489	.0580654	-0215602												.0680
-.0279558	-.014435	-.062203	.039478	-0226585	.0630295	-.057487	-.0339245											0.079
-.0285591	-.0285591	-0142076	.031542	-.0197676	.0536083	-0179378	-0339819	.0427585										.0826
0.0281046	-.0142434	-..0059294	.039211	-0202825	.0523761	-.0181545	-.0354727	.03912293	.0187939									.0832
-0321066	-.0148887	-.036725	-.003673	-.278725	.0491012	-.0005935	-.0338797	.0540864	.0384515	-.142424								.0.105
-.0321066	-.O14888	-0108351	.037510	-.0280929	.0522135	-.0011528	-0335941	.056422	.0435665	-.1359083	-.0093136							0.106
-.03108	-.03108	-0143318	.0019255	-.025711	.054944	-.001408	-.0329795	.0596068	.056068	-.1417351	-0076148	-.0119866						.0.107
-0.0295307	-.0145916	-.0145916	.035021	-0264416	.509954	-.0006627	-.325309	.0570041	.0583455	-.0147192	-.0046029	-.0082013	-.069212					0.108
-0.0337432	-0.014704	-.011338	.0111741	-.0236491	0.0364491	-0.010414	-0.0380568	0.0505617	0.0482236	-0.125620	-.0038437	-0064875	-470218	0.211895				.0.119
-.0329002	-.0143992	-0143992	.0118471	-.0208001	.0355191	-.0116513	-.042621	.0437886	.043957	.0994368	-.0009734	-0030641	-.055078	.049345	.022791			0.138
-.0306559	-.0116502	-.0102474	.078412	-.0208038	.027779	-.011486	-0406394	.0556131	.0595822	.1542602.	.0075378	.0004587	.0010156	.026575	.235166	-.02750		0.1441
-.0297	-0.012	-0.010	0.029	-0.022	0.026	-0.012	-0.012	0.053	0.060	-0.155	-0.008	- 0.001	-0.001	0.021	0.243	-0.028	0.008	0.1448

Table (12) Stepwise Regression For second Model

ACSIZE	ACMEET	ACINDEP	ACEPERT	BIG$	ADOPIN	AUDSWITCH	TIMELIE NSS	FAMOWN	INSTOWN	STATEOWN	BLOCKO WN	LEVEG	ROA	CFO	SIZE	COMPLE	AUDSPEC	MANGOWN	BRDINDP	R^2.
-.0250474																				**0.017**
-.0212915	-.004387																			**0.0213**
-.0212432	-.0040516	-.0204042																		**0.0231**
-0180697	-.0030333	-0112495	-.0201414																	**0.0264**
-.0175046	-.002891	-.0112891	-.096645	-.005816																**0.0267**
-.0154491	-.0027451	-.011514	-.087533	-.006778	-.0241543															**.0303**
-0159134	-.002825	-.0028254	-.0178211	-.0094335	-.0235852	-.0197405														**0.033**
-.0142267	-.0023414	-.013247	-.014494	-.0126438	-.0230826	-.0190004	.0216584													**0.0347**
-.14632	-.014632	-.0025287	-0130252	-.0122951	-.0171772	-.0145872	.0174783	.062445												**0.0368**
-.0143938	-.0022626	-.01297	-.011925	-.0188893	-.0253337	-.05082	.015082	0.5911335	.0186603											**0.040**
-.0134325	-.0036413	-.106588	-.0181695	-.0287164	-.0385134	-.0131138	.0017337	.0825328	.0516636	-1283442										**.0594**
-.01129323	-.0037566	-.0116778	-.0175511	-.0276842	-.0369433	-.0136433	-.0019333	. 0845761	.084576	.1222877	-.0082806									**0.0629**
-.0132245	-.0042328	-.0104627	.0135335	-.024171	-.0126767	-.006431	-.0064341	.082075	.0651567	.127587	-.006223	-.067433								**.0666**
-.0136366	-.0037977	-.0108508	-.0125366	-.0268366	-.0454884	-.0105369	.0022434	.0721904	.0590196	.1138661	-.005444	-0422368	.1704584							**0.0708**
-.0133671	-.004267	-.0061611	-.00616	-0236871	-.0451282	-.0134405	.0029602	.0642701	.0525035	.0928119	-.000663	-.0478667	-.0141436	.245322						**0.101**
-.0040623	-.0043558	-.0085046	-.0076655	-.0154857	-.0154856	-.0460352	-.0128187	.0052118	.0757989	.1949106	.0107543	.0484623	-.0359966	.2576261	-.04952					**.1143**
-.004114	-.004114	-.00424	-.009193	-.0081376	-.467616	-.011938	-.0000917	.089468	.0789468	.0770491	.1979442	.011393	-0466221	.0267773	-.05324	0.0116173				**.1159**
-.0052259	-00416267	-.0104861	-0084604	-0123752	-.0084604	-.0474438	-.0020883	.0792249	.0773701	.0792249	.196773	.0111404	-.046679	.02626136	-.048613	.0106566	-.00963			**.1163**
-.0046567	-.004265	-.009577	-.008777	-.13172	-0123348	-.047988	.0762515	.077587	.0775827	.195859	.0092.1	.04446	-058057	.260881	-0475732	.0099199	-0099428	0.01766		**.1170**
-0.011	**-0.003**	**-0.004**	**-0.001**	**-0.017**	**-0.050**	**-0.012**	**- 0.000**	**0.076**	**0.072**	**-0.202**	**-0.010**	**0.048**	**-0.024**	**0.247**	**-0.045**	**0.006**	**-0.011**	**0.013**	**-0.031**	**.1267**

