

**UNIVERSITY OF SOUTHAMPTON**

FACULTY OF BUSINESS AND LAW

Southampton Management School

**Factors Affecting External Audit Quality:** The Case of Listed Companies in Saudi  
Arabia

by

**Rasha Abdulrahman Fallatah**

Thesis for the degree of Doctor of Philosophy

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### **ABSTRACT**

This study explores the factors affecting external audit quality in non-financial listed companies in Saudi Arabia (SA). In particular, it provides new insights by using an integrated research design framework. The study seeks to: (i) investigate the relationship between external audit quality and certain corporate governance characteristics in SA, namely, boards of directors, audit committees, and internal auditors, and (ii) find strategies that can be undertaken to enhance external audit quality in SA. Agency theory predicts that external auditors and corporate governance play a vital role in enhancing external audit quality. Ordinal Logistic regression was used to investigate the association between the variables. Semi-structured interviews and a questionnaire survey were implemented to attain a deeper understanding of the phenomena.

To achieve the research goals, the researcher investigated the perceptions of boards of directors, audit committees, and internal auditors regarding external audit quality, using questionnaires, while the perceptions of external auditors were investigated by using interviews. Moreover, the ordinal logistic regression models were examined to test the hypotheses using a set of questionnaires. The decision to employ a mixed-methods research design was motivated by the recent calls for, and relative lack of, mixed-methods approaches in external audit quality research in general. Efforts were made to achieve integration between the two different research designs by applying the Convergent Parallel Design suggested by Creswell and Clark (2011). The researcher collected and analysed both quantitative (survey) and qualitative (interview) data separately, at the same time, and then

combined the findings of the two approaches, which was achieved by merging the data and then comparing and contrasting the two sets of data and the results.

The findings of the study showed that audit practice in SA was experiencing difficulties, because of the auditors' lack of competence, their lack of training, lack of expertise and specialisation, lack of independence, and the length of tenure of the audit, all of which affected external audit quality. Regarding audit committees, there was a lack of knowledge and a lack of awareness of members' responsibilities, a little time was taken to attend meetings and a lack of financial expertise. The findings relating to boards of directors showed that there were infrequent meetings, a lack of requesting speedy financial statements, and a low existence of personal relationships. With regard to internal auditors, the findings showed that there was a lack of education, and of independence. Additionally, corporate governance mechanisms in SA suffered from the absence of detailed regulations, non-implementation of the regulations, and a lack of control by regulators. Finally, the findings obtained from this study led to some suggestions to enhance the level of external audit quality and corporate governance practices in SA.





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## DECLARATION OF AUTHORSHIP

I, Rasha Abdulrahman Fallatah

declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

### **Factors Affecting External Audit Quality: The Case of Listed Companies in Saudi Arabia**

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. Parts of this work have been published as:

❖ Fallatah, Rasha; Marnet, Oliver ; Malagila, John, November 2016, “ Factors Affecting External Audit Quality: The Case of Listed Companies in Saudi Arabia”, Paper presented on the 16<sup>th</sup> Workshop on Accounting and Finance in Emerging Economies Conference, BAFA Auditing Special Interest Group, British Accounting & Finance Association , Northumbria University, Newcastle, UK, 25 November.

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Signed: Rasha Abdulrahman Fallatah .....

Date: 31/5/2017.....



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## Definitions and Abbreviations

<b>AC</b>	Audit Committee
<b>ACMEET</b>	Audit Committee Meetings
<b>AICPA</b>	American Institute of Certified Public Accountants
<b>AQ</b>	Audit Quality
<b>AUDSIZE</b>	Audit Size
<b>BLG</b>	Basic Law of Governance
<b>BOD</b>	Board of Directors
<b>BODIND</b>	Board of Directors' Independence
<b>BODSIZE</b>	Board of Directors Size
<b>BRC</b>	Blue Ribbon Committee
<b>CEO</b>	Chief Executive Officer
<b>CFO</b>	Chief Financial Officer
<b>CG</b>	Corporate Governance
<b>CIA</b>	Certified Internal Auditor
<b>CL</b>	Company Law
<b>CMA</b>	Capital Market Authority
<b>EX</b>	External Auditor
<b>EXCOMPET</b>	External Auditors Competence
<b>EXIND</b>	External Auditor Independence
<b>EXTENURE</b>	External Auditors Tenure
<b>FINEXPERTIS</b>	Financial Expertise
<b>FRC</b>	Financial Reporting Council
<b>GAAP</b>	Generally Accepted Accounting Principles
<b>GDP</b>	Gross Domestic Product
<b>IA</b>	Internal Auditor
<b>IACOMPE</b>	Internal Auditor Competence
<b>IFAC</b>	International Federation of Accountants
<b>IFRS</b>	International Financial Reporting Standards
<b>IIA</b>	Institute of Internal Auditors
<b>IMF</b>	International Monetary Fund
<b>ISA</b>	International Standards on Auditing
<b>MCI</b>	Ministry of Commerce and investment
<b>NEDs</b>	Non-Executive Directors
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>OPEC</b>	Organisation of the Petroleum Exporting Countries
<b>PIF</b>	Public Investment Fund
<b>SAGIA</b>	Saudi Arabian General Investment Authority
<b>SAMA</b>	Saudi Monetary Agency
<b>SAS</b>	Saudi Auditing Standards
<b>SCGC</b>	The Saudi Corporate Governance Code
<b>SCGI</b>	The Saudi Corporate Governance Index
<b>SEC</b>	Securities and Exchange Commission
<b>SOCPA</b>	The Saudi Organisation for Certified Public Accountants

<b>SOX</b>	Sarbanes-Oxley Act
<b>TADAWUL</b>	The Saudi Stock Exchange
<b>UA</b>	European Audit
<b>UK</b>	United Kingdom
<b>US</b>	United States of America



# Chapter 1: INTRODUCTION

## 1.1 Background and Motivation of the Study

The global financial market witnessed several financial scandals and failures in recent years. Well-known firms, such as Enron and Arthur Andersen, and the global financial crises of 2008 are the main examples of such failures. As a result of these financial scandals, corporate governance, ownership structure and other tools have been introduced to reduce and constrain the prevalence of financial problems, to protect shareholders' interests and to enhance the quality of the monitoring mechanisms, such as external audit quality (Man and Wong, 2013).

However, the weakness of corporate governance bodies' characteristics (boards of directors, audit committees, internal auditors and external auditors) has been found to be one of the main reasons behind introducing weak and poor monitoring tools (Coffee and John, 2005; Lobo and Zhou, 2006; Adeyemi and Fagbemi, 2010; Al-Khaddash *et al.*, 2013).

Consequently, the internal and external parties maybe inclined to adopt administrative and accounting corruption and financial corruption in particular, to change a firm's overall financial position. On the other hand, external auditors are responsible for guaranteeing the validity and transparency of the financial statements. In general, at the time of the previous scandals and failures, firms' financial statements and other documents did not disclose the accurate financial position, which gave rise to questioning the credibility of the external auditors (Al-Khaddash *et al.*, 2013). Therefore, corporate governance and external audit need to be given more care and attention in order to improve their monitoring functions. Furthermore, external auditors should be more aware of their essential role, in order to attest the accountability and stewardship of companies (Stirbu *et al.*, 2009). For example, it is the external auditors' responsibility to express their opinion regarding the fairness of financial statements (AU sec. 230)<sup>1</sup>.

In general, the financial statements should be relevant, accurate, and unbiased (Yasina and Nelson, 2012), and should be audited by qualified auditors, in order to increase the reliability of the reports. Within the Saudi market, to be a qualified external auditor a candidate must

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<sup>1</sup> U.S.A Auditing Standards Board (**Due Professional Care in the Performance of Work**): This section describes how the auditor must exercise due professional care in the performance of the audit and the preparation of the report. The section also requires that the auditor exercises professional scepticism and has reasonable assurance that the financial statements are free of material misstatement.

hold a bachelor degree in Accounting and, furthermore, he or she should be trained or employed by an audit firm for at least one year (SA503)<sup>2</sup>. Additionally, a collaboration between a firm's internal and external governance players is needed to increase the quality of external audit. However, firms' internal control systems and audit committees appear as another important factor that may affect external audit quality (Al Rahele, 2008; Chan and Li, 2008; Bhasin, 2012; Al-Khaddash *et al.*, 2013).

Interestingly, the effect of corporate governance and external audit quality is still ambiguous within the scope of the emerging markets, specifically, the Saudi market, since previous studies, in general, have focused on other governance agents and variables. Therefore, this study contributes to both the external audit and the corporate governance literature by focusing on the association between more than one corporate governance characteristic and external audit quality in SA.

SA, as an emerging country, has four primary reasons for selecting it to examine the factors affecting audit quality in listed companies: lack of auditors' independence, accounting scandals, the limitations and complexity of corporate governance, and foreign investment (Sioufi *et al.*, 2017 ).

Firstly, serious accounting scandals are a real problem, and they happen because of the lack of auditors' independence in Saudi listed firms. In response, the Saudi Ministry of Commerce and Investment mandated the company law and stated that independent auditors should audit the financial statements of Saudi listed firms (Reda *et al.*, 2016). For instance, in 2014, one of the largest Saudi telecommunications companies was hit by an accounting scandal (Smith, 2015). The company, known as "Mobily", was investigated for accounting errors that wiped out 380 million dollars of past profits. The scandal began when the "problems" at Mobily came to a head in November, 2014, when the company restated its profits for 2013 and the first half of 2014, cutting them by a combined 1.43 billion riyals (\$381 million), while, in January 2014, it posted a shocking fourth-quarter loss of approximately 2.28 billion riyals (\$ 533 million) (Smith, 2015).

Other examples of Saudi scandals include the Mohammad Al-Mojil Group (2014) and the Etihad Etisalat Company (Mobily). A local branch of Deloitte was auditing the financial statements for the Mohammad Al-Mojil (MMG) and, after the scandal, the Saudi Capital Market Authority (CMA) banned Deloitte from auditing listed firms for two years in SA.

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<sup>2</sup> Saudi Organization of Certified Public Accountant (Auditing Standards): Qualification standards section (503).

CMA said, “The ban could be revoked if the Big Four firm resolves an unnamed dispute” (Warmoll, 2014).

These scandals emphasised the accounting regulations' problems in Saudi listed firms and reflected very negative views of the lack of auditors' independence and their ability to mitigate frauds. As a result, the roles of corporate governance and auditors' independence needed to be investigated to contribute to the audit quality literature and to fill the existing gap, especially in emerging markets such as Saudi Arabia.

The second justification for the selection of SA is that the code of practice for corporate governance has limitations and complexities, which may affect audit quality. The Saudi institutional framework for corporate governance does not differ much from other regional institutional frameworks, but the dissemination regulations, as well as the integration of the jurisdictions of these institutions, may cause some ambiguity and confusion (Kahtani, 2014). SA has contextual characteristics, institutional and regulatory frameworks similar to other Arab countries and developing Islamic countries (Piesse *et al.*, 2012). On the other hand, it also has dissimilarities with many developed and developing countries. Specifically, SA practices *Shari'ah* (Islamic) law as the foundation of daily activities (Safieddine, 2009; Judge, 2011; Kahtani, 2014).

In Islam, there is no separation between secular and spiritual affairs. Furthermore, commerce is subjected to the moral ethics of Islamic *Shari'ah*, which is based on the Quran<sup>3</sup> and Sunnah<sup>4</sup>. In fact, auditing was an early concept in Islamic history at the time of the Prophet Muhammad (peace be upon him). Furthermore, an auditor under *Shari'ah* law is responsible for assisting people, by alerting and reporting any misstatement or any fraud that can cause loss to others. A verse in the Quran refers to: “... and let him be wary of Allah, his Lord. And do not conceal your testimony<sup>5</sup>; anyone who conceals it, his heart will indeed be sinful, and Allah knows well what you do” (Quran, 2 / 283). Thus, audit functions under *Shari'ah* are important and mandatory, because they reflect the auditor's accountability, not only for beneficiaries of financial statements but also, more, to the Creator, Allah (subhana wa ta'ala) as mentioned in the Quran, “...surely *Allah* takes account of all things” (Quran, 4/86).

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<sup>3</sup> Quran: the Islamic sacred book, believed to be the word of God as dictated to Muhammad by the archangel Gabriel and written down in Arabic. The Quran consists of 114 *suras*. These touch upon all aspects of human existence, including matters of doctrine, social organisation, and legislation.

<sup>4</sup> Sunnah: the actions and sayings of the Prophet Muhammad (peace and blessings be upon him) which cover every aspect of a person's life. This includes, but is not limited to, places of work, family, religious and social affairs, and law.

<sup>5</sup> Testimony in Islam (Shahada) has different meanings, such as to tell specific news or information, inspection, a declaration, oath or acknowledgment. <http://eng.dar-alifta.org/Foreign/ViewArticle.aspx?ID=143&CategoryID=3>

Muslims fear *Allah* (subhana wa ta'ala), and they believe that all their actions will always be watched by *Allah* (subhana wa ta'ala).

In terms of the agency problem, the ethics of accountants and auditors depend mainly on the rules and principles of *Shari'ah*, which creates unique corporate governance challenges (Safieddine, 2009; Vinnicombe, 2010). Although *Shari'ah* law forbids fraud, misrepresentation, and misstatement, still there are some cases which exist in Saudi society.

As stated previously, the Saudi government emphasises that the constitution of SA is based on *Shari'ah*. However, the corporate governance code and accounting and auditing standards are borrowed from other countries, such as the UK or USA. In the case of adopting standards or regulations from a foreign country, regulators have attempted to alter these standards in accordance with Saudi Islamic *Shari'ah* law (Al-ghamdi, 2012). In fact, the *Shari'ah* law has more authority than the standards in Saudi Arabia, which makes it a unique environment in which to investigate corporate governance and audit practice.

The third justification for selecting SA is that Saudi is one of the largest and fastest growing emerging countries that currently acknowledges and attracts foreign investment (Sioufi *et al.*, 2017). For that reason, it is important to enhance the corporate governance and auditing practice, in order to match the requirements of foreign investment in the Saudi market. Failure in corporate governance may result in losses for both domestic and foreign listed firms, which will affect the economies of both nations.

The fourth justification for selecting SA is that foreign investment is considered to be the second largest source of income for Gulf countries, following the drop in the oil price. This in turn raises the need to investigate Saudi corporate governance and to encourage improvement of it when there are failures. As stated by Iskander and Chamlou (2000), business environments and emerging market economies still need to be enhanced in order to promote competitiveness in the market and to create a culture of enforcement and compliance (Baydoun *et al.*, 2013). The improvements should help to improve the effectiveness of the corporate governance code and audit practice among Saudi listed firms, which seems to be a valuable contribution to literature dedicated to the topic.