Table (13) Spearman correlations coefficients for First Model

* denote significance at the 0.05 level

	DAC	OUTSIDE	BRDSIZE	BRDMEET	RFAMILY	DUAL	RNEXIST	RNIDP	FAMOWN	INSTOWN	STATEOWN	MANGOWN	BLOCKOWN	BIG4	LEVG	ROA	CFO	SIZE	COMPLE
DAC																			
OUTSIDE	-0.1338*																		
BRDSIZE	-0.1860*	0.1551*																	
BRDMEET	-0.102	0.2471*	0.1507*																
RFAMILY	0.013*	0.044	-0.051	-0.073															
DUAL	-0.062	0.2794*	-0.1411*	0.011	-0.014														
RNEXIST	-0.041	-0.012	0.059	-0.0990	0.049	-0.062													
RNIDP	-0.052	-0.2026*	0.1073*	-0.2481*	-0.011	-0.3314*	0.1411*												
FAMOWN	0.080	-0.041	-0.034	-0.068	0.067	-0.1622*	0.1332*	0.092											
INSTOWN	0.036	-0.090	0.025	-0.093	-0.085	-0.074	0.073	0.2144*	0.2356*										
STATEOWN	0.053	0.225*	0.087	0.4211*	0.1322*	0.1813*	-0.2522*	-0.2368*	-0.1975*	-0.2560*									
MANGOWN	0.091	-0.088	-0.019	-0.011	0.041	-0.1335*	0.1322*	0.1234*	0.2348*	0.1340*	-0.0930								
BLOCKOWN	-0.033	-0.031	0.1481*	-0.046	-0.054	-0.1235*	0.1012*	0.1919*	0.2720*	0.3899*	-0.3392*	0.2473*							
BIG4	-0.051	0.1305*	0.2070*	0.1389*	0.1257*	-0.015	0.013	0.061	0.1832*	0.2374*	0.1198*	0.1705*	0.2055*						
LEVG	-0.031	0.124*	0.041	0.061	-0.063	0.067	-0.012	0.028	-0.004	0.2298*	0.066	-0.029	0.1530*	0.2311*					
ROA	0.1371*	0.082	0.051	0.085	0.2428*	-0.1123*	0.1565*	0.1365*	0.1308*	0.047	0.1283*	0.1931*	0.006	0.076	-0.1121*				
CFO	0.2217*	0.026	0.014	0.050	0.1594*	-0.1000*	0.094	0.1244*	0.089	0.011	0.2403*	0.1111*	-0.103	0.015	-0.05	0.6336*			
SIZE	-0.097*	0.2598*	0.3364*	0.305*	0.068	0.054	-0.109	-0.011	0.070	0.1761*	0.5100*	-0.055	0.1342*	0.3800*	0.4944*	0.002	0.051		
COMPLEX	0.042	-0.043	0.056	0.013	0.1119*	0.011	0.077	0.086	0.1713*	0.075	-0.012	0.1142*	0.071	0.2290*	0.1107*	0.081	-0.041	0.1210*	

Table (14) Spearman correlations coefficients for second Model

	DAC	ACINDEP	ACSIZS	ACMEET	ACEXPERT	BIG4	AUDSPEC	AUDOPIN	REPTIME	AUDSWITCH	BRDINDP	FAMOWN	INSTOWN	MANGOWN	STATEOWN	BLOCKOWN	LEVG	ROA	CFO	SIZE	complex
DAC																					
ACINDEP	-0.0501																				
ACSIZE	-0.1315*	0.042																			
ACMEET	-0.101	0.1100*	0.2955*																		
ACEXPERT	-0.1311*	0.3188*	0.3314*	0.3011*																	
BIG4	-0.057	0.0313	0.1654*	0.1200*	0.1461*																
AUDSPEC	-0.059	-0.071	-0.023	0.044	0.025	0.559*															
AUDOPIN	-0.090	0.023	0.2011*	0.1214*	0.1100*	-0.003	-0.053														
REPTIME	0.049	0.017	-0.061	-0.032	-0.067	0.074	-0.047	-0.22*													
AUDSWITCH	-0.058	0.050	-0.053	-0.027	0.031	-0.1588*	-0.1334*	0.020	0.006												
BRDINDP	-0.1311*	0.076	0.2434*	0.2041*	0.3346*	0.141*	0.044	0.029	0.0070	0.019											
FAMOWN	0.091	-0.0310	0.044	0.027	-0.057	0.18*	0.1104	-0.020	0.084	-0.13*	-0.043										
INSTOWN	0.037	-0.036	-0.019	-0.1334*	-0.061	0.2341*	0.1818*	0.164*	0.057	-0..121	-0.105	0.2234*									
MANGOWN	0.091	-0.080	-0.077	0.003	-0.0420	0.1556*	0.071	0.0650	0.090	-0.089	-0.088	0.2600*	0.1241*								
STATEOWN	0.0580	0.041	0.1369*	0.1942*	0.2140*	0.1232*	0.055	0.13*	0.066	0.004	0.2381*	-0.2098*	-0.2455*	-0.093							
BLOCKOWN	-0.044	-0.087	0.1246*	-0.083	0.010	0.2018*	0.1328*	0.15*	-0.0230	-0.104	-0.031	0.2332*	0.3361*	0.2400*	-0.3349*						
LEVG	-0.039	0.081	0.075	-0.037	0.2236*	0.2351*	0.2065*	0.094	-0.1677*	0.006	0.1209*	-0.006	0.2017*	-0.031	0.065	0.140*					
ROA	0. 1233*	-0.025	0.057	0.003	-0.049	0.076	-0.074	0.2011*	-0.098	-0.094	0.082	0..1123*	0.052	0.2100*	0.1109*	0.007	-0.1244*				
CFO	0.2361*	-0.068	0.021	0.050	-0.057	0.012	-0.096	0.1474*	-0.052	-0.018	0.023	0.085	0.013	0.1324*	0.2389*	-0.105	-0.065	0.6336*			
SIZE	-0.1122*	0.044	0.3319*	0.1567*	0.3009*	0.3991*	0.3788*	0.1800*	-0.007	-0.066	0.2400*	0.073	0.1771*	-0.048	0.5011*	0.1242*	0.840*	0.001	0.054		
COMPLEX	0.035	0.053	0.071	-0.006	0.076	0.2246*	0.038	-0.011	0.1855*	-0.098	-0.041	0.1500*	0.076	0.133*	-0.012	0.073	0.1299*	0.089	-0.041	0.122*	

Questionnaire

On

Investigation into Earnings Management Practices and the Role of Corporate Governance and External Audit in Emerging Markets: Empirical Evidence from Saudi Listed Companies

2010

Dear Sir:

I am a full time PhD student in the Accounting and Finance section of the Business School, university of Durham, United Kingdom. I am currently doing my PhD on the investigation of the role of monitoring mechanisms (corporate governance mechanisms and external auditing) in constraining earnings management as an empirical study in Saudi Arabia. The attached questionnaire, is a significant part of my PhD, is one of the important aims of this questionnaire is to provide empirical evidence on the quality of internal corporate governance mechanisms and external auditing as a safeguard against the manipulation of earnings management.