The findings of this study might benefit external auditors, internal auditors, boards of directors, audit committee members, and regulators to enhance the external audit quality, and the corporate governance mechanisms in the Saudi listed firms. The monitoring of the financial statements by the Saudi Ministry of Commerce, the Saudi Capital Market Authority, and the Saudi Organization of Certified Public Accountants might satisfy and

protect shareholders and users of financial statements. The Saudi Organization of Certified Public Accountants might increase external audit quality by improving the independence and the competence of the external auditors. Moreover, regulators might place more emphasis on the implementation of corporate governance codes and the need to comply with regulations, which will increase the external audit quality. Finally, regulators might enforce punishments on those who violate regulations or standards.

## **1.2 Research Objectives and Questions**

This study aims to achieve two objectives: the first objective is to investigate the effects of external auditors' characteristics, the board of directors' characteristics, audit committee characteristics, and internal auditors' characteristics on external audit quality in listed companies in SA. The second objective is to explore means to enhance external audit quality in SA.

The objectives of this study were attained by answering the following specific research question (RQ): *What are the factors affecting external audit quality in Saudi listed firms?*

To answer this key question, the main research question was divided into four sub-questions (SQ1-4).

- 1- Does the board of director have a relationship with external audit quality in listed companies in Saudi Arabia?
- 2- Does the audit committee have a relationship with external audit quality in listed companies in Saudi Arabia?
- 3- Does the internal auditor have a relationship with external audit quality in listed companies in Saudi Arabia?
- 4- What major steps can be undertaken to enhance external audit quality in Saudi Arabia?

## **1.3 Contributions of this Study**

The current study contributes to methodological practice, and both theoretical and practical corporate governance literature, and external audit quality literature, in several ways. Firstly, it contributes by presenting how the results from a mixed-methods research design (Convergent Parallel Design), using both qualitative and quantitative data, can be combined to strengthen the empirical findings and give a clearer and deeper understanding of the current practice in SA listed firms. Business studies, in particular, corporate governance

studies, generally use quantitative research (Zattoni *et al.*, 2013) and, despite the significance of qualitative data in management behaviour research, corporate governance has received little attention (McNulty *et al.*, 2013). In this regard, Molina-Azorin (2012) states that most of the current studies in business research are quantitative, with only 8% of present studies using a qualitative research design. However, quantitative data does not provide adequate justification for results obtained through statistical analysis (Zattoni *et al.*, 2013).

More precisely, quantitative outcomes do not provide in-depth explanations and are less likely to answer 'why' questions in social phenomena (Morgan and Smircich, 1980; Cohen *et al.*, 2002; Creswell and Clark, 2011). This gives further motivation for researchers to use interviews in combination with quantitative data to discover interactions among key factors. Mengoli *et al.* (2009) claim that an interview (qualitative method) also provides a mechanism for checking the validity of quantitative data outcomes. Boyd *et al.* (2012) and Molina-Azorin (2012) argue that mixed-methods research creates more credible and reliable results than when a single strategy is utilised. Molina-Azorin (2012)'s study surveyed the methodology used in articles published in the *Strategic Management Journal* from 1980 to 2006. He identified that single method studies tended to be less cited than mixed-methods studies. This indicates that the results from mixed-methods research studies are more highly valued (Boyd *et al.*, 2012; McNulty *et al.*, 2013; Zattoni *et al.*, 2013). Furthermore, this study contributes to external audit quality literature by providing new insights into the external audit quality practice in SA, by conducting semi-structured interviews with external auditors and regulators in Saudi Arabia. For example, the findings from the interviews have added to the external audit quality literature by providing new evidence about current audit practice. Moreover, it contributes to the literature by illustrating how the external auditors may become involved in scandals or violation of auditing standards. An example of this is the preparation of a client's financial statements by the external auditors. Using interviews, models, and questionnaires in this research, in the context of audit quality, will open the way for future research because these methods are not common in the literature, and are likely to be beneficial to other researchers.

Secondly, this study contributes to the external audit quality literature by covering a multitude of governance agents and variables. More precisely, it aimed to investigate the effects of external auditors' characteristics, internal auditors' characteristics, audit committee characteristics, and boards of directors' characteristics on external audit quality in SA listed companies. Other studies have covered only one or two variables. For instance, the study by Al-Twaijry and Elnafabi (2008) investigated the factors affecting external audit quality using only the perceptions of external auditors. Allehaidan (2012) focused on the

association of external auditors' perceptions and non-audit services and its effect on external audit quality (Allehaidan, 2012).

Thirdly, this study contributes to the extant audit literature by using the perceptions of the participants (board of directors, audit committee members, and internal auditors) as a proxy for audit quality. For instance, the external audit quality has been measured by using the perceptions of the board of directors, audit committee members, and internal auditors of the level of overall external audit quality achieved by the external auditor in a recent engagement.

Fourthly, the findings of this study contribute to the audit literature by evaluating audit practice and corporate governance for regulators' bodies, in order to enhance the current audit practice and the corporate governance mechanism. These findings may be of practical importance to the Saudi Certified Public Accountants, the Ministry of Commerce and Investment, the Capital Market Authority, and the Saudi Stock Exchange (Tadawul), which can develop and mandate corporate governance mechanisms and audit practice to ensure that more protection is offered to shareholders and beneficiaries.

Fifthly, this study contributes to both the corporate governance and external audit quality literature by highlighting how the Islamic religion in SA affects corporate governance reforms and audit practice. The *Shari'ah* law has more authority than standards and regulations in the Saudi market. When regulators adopted the regulations and standards, they attempted to change them in order to fit in with Islamic *Shari'ah* law, which makes this research's findings extracted from the Saudi environment unique when compared to other countries.

Sixthly, the study contributes to corporate governance and audit practice by combining two theories for analysis. This combination has added to the literature by interpreting the findings using both agency theory and resources dependence theory. Both theories (Agency and Resource-Dependence theory) emphasise the association between external audit quality practices and corporate governance characteristics. Agency theory recommends that the issue related to the separation of ownership and management might lead the actors to act in their own best interest (Jensen and Meckling, 1976). However, Resource-Dependence theory suggests that directors of organisations bring resources and opportunities, such as skills and information, for the benefit of the company. The combination of both theories is important, because agency theory interprets the relationship between the owner and the agents. Whereas, resource-dependence theory mitigates the agency problem, which is a result of

different interests, by using and controlling the resources, such as the appointment of an external auditor, bringing skills and experience to the organization, or reducing costs.

## **1.4 Thesis Structure**

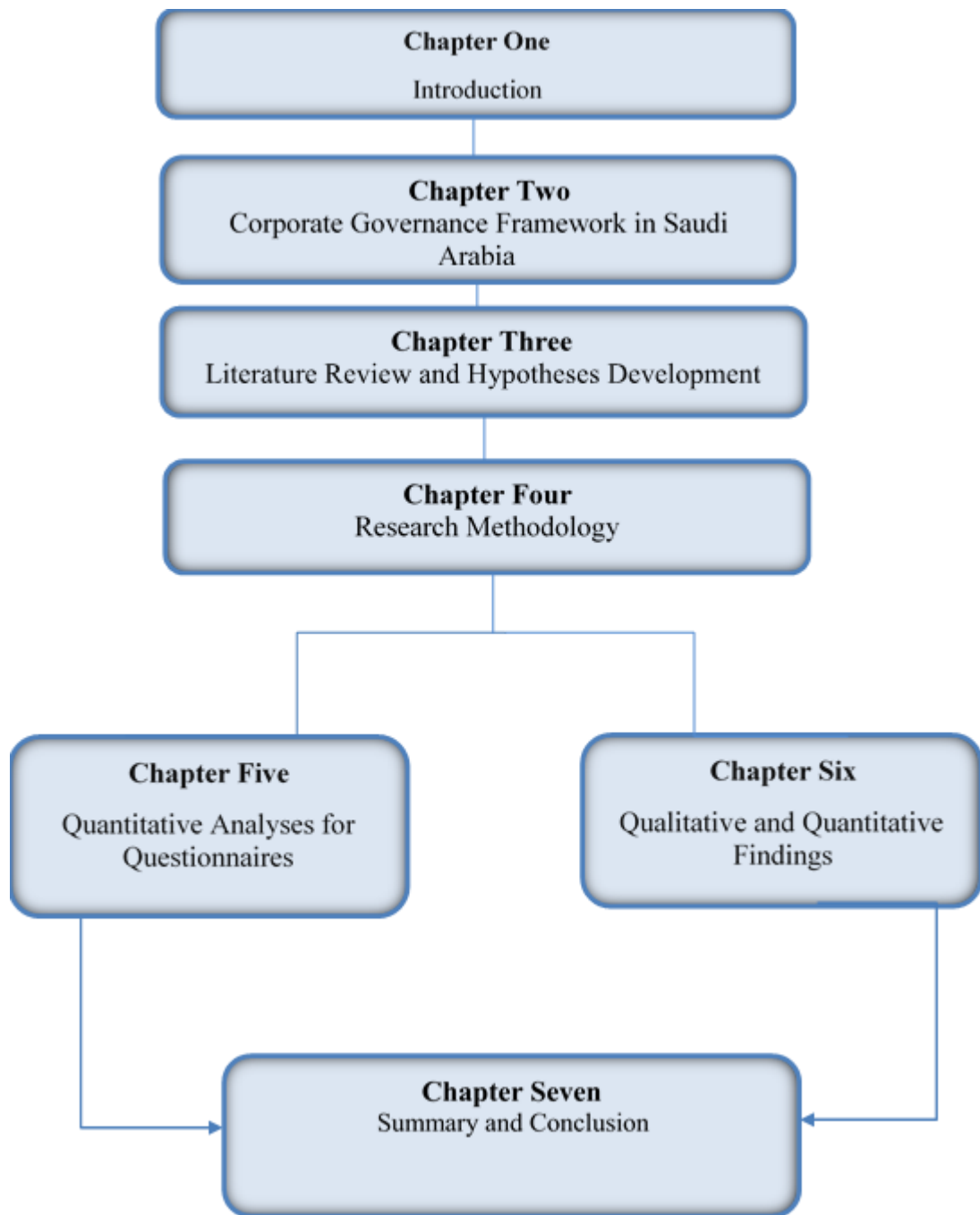
The second chapter provides a general overview of the framework of corporate governance in SA. The third chapter presents a literature review of external audit quality and its influencing factors, as well as its characteristics, and presents the theoretical underpinning of corporate governance and external audit quality. In addition, it presents a comprehensive review of corporate governance mechanisms, as well as their components. Moreover, it presents the significant roles of agency theory and the necessity for high external audit quality and corporate governance in resolving agency problems. Chapter four explains the study's methodology. Chapter five analyses and the findings of the questionnaires. Chapter six presents the integration between the analysis and the findings of both the questionnaires and interviews. Chapter seven presents the conclusions of this study and includes the limitations and the potential for future research. It is predicted that the findings arising from this study will provide significant improvement to both corporate governance structure and external audit quality in Saudi listed companies.

## **1.5 Chapter Summary**

This chapter has outlined the background and the motivations of the study and the reason behind selecting SA for this study. Previous studies have shown that there is a lack of studies of corporate governance and external audit quality in general, and specifically in SA. The second section explains the contributions of the study to corporate governance literature, external audit quality literature, methodological practice, and theoretical practical. The last section explains the thesis structure. The following chapter presents the background and the legal structure of SA, corporate governance structure, and the internal, and external corporate governance framework in SA.



Figure 1-1 Thesis structure constructed by the researcher



Source: constructed by researcher



## **Chapter 2: BACKGROUND AND CORPORATE GOVERNANCE IN SAUDI ARABIA**

### **2.1 Background and the legal Structure of Saudi Arabia**

### **2.2 Introduction**

Primarily, this chapter aims at explaining the background of corporate governance structures in SA that should understand because they lay the platform for understanding the following chapters of this thesis. As such, the section shall provide the background information relating to SA and its economic and regulatory structure and overview of corporate governance in SA. Therefore, the first section shall provide an overview of the country by offering a review of the established regulations controlling the corporate governance in SA and the fundamental economic condition of the country. Subsequently, the second section will cover corporate governance structure. Finally, the chapter will be summarised.

### **2.3 Common Overview of Saudi Arabia**

SA is located in South West of the Asian continent and covers an area approximately measuring 2.25 million kilometres squared thereby making it the largest Arab country in the entire region of Western Asia in terms of land area (Haniffa and Hudaib, 2007; AL Kahtani, 2013). The country is estimated to provide residence to around 30 million people. According to Rasheed (2012), the country occupies the region formerly occupied by 'Asir (Southern Arabia), Najd, Hejaz, as well as some parts of Al-shaargiea (Eastern Arabia). The capital city of the country is Riyadh while Arabic represents the official language. Figure 2.1 shows the regions of SA and its location on the Middle East.

Figure 2-1 Map of Kingdom of Saudi Arabia



Source: Google map

More so, the Basic Islam of Governance (1992) asserts that the country operates under a monarch form of political system with the king performing the roles and responsibilities of both the head of the state as well as that of the prime minister. Today, the Islamic world<sup>6</sup> views the country as an important place associated with a certain degree of religious significance. Muslims believe that Islam began in SA around the seventh century. Besides, the cities of Medina and Makkah are viewed as holy cities. Makkah provides al-Kaba (direction of prayer) while Medina hosts Prophet Mohammad's grave and mosque.

According to Menoret (2005), Muslims believe that it is impossible to separate Islam and the country's national pride and consciousness. Such a condition is dominant because of the existence of Medina and Makkah as well as its designation as the original centre for traditional Muslim-Arab opposition to foreign control. Additionally, Islam plays an integral role in many aspects of the Saudi Arabian daily life. Article 23 of Saudi's Basic Law of Governance states that the country will safeguard the Islamic doctrine and ensuring the *Shari'ah* is applied. In addition, the state is mandated with encouraging good deeds while discouraging evil deeds. Lastly, the article also states that the state shall undertake the

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<sup>6</sup> Islamic world: means the nation or community of Muslim countries.

propagation of the Islamic religion (Basic Islam of Governance, 1992). According to Al Farsy (1997), the privileged role of religion in the state began during the foundation of SA after King Abd al-Aziz Al Sa'ud signed an agreement with the nomadic fighters and tribes. In this treaty, the two parties agreed to form a cohesive nation operating under *Shari'ah* legislation. The country's constitutional law has emerged from written constitutional norms. They accumulated before the year 1992 during the reign of King Fahad Al Sa'ud who ratified the modification of the constitutional law thereby affirming the existence of four sources of law. The Basic Law of Governance (1992) include the Council of Ministers Law, Consultative Council Law, Basic Law of Governance, and Regional Law. However, the Basic Law of Governance provides the primary source of legislation and consists of nine chapters containing 83 lawful clauses. Realistically, SA does not have legitimate constitutional law since its framework is founded on the Sunna and Qur'an as stressed by Article 1 of its Basic Law of Governance. According to Basic Law of Governance (1992, Art. 1), the article reports that Saudi Arabia's primary religion is Islam with the Sunna and the Book of God as its constitution. Nonetheless, the Basic Law of Governance serves as the constitutional law although the word constitutional does not refer to the universal law as meant in other global contexts such as countries that do not practice *Shari'ah*.