I am hoping to carry out the questionnaires with you, as an experienced person in this area, to attain a clear image of the role of corporate governance mechanisms in order to identify what needs to be done to improve them. Therefore, I would be extremely grateful if you would contribute toward the successful result of this research, which will hopefully also lead to the improvement of the Saudi market, by completing this questionnaire.

Finally, I wish to confirm that the information and personal opinion that you provide will be treated as confidential. Please accept in advance my best regards and appreciation for your cooperation.
Yours Faithfully,,,,

Salim alghamdi
Tel: 0555695055
Email: Lafy1393@hotmail.com

Section (1): General and Background Information

This questionnaire consists of four sections. This section aims to collect general information about you, your position and your educational background. Please answer by circling the appropriate number.

1-1 What is your position? Please select one

Member of board directors	Member of sub-committees	auditor	Academic Staff
1	**2**	**3**	**5**

1-2 What is your total length of experience in this job?

Less than 1 year	1-5	5-10	10-15	More than 15 years
1	**2**	**3**	**4**	**5**

1-3 What is your highest educational qualification?

Bachelor	Master	PhD	Other*
2	**3**	**4**	**5**

Please specify ....

1-4 What was your major in your highest educational qualification?

Accounting	Finance	Bus-Admin	Economic	Other*
1	**2**	**3**	**4**	**5**

Please specify ....

Section(2):General perceptions of the motivation of earnings management and techniques

2.1 Numerous attempts have been made in accounting literature to detect the real reasons why companies tend to manipulate earnings management. Several causes are given below. In relation to the Saudi business environment, please indicate which of the following statements you agree and disagree with by circling the appropriate number on the following 5-point scale:

Strongly Disagree (SD)	Disagree (D)	Do not Know (N)	Agree (A)	Strongly Agree (SA)

statement	**(SD)**	**(D)**	**(N)**	**(A)**	**(SA)**
1-To reduce the amount of Zkat					
2- To increase the amount of remuneration					
3- To retain stable dividends					
4- To report a reasonable profit and avoid loss					
5- To increase the confidence of investors					
6- To obtain a bank loan					
7- To increase share price					
8- To obtain position and reputation in the business market					
9- To reduce buyout compensation					
10- To fulfil the stock market's expectations					
11- To retain stable performance					
12- Others (s), please specify……………					

2.2 In previous accounting literature, there is agreement on various ways for managers to exert their judgement in specifying the amount of reported earnings. From your experience, to what extent do you agree with the following forms of earnings management in Saudi Arabia? Please indicate which of the following statements you agree and disagree with by circling the appropriate number on the following 5-point scale:

statement	**(SD)**	**(D)**	**(N)**	**(A)**	**(SA)**
1- Manipulation of the provision of inventory					
2- Manipulation of the amount of receivable accounts					
3- Manipulation of the amount of depreciation accounts					
4- Manipulation of the amount of various expenses (such as development costs, maintenance expenses)					
5- Manipulation of the amount of loan interests					
6- Manipulation of the amount of revenue					
7- Manipulation of the amount of cash flow					
8- Manipulation of the amount of reserves					
9- Manipulation on sales of assets					
10- Manipulation of internal transactions related to business combination					
11- Capitalising rather than expensing expenditures					
12- Other (s), please specify………………………					

Section(3): General perception of the role of internal corporate governance mechanisms in constraining earnings management.

In accounting literature, a large number of studies found that corporate governance mechanisms constrain earnings management. Indicate to what extent you agree and disagree that the following actions can reduce earnings management by circling the appropriate number in the following 5-point scale:

statement	(SD)	(D)	(N)	(A)	(SA)
1- Frequent meetings of board of directors					
2- Small size of board of directors					
3- High proportion of outside directors on board of directors					
4- High proportion of shares owned by board of directors					
5- Existence of royal family members on the board of directors					
6- Separation between functions of CEO and chair of board					
7- Shorter CEO tenure					
8- Frequent meetings audit committee					
9- Small size of audit committee (no more than 3)					
10- High proportion of outside directors on audit committee					
11- Sufficient expertise in accounting, auditing and/or finance on audit committee					
12- Frequent meetings of remuneration and nomination committee					
13 - Small size of remuneration and nomination committee					
14- High proportion of outside directors on remuneration and nomination committee					
15- CEO should not serve on remuneration and nomination committee					
16- Ownership concentration					

Section(4): General perceptions of the role of external auditing in constraining earnings management.

The following actions have been recommended by numerous studies to contribute to constraining earnings management. To what extent do you agree with the following actions? Please indicate which of the following actions you agree and disagree with by circling the appropriate number on the following 5-point scale:

statement	(SD)	(D)	(N)	(A)	(SA)
1- Contracting with a firm which has high independence and good reputation					
2- Contracting with a local firm affiliated with the BIG4					
3- Contracting with a specialist auditor in industry					
4- Short auditor tenure with a company					
5- Issuing stricter auditing and accounting standards					
6- Issuing deterrent punishments					
7- Other (s), Please specify……………………					

Thank you very much for your interest

.

Semi-Structured Interview Questions

1. Do you **think** the figures of reported earnings reflect the real image of the profitability of Saudi companies and why?

2. Do you **agree** that Saudi managers tend to manipulate earnings in order to increase their own personal wealth? If yes, could you provide an example of how manipulation can be made?

3. What important actions would you recommend in order to constrain earnings management practices in Saudi Arabia? **Discuss** the following actions:

1- Issuing more accounting legislations
2- Issuing stricter standards
3- Issuing punishments as a deterrent
4- Full commitment of implementation of corporate governance mechanisms
5- contracting with a BIG 4 auditor or local firm affiliated with BIG4
6- Contracting with a specialist auditor
7- Retaining the auditor for long time
8- Greater disclosure
9- Other

4. How do you evaluate the role of the **board of directors** in preventing wrongdoing and errors?

5. How do you evaluate the role of the **audit committee** in preventing wrongdoing and errors?

6. How do you evaluate the role of the **remuneration and nomination committee** in preventing wrongdoing and errors?

7. How do you evaluate the role of **external auditing** in constraining wrongdoing and errors?

8. How do you evaluate the role of **ownership structure** in preventing wrongdoing and errors?

قائمة استقصاء عن

" دور آليات الرقابه في الحد من إدارة الربحية في الشركات المساهمة السعودية "

2010

المكرم ألأخ العزيز:

تحية طيبة وبعد.........

أود أن أحيط سعادتكم علماً بأني أحد طلاب الدكتوراه بجامعة درم بالمملكة المتحدة- كلية إدارة الأعمال، قسم المحاسبة والمالية, وأقوم في الوقت الحالي ببحث عن دور آليات الرقابة (حوكمة الشركات والمراجعة الخارجية) في الحد من إدارة الربحية كدراسة تطبيقية في المملكة العربية السعودية. هذه الاستبانة جزء من رسالة الدكتوراه والتي من أهدافها تقييم مثل هذه الآليات التي أكتسبت موخراً أهمية كبيره خاصة بعد الازمة المالية العالمية، وكذلك حضيت بأهتمام كبير من وزارة التجارة السعودية والجهات ذات العلاقة.

وحقيقةً أنا على أمل أن اقوم بتنفيذ هذه الاستبانة معكم على أساس خبرتكم في هذا المجال من أجل التعرف على هذا الدور حتى يمكن لنا المساهمة في تحسين آلياتها وضمان جودتها. وساكون ممتن لكم في حالة مساهمتكم في تعبئة هذه الاستبانة التي قد تسهم في تطوير السوق السعودي.

أخيرا، أود أن أوكد لكم أنه سيتم التعامل مع المعلومات وأرائكم الشخصية بشكل سري، وتفضلوا بقبول خالص شكري وتقديري.

سالم علي الغامدي
Lafy1393@hotmail.com
عضو هيئة التدريس بجامعة الطائف
0555695055

الجزء الأول: معلومات عامة

تحتوي هذه الاستبانه على أربعة اجزاء•يهدف الجزء الأول من هذا الاستقصاء إلى جمع بيانات عامة عن المستقصى منه تشمل الوظيفة والمؤهلات العلمية، الخبرة الشخصية، لذا أمل منكم الإجابة باختيار الرقم المناسب.

1-1 ماهي وظيفتك الحالية ؟

عضو مجلس إدارة	عضو لجنة (مراجعة أو لجنة المكافآت)	مراجع	عضو هيئة تدريس
1	**2**	**3**	**4**

2-1 ماهي مدة خدمتك في هذه الوظيفة

أقل من سنة	5-1	10-5	15-10	أكثر من 15 سنة
1	2	3	4	5

1- 3 ماهي مؤهلاتك التعليمية الحالية ؟

بكالوريوس	ماجستير	دكتوراه	أخرى
2	3	4	5

أخرى من فضلك حدد..