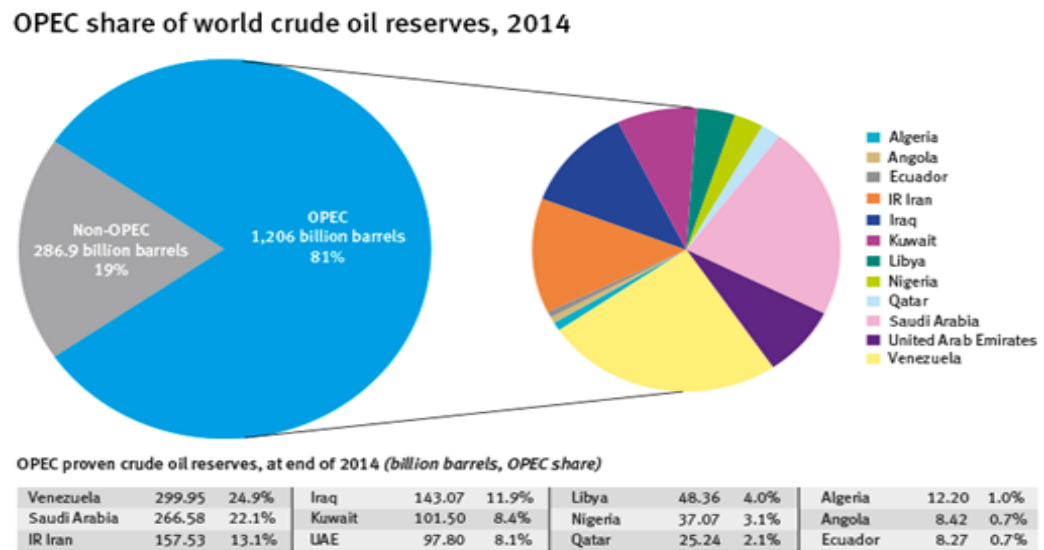
In SA, the word constitutional denotes the structure of all life aspects in the Saudi society. The constitutional law has existed since the affirmation of the Basic Law of Governance. According to Al Shalhoub (1999), this may translate into the maintenance of constitutional principles. The Basic Law of Governance (1992) posits that this makes the acceptance of the Basic Law of Governance as the constitutional law and primary source of Islamic law clear. Although Saudi legal framework has mainly been influenced by *Shari'ah*, the country's business environment has been significantly affected by some developed countries' legislations that originally borrowed from US and UK in terms of accounting practices, such as accounting standards, auditing standards, company law systems (Al- Angari, 2004).

Simplify, Islamic regulations and the environment of Saudi are an important factors when choosing or applying borrowed or derived regulations from other countries. In fact, the *Shari'ah* laws have more authority than standards in SA. In other words: “when SA 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-ghamdi, 2012) .

## **2.4 Economic Condition of Saudi Arabia**

The oil industry is the backbone of the economy in SA. Since its discovery in the 1930s, SA has progressed to be the leading global producer and exporter of oil. OPEC (2015) states that it is number two in terms of proven reserves worldwide. The country's land area makes its number 14 in the world and second largest OPEC Member State. In excess of three-and-a-half of the 30 million citizens resides in Riyadh. Samargandi *et al* (2014) proposes that the oil industry produces around 45% of the Saudi GDP as well as 90% of their total export proceeds. However, the government has diversified the economy through the promotion of non-oil sectors such as power generation, natural gas exploration, petrochemical segments, and telecommunications to reduce reliance on oil. More so, the government has realized the essential role played by the financial segment in mobilizing savings and directing capital towards investment. Hence, it is supporting the development of operational, financial markets, banking systems, and insurance services. Today, SA is economically vital to global economies because it serves as a monitor and regulator of global oil prices thus making its welfare important to its citizens as well as the rest of the world. To clarify, researcher mentioned the Saudi economic in this thesis to show that stock market could effected by economic forecast, which would be bad news for companies and shareholders. The figure 2.2 below illustrates the world crude oil reserves at end of 2014. SA occupies the 2ed OPEC share among other countries.

Figure 2-2 OPEC Share of World Crude Oil Reserves 2014



Source: OPEC Annual Statistics Bulletin 2015

## 2.5 Corporate Governance in Saudi Arabia

The corporate governance of any particular country mirrors its way of life, known as culture, including the regulatory framework, history, and the predominant components that make up its capital market (Keong, 2002). In this way, we need to take into consideration the history, regulatory framework, and culture of SA, including the present components of the capital market. At present, SA is experiencing the foundation phases of building its corporate governance, as shown by the incorporation of the best practices code of 2006. The practice code development is appealing because of the nature of the country and how it possesses an incredible mix of wealth, size of land, development, and strict compliance with Islamic law. As a result of this, more insight is given into four different basic features of the corporate governance, including the board of directors, the audit committee, and internal and external audit, and their impact on the quality of external audit of the listed firms in SA.

The stock market, together with its associated regulations, was thought to be weak in SA until the early years of the 1980s and, thus, not able to attract and protect investors and shareholders (Al-Nodel and Hussainey, 2010; Al-Matari *et al.*, 2012a). However, operationally, the stock market had its own informal origin as far back as the 1930s when the initial joint stock organization was founded. Following the 1975, there were 14 public organizations. Also in the 1970s, there was rapid economic growth and an oil boom, which resulted in the development of different public banks and organizations. However, it was not until 1985 that the government of Saudi was able to request the formation of the Saudi

Arabian Monetary Agency (SAMA), which is the renowned Central Bank for the development of the stock market. From that period until July of 2003, the SAMA was also responsible for monitoring and regulating the stock market trading. Since 2003, the Capital Market Authority (CMA) has been responsible for the regulation (SFG, 2009; Tadawul, 2012). Additionally, the Saudi Companies Act that was formally issued in 1965 remains the exclusive mandatory legislation regarding the monitoring of the actions of corporations' and their officers (Haniffa and Hudaib, 2007; Hussainey and Al-Najjar, 2012). Nevertheless, there is no provision in the Act to broadly address the mechanisms of corporate governance, aside those that relate to attributes of an organization's board, as well as the entire assembly of the shareholders.

SA is a vital rising economy and has been a member of the entire G20 since 2008 (Al-Matari *et al.*, 2012a). Currently, the number of listed firms and their market capitalisation does not reflect the importance of the Saudi economy either regionally and internationally, as identified by Al-Filali and Gallarotti (2012). Consequently, investors, academics and practitioners are calling for the reform of the stock market, corporate governance in SA (SFG, 2009). Some recommendations that have been presented are:

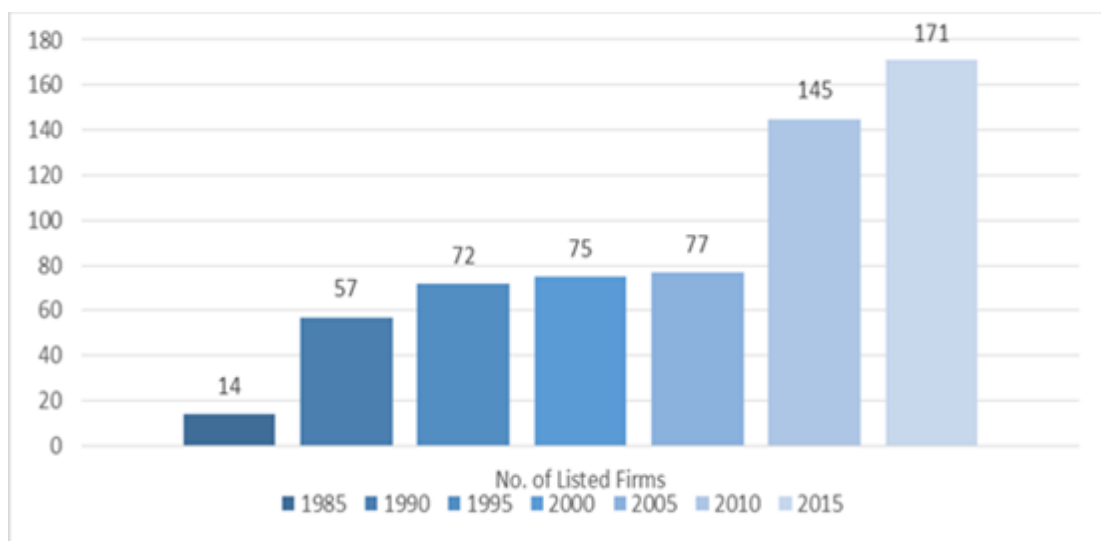
- i. The growth of market capitalization, as well as the number of organizations that are listed, thus enabling full engagement by foreign investors.
- ii. The relaxation of the regulation pertaining to corporate governance for the protection of the rights of the shareholders.
- iii. The improvement of transparency and disclosure.
- iv. The advance of the mechanisms for external corporate governance, particular for corporate control.

Simultaneously, the global bodies, such as the International Monetary Funds (IMF), the Organization for Economic Co-operation and Development (OECD), and the World Bank put a call through to motivate rising nations, particularly SA, to ensure that corporate governance is made a priority and that governance codes are introduced (Rwegasira, 2000; Clarke, 2004; ROSC, 2009). As a result, the government of Saudi had to respond through the instigation of corporate governance reforms, as one of the broader economic reforms of the country (Al-Matari *et al.*, 2012a). Also, new authorities were formed, including the Saudi Arabian General Investment Authority (SAGIA), the Saudi Stock Exchange (Tadawul), and the Supreme Economic Council (SEC), in order to enhance investment and to advance economic growth and development.



The corporate government reforms started 2003, a time when the Capital Market Authority (CMA) was also formed (Al-Nodel and Hussainey, 2010), and from that time till now it has been in charge of the re-regulation of the stock market as well as the corporate governance regime (Alshehri and Solomon (2012). Consequently, the Saudi stock market has experienced significant development in different organizations, liquidity, visibility, and market capitalization (Alshehri & Solomon, 2012). Between 2005 and December 2010, the total number of listed firms increased from 145 firms to 171 firms. Figure 2.3, below, indicates the total number of firms in existence over the three decades.

Figure 2-3 The Saudi stock market growth during the last three decades



Source: constructed by researcher

Meanwhile, between 2004 and 2006, there was a rapid growth in the market and, at that point, the country experienced a sudden drop in share prices, with a loss of roughly 53 percent, which amounted to a total of \$480bn of its entire market value. This sudden crash indicated a significant need for improvement of the mechanisms of corporate governance in the organizations in Saudi (Tadawul, 20112). Based on a direct response, the Saudi Corporate Governance Code (SCGC) was further introduced by the CMA in November of 2006 for the restoration of confidence in the market and for the protection of the investors (Al-Abbas, 2009; Fallatah, 2012). The reason for the abrupt market crash was that many individuals had to have their assets liquidated and a few of them had to borrow from the bank in order to buy stock, leading to a huge increase in the demand.

### **2.5.1 The Saudi Corporate Governance Code (SCGC)**

The Board Capital Market Authority (CMA) published the SCGC in 2006, on the basis of a royal decree, as stated by the ministers<sup>7</sup> of the council. In Table 2.1, below, details the pertinent articles prepared by the SCGC concerning the corporate governance. The first part introduces the preliminary provisions, by providing essential definitions as well as outlining the relationship existing between the SCGC other pieces of legislation, as well as other relevant sections of the legislation. The second part of the SCGC talks about the rights of shareholders, as well as the role of the general assembly. Specifically, the major challenge regarding the rights of public shareholders is encouraging their engagement with their rights and their privilege to access the necessary information. The third part of the SCGC concentrates particularly on improving voluntary disclosure and corporate transparency. To improve the independence of the board, Article 9 specifies the composition of the board, while section four of the code concentrates on how corporate governance relates to the directors and the board. The following sub-section discusses the operation of the board of directors in detail.

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<sup>7</sup> Issued by the Board of Capital Market Authority Pursuant to Resolution No. 1/212/2006dated 21/10/1427AH (corresponding to 12/11/2006) based on the Capital Market Law issued by Royal Decree No. M/30 dated 2/6/1424AH

Table 2:1 Parts of the Saudi Corporate Governance Code SCGC

Part One: Preliminary Provisions							
Preliminary provisions: definitions and the relationship between the SCGC and other pieces of legislation	<b>Article 1</b> outlines the main purpose of the SCGC is to regulate and improve compliance with corporate governance standards among Saudi firms.	<b>Article 1b</b> indicates that the code constitutes the main guiding principle for all public firms listed on the Saudi stock market.					
Part Two: Shareholders' rights and general assembly provisions							
Shareholders' rights and general assembly provisions.	<b>Article 9e</b> requires listed firms to provide details of compensation and remuneration paid to each member of the board of directors and each of its top five executives, including the CEO and CFO.	<b>Article 17</b> points out that payment to each member of the board of directors may take the form of: (i) a fixed salary; (ii) an attendance allowance; and/or (iii) a certain percentage of the corporate profits.	<b>Article 9b</b> states that firms' annual reports should include the names of other listed firms in which a director holds additional directorships.	<b>Article 18</b> asserts that board members cannot participate in any activity that runs counter to the company's interests	<b>Article 9</b> requires companies to declare any punishment, penalty or preventive restriction imposed by the CMA or other regulatory, supervisory or judiciary body.	<b>Article 9g</b> emphasizes the importance of firms' internal control systems and evaluates the role of the system in enhancing corporate governance practices.	
Part Three: corporate transparency and voluntary disclosure							
Enhancing corporate transparency and voluntary disclosure.	<b>Article 9</b> requires that the board's composition should be disclosed in a firm's annual report						