1- 4 ماهو التخصص العلمي لهذا المؤهل ؟

محاسبة	مالية	إدارة أعمال	اقتصاد	أخرى
1	2	3	4	5

أخرى من فضلك حدد..

الجزء الثاني: التصور العام عن طرق وأساليب إدارة الربحية

2-1 العديد من البحوث المحاسبية توصلت إلى عدد من الأسباب التي قد تدفع العديد من مديري الشركات إلى التحكم في التقدير الشخصي لقيمة الأرباح المنشورة. بالنسبة إلى البيئة السعودية، الرجاء منكم إبداء رأيكم الشخصي عن الحالات الموضوعة أدناه.

لا أوافق بشدة	**لا أوافق**	**لا أعلم**	**أوافق**	**أوافق بشدة**
1	2	3	4	5

الحالة	**لا أوافق بشدة**	**لا أوافق**	**لا أعلم**	**أوافق**	**أوافق بشدة**
1- لتخفيض وعاء الزكاة					
2- لتعظيم المكافأة التي تمنحها الشركة للإدارة التنفيذية					
3- للمحافظة على استقرار التوزيعات النقدية					
4- للتقرير عن أرباح مناسبة وتفادي الخسارة					
5- لزيادة ثقة المستثمرين					
6- لتسهيل الحصول على قرض من البنوك					
7- لزيادة سعر أسهم الشركة في السوق					
8- لتعزيز موقف وسمعة مديري الشركة للاحتفاظ بمناصبهم					
9- للتأثير سلبا على أسعار الأسهم ثم الاستحواذ عليها					
10- لتلبية توقعات سوق الاسهم السعودي					
11- للحصول على أداء مالي مستقر					
12- أخرى (الرجاء ذكرها)					

2-2 تكاد تجمع الدراسات المحاسبية السابقة عن تعدد الطرق والقياس المحاسبي التي قد تولد بعض الفرص للمديرين لكي يمارسوا الحكم الشخصي في التأثير على قيمة الأرباح المنشورة، من خلال خبرتك الشخصية ألى أي مدى توافق على إمكانية استخدام الطرق التالية للتأثير على أرقام الأرباح المنشورة في البيئة السعودية.

الطريقة	لا أوافق بشدة	لا أوافق	لا أعلم	أوافق	أوافق بشدة
1-التحكم في قيمة المخزون					
2- التحكم في قيمة حسابات المدينون					
3- التحكم في حسابات الاستهلاك					
4- التحكم في قيمة المصروفات المختلفة (مثل مصاريف البحوث والتطوير ومصاريف الصيانة)					
5- التحكم في فوائد القرو ض					
6-التحكم في قيمة المبيعات					
7-التحكم في قيمة التدفقات النقدية					
8- التحكم في قيمة الاحتياطيات					
9- التحكم في العمليات الداخلية المتعلقة بألاندماج					
10- التحكم في قيمة الأصول المباعة					
11- رسمألة المصاريف الايرادية بدلاً من الاعتراف بها					
12- أخرى (الرجاء ذكرها)					

الجزء الثالث: التصور العام عن دور آليات حوكمة الشركات في الحد من إدارة الربحية:

1-3 مجموعة من الأدبيات أشارت بأن آليات حوكمة الشركات تحسن إدارة الربحية وتحد من دور المديرين في التأثير عليها. في رأيكم الشخصي أي من الإجراءات التالية سوف تسهم في تحسين إدارة الربحية والحد من التأثير الشخصي للمديرين في الأرباح المنشورة.

الإجراء	لا أوافق بشدة	لا أوافق	لا أعلم	أوافق	أوافق بشدة
1- عقد الاجتماعات بصفة دورية لأعضاء مجلس الإدارة					
2- صغر حجم مجلس الإدارة					
3- وجود عدد كافي من الأعضاء غير التنفيذيين في مجلس الإدارة					
4- وجود عدد كافي من حاملي **الأسهم** في مجلس الإدارة					
5- وجود أحد الأعضاء ذوي النفوذ في مجلس الإدارة					
6- الفصل بين مهام رئيس مجلس الإدارة وبين المدير التنفيذي للشركة					
7- عدم بقاء خدمة المدير التنفيذي لفترة طويلة					
8- عقد اجتماعات لجنة المراجعة بصفة دورية					
9- صغر حجم لجنة المراجعة					
10- وجود الأعضاء غير التنفيذيين في لجنة المراجعة					
11- وجود خبير مالي أو محاسبي في لجنة المراجعة					
12- عقد اجتماعات لجنة الترشيحات والمكافآت بصفة دورية					
13- صغر حجم لجنة الترشيحات والمكافآت					
14- وجود الأعضاء غير التنفيذيين في لجنة الترشيحات والمكافآت					
15- وجود المدير التنفيذي كعضو في لجنة الترشيحات والمكافآت					
16- وجود نسبة مقبولة من الملكية للمساهمين					