Part Four: Corporate governance provisions relating to the board and directors					
Corporate governance provisions relating to the board and directors and role of the board of directors - presented in five subsections:	<p><b>Section One:</b> main function of the board - reduce agency costs and maximise the firm's value for shareholders by (i) laying down a comprehensive strategy; (ii) establishing risk management policy and identifying areas of risk; (iii) reviewing and updating corporate strategies and policies (iv) supervise the implementation process and hold management accountable when objectives are not met.</p> <p><b>Article 10b</b> recommends that listed firms draft their own corporate governance code, which should not contradict the provisions of the SCGC, in order to activate governance structures.</p> <p><b>Article 10e</b> requires that behaviour of executives and employees should be monitored by the board to ensure adherence to proper professional and ethical standards. Public listed companies should develop a written policy regulating their relationship with stakeholders in order to protect their rights.</p>	<p><b>Section Two:</b> the responsibilities of the board of directors. Board members must strive to achieve whatever is required to ensure the general welfare of stakeholders, not just the interests of a minority of privileged shareholders. The board chairperson is expected to ensure equal and timely access to information by all board members. Non-executive and independent board members must be enabled to have effective and complete access to information to perform their duties and responsibilities.</p> <p><b>Article 11a</b> indicates that the responsibility for running the company ultimately rests with the board, even if some of its powers are delegated to appropriate board sub-committees or third parties.</p> <p><b>Article 11b</b> responsibilities of board members must be clearly stated in the company's articles of association.</p>	<p><b>Section Three:</b> the composition of the board.</p> <p><b>Article 12</b> recommends that the size of the board should be not less than three and not more than eleven members. and the number of independent members of the board shall be not less than two members or one third of the members, whichever is greater; the majority of board members shall be non-executive directors; board members are expected to be appointed by the general assembly, provided that the duration of the appointment does not exceed three years; the general assembly holds the power to dismiss all or some of the board members;</p> <p><b>Article 12g</b> states that when any member resigns from the board, the company shall promptly notify the CMA and Tadawul and specify the reasons for such resignation or termination</p> <p><b>Article 12d</b> to enhance the role of the board in monitoring firm performance, the SCGC recommends splitting the roles of CEO and chairperson- the board chairperson should be a non-executive director.</p>	<p><b>Section Four:</b> board sub-committees and their independence.</p> <p><b>Article 13</b> recommends the creation of a suitable number of committees in accordance with the company's, sub-committees must include audit, nomination and remuneration and each one must have a non-executive director. These committees have to notify the board of their performance, findings and decisions with transparency. In addition, the board shall follow up on committee activities to ensure that the committees are performing their roles, as they should.</p> <p>According to the code, the audit committee shall have not fewer than three members, including a member who is professionally literate in financial and accounting matters. Similarly, executive board members are not eligible to be audit committee members.</p> <p><b>Article 14c</b> determines that the main functions of the audit committee include the following: (i) to supervise the company's internal audit and review the internal control system; (ii) to recommend the appointment and remuneration of the external auditor; and (iii) to review the auditor's opinion on financial statements.</p>	<p><b>Section Five:</b> board meetings.</p> <p><b>Article 16</b> requires that board members shall perform their duties, carry out their responsibilities and endeavour to attend all meetings, which should be held regularly, documented and deliberations and voting recorded. Specifically, 54% (35 out of the total of 65 corporate governance provisions) of the SCGI provisions are related to the board of directors.</p>

			<p><b>Article 12h</b> to ensure that directors devote sufficient time to performing their roles, a board member shall not act as a board member of more than five listed firms at the same time.</p>		
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Source: SCGC, 2006 designed by researcher

### **2.5.1.1 Board of directors**

#### **2.5.1.1.1 Functions**

As the SCGC indicates, the board of directors has to perform various functions, including the approval of the strategic plan, as well as the key objective of the organization. The board supervises the execution of these plans, comprehensive strategy, capital structure, policies, the annual budget, financial objectives, performance, organizational and functional structures, risks, any possible cases of conflict, reviewing the viability of the internal control systems, ensuring that financial transactions are done with integrity, and full monitoring of all activities. In addition, it guarantees the execution of the regulations, such as corporate governance and full disclosure.

#### **2.5.1.1.2 Responsibilities of the Board**

The SCGC describes the key responsibilities taken on by the board of directors, for the purpose of maintaining financial reporting integrity and the performance of the organization. The shareholders are represented by the board of directors, even in the event that an organization establishes committees or designates part of its power directly to a third party. The structure of the organization, likewise, performs a vital function in ascertaining responsibilities in relation to the shareholders and other related investors.

#### **2.5.1.1.3 Structure of the board**

This structure of a board is subject to the criteria listed below:

1. It needs to be a minimum of three members, but no more than eleven members.
2. Most of the board of directors have to be non-executive.
3. The Chair position should not be conjoined with any of the executive positions, such as Chief Executive Officer (CEO).
4. 33 percent of the members have to be completely independent.
5. A board of directors' member ought not to act as a director for more than five joint stock organizations simultaneously.

Furthermore, the code presents a few articles associated with membership termination. However, the Code concentrates on the essence of the board meetings, without necessarily defining the number of annual meetings.

### **2.5.1.2 Board Committees**

An appropriate number of committees have to be established, in compliance with the conditions and requirements, to assist the board of directors to carry out their duties effectively. Recently, the SCGC has made it mandatory for there to be audit formation, remuneration and nomination committees, which are all liable to specific criteria. However, the major concern of this research is audit relative to the committee, which is discussed in detail below.

### **2.5.1.3 Audit Committee**

In previous years, there were no related committees, such as nomination and remuneration committees, as well as the executive committees present in the Saudi organizations. Thus, the audit committee was the only committee assigned by the board of directors to carry out specific duties (Al-Motairy, 2003).

As a result, it had to carry out a huge amount of functions, which contributed towards the inefficiency in its playing out these roles. As far back as 2007, a specific association, known as the Saudi Organization for Certified Public Accountants (SOCPA), assessed the function of the Saudi Arabian audit committees and identified an absence of clarity concerning their duties, responsibilities and function, and that the members of this association were not informed of the purpose behind committees of this nature (Falgi, 2009).

As indicated by the SCGC, it is clear that a board of directors has to create an audit committee, which includes a minimum of three members that are non-executive, with a minimum of one of them who has accounting and financial skills. The audit committee has various vital roles, such as:

1. Providing supervision and reviewing the external and internal audit processes of the organization.
2. Providing control of the systems of the organization, including the integrity of the financial reporting, monitoring the management, and accounting policy.
3. Recommending auditor selection.
4. Addressing possible conflicts that may occur between the external auditors and the management.

Table 2.2, below, summarizes the Provision of Corporate Governance of SA Code.

Table 2:2 The Corporate Governance Provision of Saudi Arabia Code.

Corporate Governance	2006 Saudi Code
<hr/>	
<b><i>Board of Directors</i></b>	
Board structure	One-tier system
Board size	Between three to eleven
Board Composition (Classification)	Executive, non- executive and independent directors
Role duality	Separate chairperson and CEO required
Chairperson	Non-executive director
Non- executive	A majority of directors
Independent	At least one third of directors
Information accessibility	Ensure equal accessibility between members
Directors' training	Provided, especially for newly- appointed directors
Frequency (number) of board meetings	Not specified (regularly)
<b><i>Board Sub- Committees</i></b>	
<b><i>Recommended committees</i></b>	Audit, remuneration, and nomination committees
Audit committee composition directors)	Formed by a minimum of three (all non- executive
Remuneration committee composition directors)	Formed by a minimum of three (all non-executive
Nomination committee composition directors)	Formed by a minimum of three (all non-executive
<b><i>Internal control and Risk Management</i></b>	
Effectiveness of control system	Provided statement
Risk management	Covered, but limited in scope
Narrative on the firm as going concern	Covered
Compliance or regulation	Voluntary or self -regulation

Source: SCGC, 2006 designed by researcher



### **2.5.1 The Corporate Governance Model in Saudi Arabia**

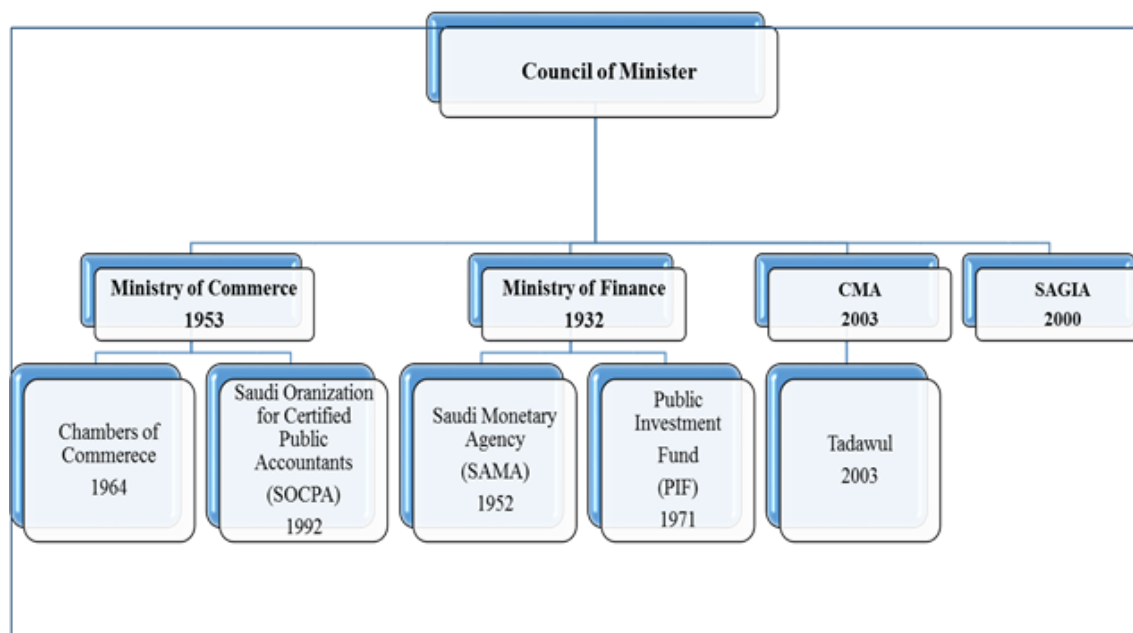
The SA corporate governance solely operates on the basis of the Anglo-American models, together with specific emphasis relating to the protection of the interests of the shareholders (Alshehri and Solomon, 2012; Seidl *et al.*, 2013). For instance, the United States does not make use of the Corporate Governance code; in any case, it still has the SOX as a constitution, while, in the United Kingdom, the code is known as the UK CG code, which is also a guide for best practice, based on explanation or compliance, as is applicable in SA. Furthermore, the Saudi corporate legislation and law are derived fundamentally from the British Companies Act (Al-Matari *et al.*, 2012a), and the SCGC is broadly derived from the Cadbury Report of the United Kingdom, 1992 (Aguilera and Cuervo-Cazurra, 2009; Seidl *et al.*, 2013). A specific illustration can be traced to the SCGC, with the recommendation of the selection of a unitary-style of board of directors, involving both non-official and official executives (NEDs), who tend to be basically accountable to all of the shareholders based on voluntary ‘explain or comply’ disclosure and a compliance regime. Nevertheless, the formal mechanisms of corporate governance in SA are probably impacted by the contextual differences, including social norms, religion, concentrated ownership structures, and a highly hierarchical social structure. A few related contextual differences have been previously discussed in the first chapter. The corporate governance environment of SA comprises internal frameworks and external frameworks. The external framework comprises: (i) the Capital Market Authority (CMA) (ii) the Ministry of Commerce and Investment (MCI), (iii) the Saudi Organization Certified Public Accountants (SOCPA); and, (iv) the Saudi Stock Exchange (Tadawul). The internal mechanisms of the corporate governance comprise: (i) the listing Rules; (ii) the Saudi Companies Act; and, (iii) the Saudi Corporate Governance Code (SCGC). In the following sections of this chapter, the environments of the internal and external corporate governance are discussed in detail.

### **2.6 The Saudi External Corporate Governance Bodies**

There are numerous external corporate governance bodies in SA that enforce and control the laws and regulations. The most significant body is known as the Council of Ministers, led by the Prime Minister, also known as the King. In case of any deficiencies, it is observed that the capital market authority report directly to the Council of Ministers. Figure 2.4, below, gives an indication of the SA external corporate governance bodies, which include: (i) the 2003 Saudi Stock Exchange (Tadawul); (ii) the 2000 Saudi General Investment Authority (SAGIA); and the 2003 Capital Market Authority (CMA). The Saudi government

established the Saudi Organization for Certified Public Accountants (SOCPA) as far back as 1992. These are external bodies that were merged with the present authorities, with the inclusion of the Ministry of Finance, established in 1932, the Saudi Monetary Agency (SAMA), set up in 1952, the Public Investment Fund (PIF), set up in 1971, and the Ministry of Commerce, set up in 1953, to develop the national external corporate governance system. A few of the structures of this external governance that are associated with the study are further discussed in the subsections that follow.

Figure 2-4 The external corporate governance framework in Saudi Arabia



Source: Albassam, 2014, p.40

### 2.6.1 Ministry of Commerce and Investment (MCI)

The MCI is a government organization that holds full legal, financial and administrative independence, and also has a full link with the Prime Minister. The MCI was formed in 1953 and until 2003 remained the sole authority that stood for the regulation of the affairs of the listed organizations of the entire general assembly of shareholders. In 1965, the MCI was able to issue the Companies Act, which highlighted a predetermined number of corporate governance provisions, targeted at the protection of shareholders. This Act listed the composition, and even the responsibilities of the board of directors, as well as the rights of the shareholders. In order to improve transparency and voluntary disclosure, in 1990 the MCI published the Public Disclosure Standard. After the corporate governance reforms of 2006, numerous MCI supervisory duties were further transferred directly to the CMA, as indicated by the CMA (2016). As of late, the MCI plays a huge function in enforcing

regulations and improving corporate governance, the auditing professions, and organizational law.

### **2.6.2 Capital Market Authority (CMA)**

The most vital external reform of corporate governance in SA came through the CMA establishment in 2003, which was perceived to be huge progress (Al-Matari *et al.*, 2012a). Altogether, the CMA has put into place about seven rules associated with the practices of corporate governance, which include the Investment Funds Regulations of 2005, the Market Law of 2004, the Saudi Corporate Governance Code of 2006, and the Listing Rules of 2004 and the Merger and Acquisition Regulations of 2005.

The major responsibilities of the CMA include: (i) the development and regulation of the Saudi stock market; and, (ii) improvement of transparency and disclosure by enlisted organizations, in order to increase investor confidence (CMA, 2016). In addition, it targets the protection of investors and dealers from malpractices, which include deceit, cheating, fraud, insider trading, and manipulation. Moreover, the CMA has the capacity to engage those essential activities for the accomplishment of its mandate. The CMA reports directly to the Prime Minister and the Council of Ministers, and is given the authority to provide regulation of the stock market, while accelerating corporate governance reforms. The CMA is additionally capable of enforcing penalties and sanctions for any related violations to securities and security agencies.

To improve corporate governance practices in the listed organizations in SA, the CMA executed three different initiatives related to the corporate governance in three major phases, as indicated by ROSC (2009). Basically, the first phase was completed with the SCGC release. The second phase was concerned with increasing awareness and appreciating in practices of corporate governance, specifically among the organizations that were listed. The third phase pertains to the revisions to the SCGC for the improvement of its effectiveness relative to the practice of the International Corporate Governance. The recent update of the SCGC was done by the Capital Market Authority board in 2017<sup>8</sup>.

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<sup>8</sup> Amended by Resolution of the Board of the Capital Market Authority Number 1-10-2010 Dated 16/5/1438H corresponding to 13/2/2017G

### **2.6.3 Saudi Stock Exchange (Tadawul)**

The initial joint stock company in SA, known as the Arabian Automobiles Company, was established in the 1930's (Tadawul, 2012). In 1975, there was an increase in the number of listed organization to around 14 public organizations and the market was still informal until 1985, when the SAMA became responsible for the development of the stock market and ensuring that trading was being regulated (SFG, 2009; Tadawul, 2012). Furthermore, the number of organizations had slowly increased to around 57 by 1990, but had risen to 75 by the year 2000. Since 2003, which was the time of its establishment, the CMA has looked to build up the stock market through the establishment off the Saudi Stock Exchange (Tadawul, 2012). This regulatory body is in charge of the organization of the financial market. Additionally, it was formed for the escalation of public awareness concerning the denationalization and stocks of businesses in Saudi. It is currently managed by a member of the board of directors, appointed by the Council of Ministers, and also includes representatives of legislators, the listed firms, and the licensed local brokerage firms in Saudi.

### **2.6.4 Saudi Organization for Certified Public Accountants (SOCPA)**

The auditing and accounting profession in SA is still young. It started in 1964, when the Saudi Companies Act was issued, necessitating the listed organizations to have their financial statements audited by independent auditors so as to ensure that the shareholders were protected (SOCPA, 2016). As a result, the initial Chartered Accountants Act was passed in 1974, and is still very crucial in the regulation of the accountancy profession in SA, which is supervised by the MCI. Until the early 1990s, there was no independent body to watch and direct the accounting improvements (Haniffa and Hudaib, 2007), but in 1992 the SOCPA was formed to act as a semi-independent authority (Alsaeed, 2006).

## **2.7 Laws and Regulations related to Corporate Governance and External Audit in Saudi Arabia**

Basically, the auditing and accounting professions are promoted by SOCPA in SA, as it is responsible for: (i) re-organizing the auditing organizations; (ii) ensuring that the quality of the performance of the audit organizations is monitored; and (iii) granting licenses. Concurrently, in 1992, there was an amendment of the 1974 Act (SOCPA, 2016). In 2006 the SOCPA was recognized by the International Federation of Accountants (IFAC) and of all the entire 16 bodies of accounting, the SOCPA was chosen by the IFAC to assist with the

development of the auditing and accounting professions (SOCPA, 2016). Alsaeed (2006) has suggested that SOCPA has assisted in the improvement of the quality of the audit organizations and increased significantly the confidence of investors and shareholders in the corporate governance, through facilitating disclosure and improving the dependability of the corporate annual reports. The MCI enforces the regulations, while also controlling the SOCPA's work.

### **2.7.1 Companies Law (1965) and Company Structure**

In recent years, Saudi Arabia's rising market has grown significantly. Compared to long established markets, such as the United Kingdom and the United States, the Saudi Arabian market, because of its outset, might not have been able to have similar levels of control and may possibly suffer from greater deficits of information. The Saudi government has, therefore, been developing regulations to rectify this. Despite there being numerous regulations in SA, this particular section discusses the laws and regulations that monitor and control the operations of organizations in SA.

The initial formal attempt for the regulation of the corporate operations and activities was the Companies Act of 1965 (Kantor *et al.*, 1995), which was widely revised in 1982 and 1985. However, the British Companies Act of 1948 shaped the premise of the Saudi Companies Act of 1965, despite the clear contextual differences, such as social norms, the legal system, and religion (Hussainey and Al-Nodel, 2008). The Act of 1965 aimed to address the mechanisms of corporate governance. While concentrating on the board attributes, it also contains provision for the protection of the shareholders.

The Companies Law is thought to be the first organized attempt to regulate the Saudi organizations. This was known as the fundamental mechanism, and all organizations in Saudi were compelled to adhere to its rules and instructions. Despite the law having been revised and amended to keep up with the rapid organizational growth in Saudi, it is thought not to satisfy modern requirements (Al-ghamdi and Al-angari, 2005). Companies' structures have to be in compliance with the Saudi Companies Law, which performs a huge function in ascertaining the legal shape and even the organizational system of a firm. In general, an individual organization, at its origin, sets out various simple regulations, such as the directors' appointment to the board, the shareholders' rights, and termination terms. Based

on the recent fraud that occurred in the Saudi Market, a newly<sup>9</sup> published company law has been introduced by the Ministry of Commerce and Investment, replacing the previous company law. With this new law, the CMA is capable of regulating the listed organizations in matters such as governance, inspections, operations, and mergers. The company law also includes major provisions, such as the remuneration of board members, and the development of an audit committee (Reda *et al.*, 2016). The illustrations that proceed are a concise description of what is contained in the company law.

- i. Regulates the number of board members for a joint stock company.
- ii. Regulates audit committee decision-making, and ability of the audit company to provide oversight.
- iii. Regulates board appointments (prohibits the Chairman from holding an executive position) and meetings (at least twice a year).
- iv. Requires that shares more than SAR 10000 are deposited with a Saudi bank as a guarantee in respect of the liability of each director.
- v. Requires the audit committee to check the company's financial statements.
- vi. Sets out three categories of violations.

The Table 2.3 below presents the three main categories of violations.

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<sup>9</sup> The new Companies Law was enacted by Royal Decree No M3 dated 28/1/1437H (i.e. 10/11/2015G).

Table 2:3 The main categories of violations according to the new company law endorsed by the Ministry of Commerce and Investments in Saudi Arabia (MCI, 2016)

Violations carrying a fine of up to SAR5 million and/or up to 5 years' imprisonment	Violations carrying a fine of up to SAR1 million and/or up to one year's imprisonment	Violations carrying a fine of up to SAR500,000
<ul style="list-style-type: none"> <li>• Provision of false or misleading data in respect of the financial statements (or the making of material omissions in respect thereof) by any officer, director, board member, auditor or liquidator.</li> <li>• Misuse of authority, votes or company funds contrary to the best interests of the company.</li> <li>• Failure by any manager, officer or director to call a shareholder meeting when he/she knows that the company's losses have reached 50% of its capital (including, in the case of an LLC, a failure to publish this fact in the Commercial Register).</li> </ul>	<ul style="list-style-type: none"> <li>• Failure by auditors to inform the company about violations uncovered during their work (which may include criminal violations)</li> <li>• Announcement by any person that a company has been registered, when in fact it has not</li> <li>• Provision of false information in the AoA, bylaws, incorporation application or other company documents by any person and including any person who signs or publishes such documents.</li> </ul>	<ul style="list-style-type: none"> <li>• Distribution (and receipt, in bad faith) of sums in violation of the New Law, including the making of any related decision or distribution and including ratification of such distribution by an auditor (if it was aware of the violation)</li> <li>• Any deliberate disruption to the call for, or convening of, a general assembly by any director</li> <li>• Obtaining a guarantee or loan by a director of a JSC in violation of the New Law (and any Chairman who was aware of it)</li> <li>• Failure to publish the financial statements of the company</li> <li>• Failure to provide MCI with the documents required by the New Law</li> <li>• Failure to prepare or record minutes</li> <li>• Failure to publish AoA, bylaws and amendments thereto</li> <li>• Breach of the New Law by any auditor</li> <li>• Non-compliance with the instructions, circulars or rules issued by MCI or the CMA.</li> </ul>

Source: (MCI, 2016) designed by researcher

### **2.7.2 Accounting and Auditing Standards**

In 1986, SA issued national accounting and auditing standards 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, 2011). As mentioned earlier, the Accounting Standards Committee of the SOCPA is responsible for developing and reviewing accounting and auditing standards in SA. Recently, the SOCPA has attempted to merge Saudi national standards with those of the IFRS and has also attempted to transfer Saudi Auditing standards to ISA standards. Both the IFRS and ISA standards still have not reported any results because some stages still under study. The implementation of the standards will be effective in early 2017. As a result, most banks and financial companies have begun to apply these merged standards. For that reason, SOCPA has provided the external auditors with some workshops and training programs in order to prepare them for the transition program. The last report issued by SOCPA contends that SOCPA, in this action plan, highlights ongoing efforts to identify obstacles to the convergence process, as well as identifying opportunities to further enable the implementation of IFRS (SOCPA, 2010, p. 7).

Overall, national accounting standards play a pivotal role in the Saudi environment and in the development disclosure and financial transaction treatment. These standards consist of 23 standards such as disclosure requirements, revenues standards, inventory standards, audit standards etc. In 2014, the SOCPA adopted international standards in auditing. The transition to international auditing standards (ISA) covered three stages from 2014 to 2015. These standards will be effective for audits of financial statements for the periods beginning on or after 1<sup>st</sup> of January 2017. With regard to the adoption of international accounting standards and IFRS, SCOPA are responsible for translating all standards, using three of the world's leading translation offices in Accounting and Auditing under the supervision of SOCPA's board. The ISA will play a key role in increasing the competence of external auditors and enhance external audit quality, which covers auditor competence, independence, audit plan, audit report, etc.

## **2.8 Corporate Governance and Auditing Practice in Saudi Arabia**

There is no doubt that accounting and auditing professions play a vital role by assisting the production of good corporate governance practice (Husnin *et al.*, 2016) . However, in many international capital markets, accounting and auditing professionals have been seen as contributing to financial collapse (Demirag and Solomon, 2003) and similarly the same



circumstances exist in the Saudi accounting and auditing professions. In fact, the accounting and auditing professions were one of the causative elements that resulted in the catastrophe in 2006 due to their lack of professionalism (Al Muneef, 2006). One of the essential factors behind the weakness in the auditing profession is suggested by Al-angari (2007) as being the lack of highly qualified auditors which he attributes to the lack of suitable education and training provide to them. After 2006, company law was considered a reference for accounting and auditing professions. However, company law was not adequate in requiring sufficient accounting and auditing standards (Al Amari, 1989), which lead the Saudi regulator to assign the problem to the SOCPA. The tasks of the SOCPA were as follows:

- i. Improving and supporting accounting and auditing standards.
- ii. Providing education and training programs and workshops.
- iii. Contributing in international and regional seminars and symposia.
- iv. Publishing research related to accounting and auditing.

The SOCPA made urgent recommendations that were not previously present a couple years ago. For instance, they discussed recommendations related to board of directors and audit committee functions as well the shortage of control rules. After all these efforts from regulators and external bodies to improve corporate governance in general, and auditing practice specifically, the numbers of fraud and scandal cases identified have increased since 2012. This study may help to highlight the possible causes for this failure and develop some solutions, which will enhance the audit profession. The most significant factors behind the weakness of auditing in SA is fraud in financial statements. This fraud has happened through different means such as misstatements or omissions of financial statement data, or deliberate misrepresentation in order to mislead the beneficiary. One significant scandal occurred in 2013 when, "Saudi Arabia's telecommunications company, Mobily, suspended its CEO, Khalid al-Kaf, effective November 21, after the company was forced to restate 18 months of earnings due to accounting errors" (Matthew, 2014, p.1). The telecommunications company stated that an error in the timing of revenue recognition was the reason for the affected financial statements. The shares swung between gains and losses until they dropped more than 70% in the third quarter (Matthew, 2014). The improper revenue recognition is considered the most common scheme used in financial statement fraud. A survey by Deloitte US from 2000 to 2008 found that from 403 cases, 38% were recognized as improper revenue recognition schemes. Another tragic fraud case was in the Mohammad Al- Mojil Group (MMG) Company in 2012. It was a pioneer company in SA, establishing its operations in 1954 in Dammam city; its activities concentrated on building and construction. In 2008, the

company decided to start trading its shares in Tadawul. The company began to face debt problems after over-extending itself to take advantage of the construction boom in SA (Shamseddine and Rashad, 2014). The suspension by the CMA of the company in 2012 led to significant accumulated losses of around 2.79 billion riyals (\$743.4 million), equivalent to 223% of its capital (Shamseddine and Rashad, 2014). Financial analysts believed that the accelerated problem became more complicated because of the management and board of director's deficiency (Morgan, 2016). The company was audited by Deloitte & Touche, and was held responsible for not announcing second-quarter results in 2012. As a result of new company law imposed by the MCI, the CMA banned Deloitte & Touche in SA from doing auditing work for listed companies from June 2015 (Morgan, 2016). Furthermore, the three MMG executives had prison sentences and penalties imposed on them (Morgan, 2016). In addition, the CMA penalized Deloitte Touche for its involvement in the case (Morgan, 2016). The punishments imposed were the first of their kind in the history of the Kingdom. These are not the only cases of losses or frauds in listed companies in SA. The figure below shows the number of Saudi listed companies with accumulated losses reaching 100% of its capital.

Table 2:4 Summaries the accumulated losses on some listed companies in 2013 (million Saudi riyals).

Company name	Accumulated losses	Capital	Percentages of accumulated losses	sector
<u>Mohammad Al Mojil Group</u>	3.563	1250	285%	Building & Construction
<u>Bishah Agricultural Development Co.</u>	67	50	134%	Agriculture & Food Industries
<u>Weqaya Takaful Insurance and Reinsurance Co.</u>	185	150	124%	Insurance
<u>Al-Baha Investment and Development Co</u>	298	200	149%	Multi-Investment

Source: (CMA, 2013) designed by researcher

## **2.9 Chapter Summary**

The chapter above has provided insight into the background as well as the legal and economic structure of SA, discussed the corporate governance regime in SA. It has provided background information relating to the external and internal corporate governance environment, and an overview of the Saudi stock market. The chapter then discussed the corporate governance model in SA, which is based on the Anglo-American model, which focuses on protecting shareholders rather other stakeholders. The chapter investigated the external corporate governance framework in SA. The external framework is represented by three regulatory and supervisory bodies: the MCI, CMA and Tadawul. The chapter has discussed the internal corporate governance framework, addressing the regulations relating to internal corporate governance practices, in particular, the main monitoring devices, which play a significant role in regulating and developing the Saudi business environment. It has also considered important regulations, such as Companies Law and Accounting and Auditing Standards. In terms of the development of corporate governance, this chapter has identified that corporate governance in SA is in its early phase suffered from a lack of accountability, a weak legal framework and poor protection of shareholders. Besides, the role of audit committees and boards of directors are not effective (Al-ghamdi, 2012).

In relation to external auditing, this chapter has provided an historical view of the development of the accounting and auditing profession and the important events it has undergone. The SCG was discussed in detail, since it was the main source used for constructing the broad Saudi Corporate Governance Index (SCGI). Overall, this chapter has aimed to provide a concise view of the background of Saudi Arabia's corporate governance legal system and the important regulations and monitoring instruments such as operations, mergers, governance, and inspections. The following chapter will discuss the literature in relation to external audit quality.