الجزء الرابع: التصور العام عن دور المراجعة الخارجية في الحد من إدارة الربحية:

1-4 أوصت العديد من الدراسات أن اتباع إجراءات معينة مرتبطة بجودة المراجعة من شأنها أن تسهم في تحسين إدارة الربحية والحد من التأثير الشخصي للمدراء في الأرباح المنشورة. في رأيكم الشخصي أي من الإجراءات التالية ترى أنها سوف تسهم في تحسين إدارة الربحية.

الحالة	**لا أوافق بشدة**	**لا أوافق**	**لا أعلم**	**أوافق**	**أوافق بشدة**
1- التعاقد مع مكاتب المراجعة التي تتمتع بالاستقلالية والسمعة الحسنة					
2- التعاقد من أحد مكاتب المراجعة المحلية التي تنتسب إلى المكاتب الأربعة الكبرى (BIG4)					
3- التعاقد مع مكتب مراجعة متخصص في مجال عمل الشركة					
4- عدم بقاء المراجع مع الشركة لفترة طويلة					
5- إصدارة معايير محاسبة و مراجعة أكثر تفصيلا وتشددا					
6- إصدارة عقوبات رادعة في حق المخالفين					
- أخرى (الرجاء ذكرها)					

شكرا على اهتمامكم ودمتم،،،،،

Joint Recommendation – Mr Salim Alghamdi:

Guidance on completing this form can be found at: http://www.dur.ac.uk/learningandteaching.handbook/8/6/3/

		(tick)
The candidate be admitted to the degree of PHD:		
A	Unconditionally	
B	With minor corrections Minor corrections are defined as changes that do not require the candidate to conduct further research, and should be used where the thesis does not require re-examination to ensure that it fulfils the criteria for the award. Such changes should be specified by the Examiners and subsequently approved by the Internal Examiner within **3** months.	✓
The candidate be NOT ADMITTED to the degree of PHD:		
C	The candidate should re-submit the thesis in a revised form, within a **12 month** period. In this case changes are deemed substantive in nature requiring the candidate to conduct further research and/or where the thesis requires re-examination to ensure that it fulfils the criteria required for the award. Examiners should identify required changes in their joint report. Additionally, examiners are requested to confirm their expectation of the time, in months, changes are likely to take: **the candidate should re-submit the thesis in a revised form within .... months** Note: This information is requested to give the candidate an indication of the work required to bring the thesis to the required standard and to identify candidate's examination and further fees requirements. If no number is stated the candidate will be given 12 months.	
The candidate be admitted to a LOWER DEGREE than PHD:		
D	That the LOWER degree of ....* be awarded unconditionally	
E	That the LOWER degree of ....* be awarded after minor corrections *Minor corrections* is defined above under 'B'	
The candidate be NOT ADMITTED to a LOWER DEGREE than PHD:		
F	The candidate should re-submit the thesis in a revised form, within a **12 month** period for a lower degree. **The candidate should re-submit the thesis in a revised form within .... months for the LOWER degree of**......................*. *Resubmission* is defined above under 'B'	
G	That the candidate be deemed to have FAILED outright	

* Please insert Degree i.e. MPhil, MLitt, MMus, MEd, MTheo, MJur, MA or MSc. Examiners should refer to the criteria for research degree awards: http://www.dur.ac.uk/resources/university.calendar/volumeii/2010.2011/coreregsrdtc.pdf

Signed Internal Examiner (Dr Asutay): Mehmet Asutay **Date:** 30/01/2012

Signed External Examiner (Dr Andrew Higson): **Date:** 30/1/2012

For Office Use Only: Recommendation approved on behalf of FEC (PG):

Signature: **Date:** 10/2/12

Issues to note ☐ ....