## **Chapter 3: LITERATURE REVIEWS**

### **3.1 Introduction**

The previous chapter presented a brief overview of the background of SA and its corporate governance structure and framework. The purpose of this chapter is to review a number of major studies about corporate governance and external audit quality. The first section discusses agency theory and resources dependence theory, while the second section provides an overview of the audit quality definitions and measurements used in previous studies. The final section covers specific corporate governance variables and their association with external audit quality.

### **3.2 Corporate Governance Theoretical Frameworks**

There are multiple corporate governance theories that help to understand and explain the complexities of corporate governance (Beasley *et al.*, 2009). This section discusses these theories to help to understand corporate governance characteristics and their effect on external audit quality. In order to increase the credibility and validity of financial statements, the corporate governance code was established in SA to develop and regulate the Saudi capital market. In this study, the theoretical framework helped to explain the findings that answered the research questions and hypotheses. In fact, the theory played an important role in the explanation, and the justification, of the expected results and the current findings. Therefore, this section explains the potential theories related to corporate governance and external audit quality practices. The results of this study used agency theory together with resource dependency theory to explain the behaviours and the processes related to corporate governance and external audit quality. In reality, external auditors consider both agency and resource variables in their judgements on auditing planning. Thus, this study introduces two corporate governance theories, namely, agency theory, and resource dependency theory.

#### **3.2.1 Agency Theory**

The agency relationship starts when one party (the principal) delegates work to other party (the agent) to perform a task. In most cases, the agent makes decisions on behalf of the principal (Jensen and Meckling, 1976) . Usually both parties seek to maximise their return; however, their interest is not always aligned (Berle and Means, 1932). The agent may not act in the best interest of the principal because the agent is involved in the day-to-day

operations of business. She or he may take advantage of a principal, which may lead to two types of agent problems, namely, moral hazard, or adverse selection.

Moral hazard relates to a lack of effort by the agent, while adverse selection arises when the principal cannot determine if the effort extended by the agent is the most appropriate. For instance, the principal cannot determine when the job he provides is highly complex, or if the principal is not able to verify the ability of the agent to complete the work (Jensen and Meckling, 1976).

The agency problem in accounting research emphasizes two sets of relationships. The first situation focuses on the issue of the separation of ownership and control that results in limited shareholder ability to observe management actions, leading to a rise in the risk that management may not always act in the best interest of the firm. The other relationship is managers' acting on behalf of the shareholders of the firm. However, there are several strategies to mitigate the agency problems, by monitoring behaviour or by providing incentives that are congruent with the principle's interest (Jensen and Meckling, 1976). Monitoring behaviour can be achieved by hiring internal and external auditors, having more independent directors, and designing effective budgetary, or other performance evaluation, systems. With regard to this study, the owner appointed board of directors, audit committee members, external auditors, and internal auditors to perform tasks in the firm, with, or without, due regard for their ability to perform those roles (Haniffa and Hudaib, 2007), which may raise an agency problem. Such practice affected the external audit practice in the Saudi listed firms. As a result, the implementation of this theory becomes more important in the context of SA.

### **3.2.2 Resource Dependency Theory**

The resource dependency theory was linked to corporate governance by Lawrence and Lorsch (Lawrence and Lorsch, 1967). They found that a firm should have an internal structure that covers the required environment. This theory explains how external resources can affect the behaviour of an organisation. These resources are important for both strategic and tactical management of any organisation. According to this theory, the board of directors provides skills and information and should be a public policy decision maker in order to reduce uncertainty (Hillman *et al.*, 2000). Resources brought from other independent organisations can enhance the quality of financial performance and maximise shareholders' wealth (Pearce and Zahra, 1992).

This theory supports the appointments of directors (board of directors' members or audit committee members) to multiple boards, because they bring opportunities to gather information and for networking in different ways. Furthermore, it supports the engagement of external auditors to more than one firm, in order to gain more experience and knowledge that may benefit the organization under the audit process. This theory emphasises that the roles of the board of directors, audit committee members, internal auditors and external auditors enhance the business by enabling access to expertise both horizontally and vertically, and builds a firm's reputation.

### **3.2.3 External Audit Quality Definition**

As a response to the agency problem, the need for external auditors has increased, in order to attest accountability and reduce the possibility of error and material misstatement, such as fraud and management manipulation (Chandler *et al.*, 1993). External audit quality is one of the most important issues facing the auditing profession, especially during recent years, due to the pressure of litigation (Vanstraelen, 2000) and a series of corporate failures. Furthermore, it plays an important role in developing and enhancing the global economy and business firms (Al-Khaddash *et al.*, 2013). Auditors issue an opinion, providing reasonable assurance on the fairness and credibility of financial statements and detecting material misstatements. It is important for the users of financial statements to gain assurance that relevant data is being reported truthfully, properly measured, and fairly presented (Al-Khaddash *et al.*, 2013).

High external audit quality is vital to companies; however, researchers have differences in agreeing what it is, and have defined external audit quality in a number of different ways. (Knechel *et al.*, 2013). Huang *et al.*, for example, defined it as the accurate information reported by the auditor (Huang *et al.*, 2014). Others have defined external audit quality as the likelihood of discovering and reporting material misstatements by auditors' technical capabilities (DeAngelo, 1981). The demand for higher quality auditing services leads to more emphasis on audit procedures (Al-Twajry and Elnafabi, 2008). Moreover, a high quality audit helps to reduce the uncertainty associated with financial reports prepared by managers and flags up the quality of the information presented. On audit engagement, external auditors are hired to perform an independent examination of a firm's financial reports and to issue an opinion on their consistency with GAAP. Jensen and Meckling (1976) recognised the importance of external auditing as a monitoring mechanism. Thus, external

auditors are the most direct monitors of financial reporting decisions and constitute the first line of defence against potential earnings or accounting manipulation.

Auditors should improve the quality of audit by detecting and reporting material misstatements or should be held responsible for business failures and be subjected to lawsuits (Abidin, 2006). External audit quality depends on auditors' competence, which can be achieved through investment in audit technology and proper training, and auditor independence, which has long been regarded as vital for maintaining the integrity of the audit (Colbert and Murray, 1995). In addition to auditor independence, other individual specifications, such as specialised knowledge, professional competence, and expertise, are important factors influencing the quality of auditors' professional decisions and, hence, external audit quality. Researchers have not reached agreement about the measurement of external audit quality. Reisch (2000, p. 12), for example, argues that "Audit quality is a multi-dimensional potential construct; it is extremely difficult to measure, and as a result, the extant literature reflects sundry measures of audit quality". Similarly, Iskandar et al. (2010) found that consensus has not been reached on how external audit quality should be measured. Figure 3.1, below, presents the framework of external audit quality according to the U.K.'s Financial Reporting Council and shows the many variables that may could affect audit quality.

Figure 3-1 the U.K.'s Financial Reporting Council: Audit Quality Framework



Source: Financial Reporting Council 2008



### **3.2.4 External Audit Quality Factors**

Measurement of external quality has taken a variety of approaches. The first approach is a direct approach, defined as being “based on the assumption that reporting of contract breaches and the probability of discovery will be reflected in features of the audit such as abuses and errors made by auditors” (Kilgore, 2007, p. 77). The second approach is an indirect approach, based on the correlates of external audit quality. The direct approach is difficult to reach because it depends on the implementation of self-censorship by the auditors themselves, so it is hard to report on contract breaches, abuses and errors made by some auditors. Unlike the direct approach, the indirect approach measures external audit quality by using surrogates for quality, or checking the attributes or factors perceived to be associated with external audit quality (Kilgore, 2007). In fact, most previous studies have attempted to measure external audit quality using the indirect approach. Specifically, they have used surrogates for external audit quality to differentiate between ‘high quality audit’ and ‘low quality audit’ (Dopuch and Simunic, 1982; Hussein and Hanefah, 2013), since audit market participants are generally unable to observe external audit quality directly. Although there is more than one way to measure external audit quality, its measurement remains a matter of controversy and disagreement. Moreover, there is still ambiguity in the literature about the definition of, and the factors affecting, external audit quality. According to (Hussein and Hanefah, 2013), the surrogates frequently used to measure external audit quality are: (1) independence; (2) audit firm size; (3) industry expertise, non-audit services; (4) audit tenure. In this study, the researcher used the perception of participants as a proxy to measure the external audit quality, by using respondents’ perceptions of the level of overall external audit quality achieved by the company’s external auditors in a recent audit engagement (Jamal and Sunder, 2011; Bing *et al.*, 2014).

### **3.2.5 External auditors’ variables**

Many studies have argued about external audit quality and the factors that influence it (Reisch, 2000; Iskandar *et al.*, 2010). As previously mentioned, there are two types of factors that can affect the external audit quality, direct or indirect - which are consistent with some external audit quality proxies. However, this thesis aimed to investigate the factors that could affect external audit quality. The first research question in this study was; *what are the factors affecting external audit quality in Saudi listed firms?*

In order to measure external audit quality, the researcher used the perceptions of participants in a questionnaire as the proxy for external audit quality, by recording respondents’ opinions

about the level of overall external audit quality achieved by external auditors in a recent audit engagement (Jamal and Sunder, 2011; Bing *et al.*, 2014). In addition, audit size, auditor competence, auditor independence, audit tenure were used as control variables.

#### **3.2.5.1 Audit firm size**

Audit firm size has been used as a surrogate, due to the difficulty of measuring external audit quality. Some researchers have used the surrogate approach and found that external audit quality improves when audit firm size increases (DeAngelo, 1981; Davidson and Neu, 1993; Becker *et al.*, 1998; Ferguson and Stokes, 2003; Abu Baker *et al.*, 2005; Francis and Yu, 2009; Choi *et al.*, 2010; Rusmin, 2010; Lawrence *et al.*, 2011; Al-Khaddash *et al.*, 2013). One explanation of the positive relationship is that large audit firms offer higher quality audits than small firms, because the large firms have more resources and facilities than the small ones. Moreover, large audit firms can do more than small firms, due to their technological capacity (Reisch, 2000). In large audit firms, the external audit quality is usually more evident than in small ones, because large audit firms experience a high number of clients, and there is a greater probability that the range of services provided will be wider (Al-Ajmi, 2009). As noted by DeAngelo (1981), large audit firms produce high quality audits and they are not afraid to be objective because they are not concerned about others in the same way that smaller firms are.

Francis and Yu (2009) stated that large audit firms have greater experience and skills in detecting material misstatements and financial statement problems. Their study examined the office size with client earning properties and external audit quality in order to test the relation between external audit quality and the Big 4 office size. They found that going-concern reports were more likely to be issued by large audit firms. Moreover, the reports were more accurate in predicting future bankruptcy. One limitation of their study was that their evidence did not indicate whether small audit size offices failed to meet the minimum standards of external audit quality. Furthermore, the study was based on public companies, and private companies were beyond the scope of the study.

Another study by Al-Khaddash *et al.* (2013) investigated the factors affecting audit quality in Jordanian Commercial Banks by distributing questionnaires to internal and external auditors, and financial managers. The findings indicated that there is a positive association between large audit firm size and external audit quality.

On the other hand, other researchers have stated that there is no difference between small and large audit firms in terms of their influence on external audit quality, and that both of

them seek to reach an acceptable level of external audit quality (Larn and Chang, 1994; Bauwhede and Willekens, 2004; Jackson *et al.*, 2008). A study in Vietnam determined the factors that affect the quality of auditing activities. The research utilised questionnaires and interviews with external auditors. The study focused on the size of auditing firms, non-audit services, knowledge and capabilities of the auditor, and quality control from inside and outside the audit firm. The results identified key factors that affect the quality of audit activities, such as prices and costs, the staff capacity of auditing firms, the organisation and operations of audit firms, the scope of supply of business services to audit clients, and external and internal quality control (Hai, 2016).

### **3.2.5.2 Auditor competence**

According to previous studies, it is obvious that the qualifications and expertise of the auditor play a vital role in enhancing external audit quality (Lee and Stone, 1995; Al-Khaddash *et al.*, 2013; Octavia and Widodo, 2015; Osée, 2016). The existence of professional auditors in business leads to a higher level of technical information and technical competence, primarily because of auditors' potential ability to discover and detect material misstatements and errors (Arruñada, 2000). Capabilities have been defined as 'the professional knowledge, professionals skills, and professional values, ethics, and attitudes required to demonstrate competence (ISA, 2009a, p. 9), while competence has been defined as 'being able to perform a work role to a defined standard with reference to real world environments'(ISA, 2009a, p. 9). Under I ISA 620, each auditor must maintain professional proficiency through continuous education and training (ISA, 2009a). However, each country has its own requirements to determine auditors' qualifications and experience. In the UK, an auditor should hold a "diploma, bachelor, or high school" certificate in order to be qualified to sit for the exam, and at least three years' experience with an audit firm. However, in the USA, all states in general require an auditor to complete 150 hours post-secondary education from an accredited institution in business or accounting, and at least one year of experience, in order to be qualified to sit for the certified public accountant exam (CPA). SA follows the Anglo-American style; therefore, it has the same requirements of CPA's as in the USA. Development in auditing skills is attained not only by education, but also by practical auditing work (INTOSAI, 2001). In the preceding research, the relationship between external audit quality and auditor expertise has been broadly studied.

A study using archival data investigated the factors affecting external audit quality and found that experience was negatively associated with absolute discretionary accruals (Xiaoke W. *et al.*, 2015). A study from SA by Al-Twaijry and Elnafabi (2008) explored the auditors'

perspectives of the factors that may affect the quality of the audit services, and also the factors that might influence the preference for one accounting office to another, using perceptions of external auditors. The results concluded that the strongest factors affecting external audit quality from the auditors' perception were: 1) auditors' experience in auditing, 2) objectivity when examining financial reports, and, 3) auditors' academic qualifications. The study had some limitations. For instance, the research did not focus on other factors affecting external audit quality, such as inside or outside governance. Moreover, the methodology the researcher used was not enough to reflect the real practice of external audit quality in SA.

A study from Nigeria by Augustine *et al.* (2014) investigated the relationship between external audit quality and auditor independence, auditor experience and auditor accountability. They found that there was a significant relationship between audit accountability and auditor independence, while there was no significant relationship between auditor expertise and external audit quality. Another study stated that there was a positive association between the external auditors and external audit quality (Osée, 2016).

Another study found that the experience of the auditor who is engaged increased external audit quality, even after controlling for audit firm characteristics, indicating that more experienced CPAs provide higher quality audit services than less experienced CPAs (Cahan and Jerry, 2015).

A recent study from Indonesia by Abdul Halime *et al.*, 2014 focused on testing the relationship between the competence of external auditors and the overall audit quality. The findings proved that there is a positive association between external auditors' competence and high external audit quality, meaning that high audit qualifications and experience lead to high external audit quality.

Maletta and Wright (1996) stated that auditors who have experience are better at detecting errors than auditors who do not have experience. Another study adds other benefits of auditor experience, by stating that auditors' experience mitigates financial fraud (Carcello and Nagy, 2004). A higher level of assurance will be found in industry specialists than non-specialists (Craswell *et al.*, (1995). Craswell *et al.* (1995) added that specialists earned a 34% fee premium over non-specialists in specialised industries. O'Keefe *et al.* (1994) reported that industry specialists were more compliant with auditing standards than non-specialists. They added, for instance, that besides the evidence of detecting material misstatements in financial statements associated with auditors' industry specialisation, there is also evidence to show

that specialist auditors make an effort to protect their reputation through increased compliance with generally accepted auditing standards (O'Keefe *et al.*, 1994). Industry specialisation is considered to be a significant goal of the largest audit firms in the USA and is considered an important problem that faces the audit profession (Neal and Richard *et al.*, 2004). Neal and Richard added that, in the USA, large accounting firms have considered specialisation to be a significant strategic objective and an essential issue facing the profession.

Consequently, there has been increased interest by academics in the relationship between external audit quality and the auditor industry. Due to a lack of agreement between scholars over measuring industry specialisation, some studies have provided mixed results. Some research states that specialised knowledge in business could affect an auditor's ability to evaluate audit risks, enhance earnings quality, and detect errors and misstatements directly (Maletta and Wright, 1996; Owghoso *et al.*, 2002; Krishnan, 2003). For instance, Owghoso *et al.* (2002) and Hammersley (2006) stated that an experienced auditor is better at detecting errors within his industry than outside his organisation. Gramling and Stone (2001) and Abdul Halim *et al.* (2014) dispute this and argue that, because of the availability of better audit technology, superior knowledge, and lower costs, auditors should provide higher external audit quality.

### **3.2.5.3 Auditor independence**

Auditor independence has been defined as “the conditional probability of reporting a discovered breach...” (DeAngelo, 1981 ,p. 117), while the Independence Standard Board defines it as: “the freedom from those pressures and other factors that compromise, or can reasonably be expected to compromise, an auditor's ability to make unbiased decisions”(Adelopo, 2010, p. 117). The International Federation of Accountants (IFAC) has divided auditor independence into independence of mind and independence in appearance. Independence of mind means: “The state of mind that permits the provision of an opinion without being affected by influences that compromise professional judgement allowing an individual to act with integrity, exercise objectivity and professional scepticism” (IFAC, 2001, p. 1137). On the other hand, independence in appearance means: “The avoidance of facts and circumstances that are so significant that a reasonable and informed third party, having knowledge of all relevant information would reasonably conclude that a firm's or a member of the assurance team's integrity, objectivity or professional scepticism had been compromised” (IFAC, 2001, p. 1137). As auditor independence affects external audit quality, auditors have the responsibility to report the real situation of companies to

management and owners of businesses without any influence. There are many threats that influence auditor independence, such as management, non-audit services, auditor tenure, etc. For instance, a company's management can prevent auditors from acting fully in accordance with their professional behaviour by providing services, or goods as gifts, or threatening audit appointments.

The first step to reduce the risk of influence is to keep the auditors independent from management. Top management and owners can have a considerable impact on an auditor's independence. As a result of financial statement fraud and lack of independence, the Securities and Exchange Commission (SEC, 2000) issued the Sarbanes-Oxley Act of 2002 (SOX) (2002), which attempts to improve auditor independence by increasing it through the enhancement of the audit committee's responsibilities, in order to eliminate management influence on the external auditor. For instance, the audit committee plays an important role in enhancing the independence of external auditors by setting up private and informal meetings without the attendance of top management, in order to encourage auditors to disclose any issue at any stage of the audit. Carcello and Neal (2003) found that auditors' decisions could be affected by the threat of discharge by management or by the audit committee. For example, auditors may not be able to determine whether to issue a going concern opinion, or not, due to the threat of dismissal. The Sarbanes-Oxley Act 2002 (hereafter SOX) enhanced auditor independence by eliminating management risk of dismissal through placing responsibility with the audit committee, which became responsible for the appointment and termination of auditors. The SOX states that the audit committee, "...shall be directly responsible for the appointment, compensation, and oversight of the work of any registered public accounting firm ..." (SOX, 2002, Section 301). The importance of audit reports has increased because of the value that the financial statements, provided by the management, have to shareholders.

Another threat of independence is non-audit services. Not only can audit services affect external audit quality, but also non-audit services can affect external audit quality (Jeong *et al.*, 2005). In 2000, the United States Securities and Exchange Commission (SEC), adopted the SOX 2002 regulations that ban accounting firms from providing certain non-audit "consulting" services to their audit clients. In this regard, a number of researchers (Chen *et al.*, 2005; Gul *et al.*, 2007; Allehaidan, 2012; Thornton and Shaub, 2014) have stated that auditors could lose their independence by accepting non-audit services. To be more precise, it has been argued by Houghton and Jubb (1999) that audit fees are more price-sensitive than non-audit service fees. Moreover, non-audit service fees can play a significant role in

improving the audit firm's partners' wealth. They concluded that there was a positive relationship between external audit quality and non-audit fees and qualified audit reports (Houghton and Jubb, (1999). The high levels of non-audit services arise in large firms, which can decrease auditor independence, and may affect external audit quality (Francis, 2004).

Savanstrom (2013) studied the effect of non- audit services on external audit quality using managers' perceptions, using 420 questionnaires and discretionary accruals to measure external audit quality. He found that there were some indications that NAS had a negative effect on external audit quality.

A study by Allehaidan (2012) from SA focused on non-audit services and external audit quality. A questionnaire survey was used to obtain opinions from a sample of auditors working at Big 4 and non-Big 4 audit firms. It was found that audit firms in SA were practising non-audit services in Saudi, even though it is prohibited by corporate governance legislation. One of the limitations in this study is that the research did not focus on client firms in order to see the consequences of this prohibition on: (i) external audit quality, (ii) audit fees (iii) and auditor independence. Furthermore, the outcomes of the study may have been enriched by considering the industry type and audit specialisation.

In conclusion, auditor independence has been strongly associated with external audit quality factors, so auditor independence may strongly influence external audit quality.

#### **3.2.5.4 Audit tenure**

Audit tenure is the time that the partner spends on a particular audit engagement. The SOX Act 2002, refers, "to the mandatory rotation of auditors from five to seven years" (SOX, 2002, section 207). Recently, some studies have focused on audit partner tenure. The effects of auditor tenure on external audit quality raise two opposing opinions. The first view indicates that auditors may develop close relationships with the client and, as the relationship lengthens, this can lead auditors to act in favour of management and, as a result, reduce external audit quality. The other view, however, suggests that with longer tenure, auditors will develop their work and increase their expertise during audit engagements, thus resulting in higher external audit quality.

External audit quality may decrease because of the lengthening associations between auditor and client (Deis and Giroux, 1992; Adenuyi and Mieseigha, 2013). Carey and Simnett (2006) studied the relationship between external audit quality and audit partner tenure. They determined audit partner tenure by measuring the number of years that auditors worked with

a partner. They concluded that long audit partner tenure was less likely to receive a going-concern audit opinion. Moreover, they found that firms with short audit partner tenure were less likely to just beat earnings benchmarks. However, there is no evidence regarding the association between discretionary working capital accruals and audit partner tenure. Another study from Taiwan by Chen *et al.* (2008) found that companies with long tenure have lower discretionary accruals. The results were conflicting regarding the argument that long tenure audit partners provide lower quality services. Manry *et al.* (2008) examined the multiple U.S. offices of three large international accounting firms and studied the association between discretionary accruals and audit partner tenure. They found that audit partner tenure affected discretionary accruals negatively. Additionally, they found that the negative relationship only applied to small clients with partner tenure of more than 7 years.

In the USA, Bedard and Johnstone (2010) examined the relationship between audit partner tenure and audit planning and pricing. They found a positive relationship between audit partner tenure and planned realisation rates, but a negative association between audit partner tenure and planned audit hours. By using the Binary Logit Model estimation technique, Adenuyi and Mieseigha (2013) collected data from Nigeria and found negative relationships between external audit quality and audit tenure. Furthermore, Belen *et al.* (2015) studied the relationship between external audit quality and audit tenure in non-profit organisations in Spain. They found that foundation external audit quality decreased as tenure length increased. This loss occurred until the sixth year of the foundation-auditor relationship. It is obvious that the mandatory rotation of auditors' relationships between auditors and clients impairs auditor independence. As stated by Abu Backer *et.al* and Jackson *et.al*, the tenure of audit firms is a part of external auditing independence. (Abu Baker *et al.*, 2005; Jackson *et al.*, 2008). However, according to European Audit Regulations (EU)<sup>10</sup>, auditors must be tendered every 10 years<sup>11</sup>, with an option of an extension to a maximum period to 20 years (24 years in the case of joint audit), after which there must be audit firm rotation (EU, 2014). In contrast, Jackson *et al.* (2008) claim that the longer audit rotation lasts, the more it strengthens external audit quality and will result in less costs for the company.

To sum up, long tenure relationships between auditors and clients may reduce auditor independence and, thus, decrease external audit quality.

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<sup>10</sup> European Audit Regulations, for more information see this website <https://www.icaew.com/en/technical/ethics/auditor-independence/implementation-of-european-audit-reforms>

<sup>11</sup> Regulation (EU) No537/2014 of the European Parliament and the Council of April 2014. Article 7 Duration of the audit engagement.



### **3.2.6 Board of Directors' variables**

According to *Agency Theory*, the board of directors, through monitoring management, can enhance the integrity of financial reporting (Peasnell *et al.*, 2005). Vafeas (1999) states that boards of directors have many roles, such as monitoring managerial actions, the imposition of financial disclosure, and assigning tasks delegated to sub-committees. The following section gives an overview of the relationship between external audit quality and board characteristics.

#### **3.2.6.1 Board of Directors' size**

Board size is the first element that may influence external audit quality in board characteristics. There is an argument in the literature for both small and large sized boards and external audit quality.

For instance, a study by Jensen shows that there is relationship between the board size and its efficiency (Jensen, 1993). His study concluded that a large number of board of directors positively affected the level of conflict among members. Moreover, as indicated by Lipton and Lorsch (1992), large sized boards of directors may lead to more communication and coordination problems than in small size ones, and may lead to the effectiveness of the board, as well as a firm's performance, being reduced. In addition, larger boards are associated with poorer performance, due to the above-mentioned problems associated with large boards, (Chen *et al.*, 2005; De Andres *et al.*, 2005).

In detail, the majority of studies emphasise the effectiveness of small sized boards of directors (Lipton and Lorsch, 1992; Jensen, 1993; Ejeagbasi *et al.*, 2015). Due to the fact that there are differences between large and small sized boards of directors, the independence of the board may be increased in cases of small sized boards (Linck *et al.*, 2008). The independence of small boards is more affected by independent directors than large ones, which consequently improves their monitoring activities. A number of researchers (Jensen, 1993; Yermack, 1996; Goodstein *et al.* (1994) claim that smaller boards, comprising four to six members, may have increased ability to monitor the CEO's behaviour and make useful decisions.

Furthermore, a recent study undertaken by Alhababsah (2016) aimed to examine the effect of board size on the level of audit quality in Jordan. Focusing on a sample of listed firms on Amman Stock Exchange (from 2009 to 2014); the researcher found that small boards were more efficient in enhancing external audit quality.

However, another study (Pearce and Zahra, 1992) found that a large board size improved control capacity and performance. Makni *et al.* (2012) studied the relationship between board size and audit quality for 137 firm from 2005 to 2009 in Tunisia. They found that there was a positive association between board size and higher audit quality. Beisland *et al.* (2015) investigated the relationship between board size and external audit quality, and found that there was a significant positive relationship between them.

This argument leads to the following hypothesis:

*H<sub>1</sub>: There is a negative association between external audit quality and the size of the board of directors.*

### **3.2.6.2 Board of Directors meetings**

To consider policy issues and major problems, the number of meetings of the board of directors should usually be held at suitable times. As a key element of corporate governance, the board of directors should run the meetings based on their responsibilities, by maintaining overall accordance with shareholders' interests and monitoring the financial reporting process. In general, the effectiveness of the board of directors affects a firm's performance and the corporate governance mechanisms, which affect audit quality. In this regard, meetings' frequency is a helpful tool to improve the board of directors' effectiveness (Carcello *et al.*, 2002; Krishnan and Visvanathan, 2009). This means that the frequency of board meetings demands extra works from auditors, which leads to enhanced external audit quality (Krishnan and Visvanathan, 2009).

However, another study stated that a firm's value and the frequency of board meetings were negatively related (Vafeas, 1999). They concluded that the activity of the board of directors, measured by meeting frequency, is an important factor of the board of directors' functions. Furthermore, in preventing fraud, meeting frequency played an important role in board functions (Chen *et al.*, 2006). Therefore, fraud incidence and the frequency of the board of directors meetings have been negatively associated. A greater number of board of directors' meetings helps in detecting fraud because such active boards are more capable of detecting financial problems that are related to the quality of financial statements; therefore, this will lead to enhancement of the overall audit quality (Basiruddin, 2011).

In this section, there is no hypothesis, because the board of directors' meetings variable was eliminated by principal component analysis (PCA). The researcher did not remove the variable from the literature review in order to support the interview findings, because board

of directors' meetings were mentioned by interviewees as a factor affecting external audit quality.

### **3.2.6.3 Board of directors' independence**

In order to monitor managers and maintain a firm's value, a board of directors should include independent directors. According to Agency Theory, directors are responsible for reducing problems, through controlling and monitoring functions, as well as in particular overseeing a firm's daily management activities (Fama, 1980; Fama and Jensen, 1983; Cadbury, 1992; Brennan and McDermott, 2004). Therefore, independent directors not only improve the reliability of financial statements, but also boost the effectiveness of monitoring functions (Khalil and Ozkan, 2016). With greater portions of independent directors on boards, reliability may be improved and, thus, prevent the presentation of misleading financial statements (Beasley, 1996).

Moreover, the effectiveness of corporate governance can be improved if the election of the board of directors' members is accomplished by hiring more independent members. According to Hsu and Wu (2013), firms who assign non-executive independent directors to their board rarely fail to complete their functions. To clarify, a study by Carcello *et al.* (2002) investigated the effects of non-executive directors on external audit quality. They concluded that the independence of board members motivated external auditors to devote more effort to enhancing the level of the external audit quality.

A study by Beasley (1996) shows that there are negative associations between non-executive directors on boards of directors and financial statement fraud. This suggests that the external auditor is expected to spend more time and effort on detecting fraud as a result of non-executive members' pressure to enhance external audit quality.

However, external members are able to offer greater consultation functions than internal members. Indeed, external members are expected to be more independent, experienced and knowledgeable in terms of a firm's concerns, and this will lead to enhancing the external audit quality in general (Man and Wong, 2013; Husnin *et al.*, 2016).

Additionally, the board of directors' independence may be influenced by another factor, namely, the turnover of the CEO. Therefore, the CEO turnover rate can be one of the factors that influences corporate governance structure. The effectiveness of the board of directors can be increased by mandating the turnover of CEOs (Hermalin and Weisbach, 1988).

Another argument claims that the external director is more powerful and effective in rotating CEOs in comparison with the internal director's role (Hermalin and Weisbach, 1988). In other words, external directors will be more motivated to rotate an ineffective CEO than internal directors, because they are eager to protect their reputation, capital and independence (Makni *et al.*, 2012; Vlaminck and Sarens, 2015). Therefore, the decisions of the board will be improved, and the overall audit quality will be enhanced (Akhidime, 2015).

For example, among the various corporate governance mechanisms selected to explore the effects of Jordanian boards of directors on improving the level of external audit quality, the effect of independent members was more pronounced in enhancing the external audit quality than other mechanisms, based on a sample of listed firms on the Amman Stock Exchange from 2009 until 2014 (Alhababsah, 2016).

Additionally, a study by Akhidime (2015) examined the impact of board structure and corporate characteristics on external audit quality in Nigerian banks. Based on a random sample of 19 out of 25 banks over their post consolidation year period, the study concluded that there were significant positive relationships amongst independent directors, bank size, and directors' ownership and external audit quality. The issues raised in these studies leads to the following hypothesis:

*H<sub>2</sub>: There is a positive relationship between external audit quality and the board of directors' independence.*

### **3.2.7 Audit committees' variables**

Audit committees, as an internal corporate governance element, have become a great source for enhancing corporations' systems. "During the last decades, an audit committee has become a very common mechanism of corporate governance internationally" (Turley and Zaman, 2004). In 1978, the New York stock exchange was the first market to obligate all listed companies to have a board audit committee, including independent members. The UK Cadbury report, section 4.33 states that, "The report of American Treadway Commission concluded that the audit committee had a critical role to play in ensuring the integrity of US company financial report". In 1992, the Cadbury report suggested that "... appropriately structured audit committees have the potential to improve both the quality of companies' reporting as well as ensuring the independence of statutory audit" (Ghafran and O'Sullivan, 2013, p. 375). In 1998, audit committee adoption increased, when the London Stock Exchange obligated listed companies to disclose compliance with the Combined Code. In

the UK, there were subsequent governance reports that presented further modifications to audit committee structure, expertise, and independence (Code, 1999; 2003; 2006; 2008;2010). In the USA, both the SOX Act and the Blue Ribbon Committee (BRC, 1999) discussed similar requirements for enhancing the effectiveness of audit committees. Following such reports, concerned people, such as regulators and investors, expected that audit committees should play a vital role, by increasing their efforts to protect shareholders' interests by monitoring auditing processes and focusing on the reliability of companies' accounting with regard to transparency.

Recently, the role, the power and responsibility, of audit committees have been significantly extended (FRC, 2012). In reality, audit committees play an essential role in external audit quality (Cohen *et al.*, 2008; Osasu and Okafor, 2013; Kee *et al.*, 2017). In other words, the role of an audit committee places emphasis on providing an oversight of the financial reporting process, considering the internal controls and reviewing their effectiveness, reviewing audit plans and the oversight of auditors' work. Stanciu (2012,p. 35) suggests that “the audit committee members must fulfil their responsibility of assuring that the financial statements and the systems of internal accounting controls are implemented based on appropriate accounting principles, policies and procedures”. Audit committees should be constituted to review and evaluate the internal control system that might affect an organisation's objectives. In addition, audit committees must have the authority, skills, and knowledge to understand the risk associated with internal control systems. Furthermore, audit committees must identify critical risks and try to mitigate these, and demonstrate and manage the mentoring of the efficiency and the effectiveness of the internal controls. Professional literature has identified potential influence from audit committees on external and internal auditors. Although there are many reviews in the audit committee literature using different frameworks, most of the studies identify similar materials. In fact, most of the previous studies, in general, have focussed on the governance role of the audit committee (Al-Twaijry *et al.*, 2002; Rezaee *et al.*, 2003; Ghafran and O'Sullivan, 2012).

Previous studies have indicated that audit committee size, audit committee independence and audit committee meetings are considered to be essential elements of corporate governance. However, in order to ensure responsibility towards shareholders and accountability, regulators use these elements to ensure that management reflects fair and true views of the firms. In this study, the influence of audit committee factors have been reviewed to discover their relationships with external audit quality.

### **3.2.7.1 Financial expertise of audit committee**

According to the SEC<sup>12</sup>, audit committee, expertise is defined within three categories, namely, financial, accounting, and supervisory, expertise. Audit committees that involve at least one financial expert have more interaction with their external and internal auditors (Raghunandan *et al.*, 2001). It is necessary that, in order for an audit committee to be effective, it should have at least one member who has a high degree of financial expertise. The role of an audit committee covers the overall process of corporate reporting. The members are responsible for overseeing financial reporting and disclosure, for selecting external auditors, for reception of both external and internal audit results, and for solving disputes between auditors and management. These rules require audit committees to have in-depth accounting and finance knowledge, in order to improve compliance with regulatory requirements and the understanding of financial reporting. According to the SOX Act (2002), each company is required to disclose whether or not it has a financial expert on its audit committee. Some studies have found a positive association between audit committees without financial experts and the financial reporting restatements (Abbott *et al.*, 2004). DeFond and Francis (2005) argue that there is a relationship between strong corporate governance and financial expertise in firms. A study from Nigeria also found that there is a positive association between audit committee financial expertise and external audit quality (Kibiya *et al.*, 2016). Their findings support the general argument that claims the presence of accounting financial expertise is necessary to enhance external audit quality.

This argument gives rise to the following hypothesis:

*H<sub>3</sub>: There is a positive relationship between external audit quality and audit committee financial expertise.*

### **3.2.7.2 Audit committee meetings**

The number of audit committee meetings plays a significant role in improving their effectiveness (Yin *et al.*, 2012). Menon and Deahl Williams (1994) suggest that an audit committee should have at least a minimum of two meetings per year in order to be effective, while Abbott *et al.* (2007) and Sharma *et al.* (2009) state that, in order to achieve an effective audit committee, the meetings should be at least four times a year.

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<sup>12</sup> Securities and Exchange Commission (2000), SEC Concept Release. International Accounting Standards, Saudi Arabia

Audit committees play a vital role in strengthening the internal control functions (Hsu, 2007) through the interaction between them, by monitoring the internal controls and by providing reliable information to shareholders (Anderson *et al.*, 2004). The level of expertise and knowledge of an audit committee member can either enhance or limit, the member's ability to perform their duties effectively and efficiently (Sharma *et al.*, 2009). The role of an audit committee is critical because audit committee members monitor the auditing processes as well as corporate financial reporting, such as internal control reports (Lin *et al.*, 2008). The responsibility of an audit committee is to enhance both the competence of the financial parties and the technical information that helps to solve issues arising from financial and accounting tasks.

The frequency of audit committee meetings affects internal controls by setting up meetings to address any problem. For instance, if internal control issues arise, the members of the audit committee can direct and solve the problem promptly. Consequently, increasing the number of audit committee meetings can reduce the possibility of financial fraud (Raghunandan *et al.*, 1998; Abbott *et al.*, 2004), which will benefit the external auditors. An active audit committee member attending more meetings has plenty of time to review the financial reporting, monitor the internal controls, and identify risks. Thus, the audit committee's performance and the external audit quality increases with its activities.

However, a recent study carried by Kee *et al.* (2017) tried to investigate the effects of corporate governance mechanisms on the level of external audit quality in Malaysia. Focusing on a set of audit committee characteristics (e.g. audit committee independence and audit committee meetings) through a sample of 457 non-financial firms listed from 2003 to 2012, the study failed to document a notable role of such meetings in improving the external audit quality in Malaysia.

In contrast, an earlier empirical study showed that there was a positive association between the numbers of audit committee meetings and the quality of a firm's financial statements (Abbott *et al.*, 2004). Thus, this current study aims to investigate the effect of audit committee meetings on external audit quality by presenting the following hypothesis:

*H4: There is a positive relationship between external audit quality and the frequency of audit committee meetings.*

### 3.2.8 Internal auditors' variables

There are many definitions of internal audit. The Institute of Internal Auditors (IIA, p. 23) (1995) defines it as, "An independent, objective assurance and consulting activity designed to add value and improve an organization's operations". Internal audit helps an organisation to accomplish its objectives by bringing a systematic approach to evaluate and improve the effectiveness of risk management, control and governance processes. Despite the benefits of an internal audit department in an organization, there are some threats that could affect internal auditors, such as staff numbers, resources, and independence from management. The availability of a reasonable number of internal audit staff allows them to do their work with a division of duty, whereas a deficiency in staff numbers may obstruct efforts to properly segregate duties, which requires ensuring that objectives are achieved.

Another threat that may affect the independence of internal auditors is pressure from management, such as the threat of losing a job, or salary. Lyscom (2013) suggested that in order to protect internal auditors from such threats, they should report any deficiency in the internal control systems and have direct communication with audit committee members. Furthermore, they should have access to resources and records as needed, thus allowing them to employ suitable probing techniques without impediment. Internal auditors, as part of an organisation, evaluate and improve the effectiveness of control, risk management, and governance processes (IIA, 2012 , Sec. 2100). While external auditors are not a part of the organization, they do, however, engage with it and aim to provide an independent opinion of the fairness of the financial statements. Both external and internal auditors share in evaluating the internal control system, although their objective for evaluating it is different. In order for both of them to work effectively and efficiently, they need to coordinate with each other, although there are some prohibited interactions.

This coordination is very important from different perspectives and leads to increase overall efficiency (Grambling *et al.*, 2004) . From the perspective of external auditors, the internal audit function can help to raise the efficiency of the financial statements' audit. On the other hand, from the internal audit perspective, its function is the assurance of internal audit works and to provide more information that helps in assessing risk assessment (Dohateanu and Dohoteanu, 2007). For example, Grambling *et al.* (2004) state that internal audit could give a warning of fraud before it happens, in order to help to detect and avoid fraudulent financial reporting. For this reason, external auditors, appointed by the audit committee, should be independent of the firm they audit. External auditors achieve their audit work by applying particular rules to the financial statements of a legal entity or firm. In order to achieve their



goal, external auditors routinely evaluate the quality of the internal control systems relating to the financial statements and determine the volume of the substantive test<sup>13</sup>. When external auditors check the financial statements, they try to detect, and avoid, material misstatement. According to ISA 610<sup>14</sup>, the goal of external auditors is to attain full understanding of the internal audit work and to evaluate the internal control systems, and to design and perform further audit procedures on audit engagement (ISA, 2010). Consequently, effective cooperation between internal and external auditors is considered to be an important element of external audit quality, through employing an appropriate level of reliance on the internal auditors' work in order to ensure the reliability of financial statements (Al Najjar, 2011). The literature shows that a number of studies relate to the views of external auditors and whether they use the internal auditors' work. Studies about the relationship between internal audit and corporate governance, in general, are limited, due to the unavailability of such information about internal auditor research. However, this study examines the size of internal audit departments, and internal auditor competence and their effect on external audit quality.

### **3.2.8.1 The Size of Internal Auditor Departments**

After several corporate scandals, (Sarbanes-Oxley Act of 2002 (SOX)) was passed by the U.S. Congress to protect the public and shareholders from accounting errors and fraudulent practices in companies. As a result, the number of internal audit employees increased and the amount of resources for such activities also increased considerably. A study by Bedard and Johnstone (2010) of 12 companies was conducted using interviews with their chief audit executives and a survey of the IIA membership. The study concerned the size of internal audit and internal audit function and some related factors, such as the scope of auditing, level and qualifications of audit staff, and the use of technology in internal auditing. Bedard and Johnstone (2010) identified that a larger internal audit function was found in large companies and they added that audit function was smaller when a company had many Certified Internal Auditor members. Furthermore, they found that companies that had more experienced chief audit executives had larger internal audit functions. Additionally, they found that the companies that had large and best governance practice in audit also had larger internal audit

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<sup>13</sup> Substantive testing is an audit procedure that examines the financial statements and supporting documentation to see if they contain errors. These tests are needed as evidence to support the assertion that the financial records of an entity are complete, valid, and accurate.

<sup>14</sup> (ISA 610) The International Auditing and Assurance Standards Board (IAASB) issued ISA 610 that addresses the auditor's responsibilities if using internal auditors to provide 'direct assistance' under the direction, supervision, and review of the external auditor for purposes of the audit.

functions. In this section, there is no hypothesis because the internal audit size variable was eliminated by the principal component analysis (PCA). The researcher did not remove the variable from the literature review in order to support the interviews' findings, because internal audit size was mentioned by interviewees as a factor affecting external audit quality.

### **3.2.8.2 Internal auditor competence**

Expertise is an important measure of employees from different backgrounds. For instance, expertise measures the ability of an employee to evaluate new technologies, detect fraud and assess the effectiveness of policies (IIA, 2012). Moreover, expertise is vital in decision-making (Salas *et al.*, 2010), which is necessary when dealing with governance issues and business activities, such as the need for internal auditors to make value judgments based on their expertise reflected through internal audit results. The greater the employees' expertise, the more internal audit is likely to be effective. The skills and knowledge of team members are as important as expertise (Firth-Cozens, 1992; IIA, 2013). The experience built over the years through skills and knowledge leads to greater expertise of team members and better and more effective, developed teamwork knowledge (Rentsch *et al.*, 1994). The performance of less experienced teams is lower than that of more experienced teams, and also the less experienced teams are inflexible in practising their knowledge (Rentsch *et al.*, 1994). Wide experience leads to better auditor error knowledge and a better ethical stance (Tubbs, 1992; O'Leary and Stewart, 2007). Experienced auditors give a clearer idea of the clarifications of the occurrence of audit results, resulting in higher performance in audit (Libby and Frederick, 1990; Novyarni, 2014; Abbott *et al.*, 2016a).

For instance, studies by DeZoort *et al.* (2001) and Zulkifflee *et al.* (2012) examined the competence of external auditors, their objectivity, and the quality of work performed, based on the reliance on internal auditors' work. They suggested that there was a relationship between these factors and external auditors' reliance on internal auditors.

Abbott *et al.* (2016b) studied the competence and independence of internal auditors and their effects on the quality of the financial report. The results showed that the quality of auditors' financial reports depends on the independence and the competence of internal auditor.

A study by Zain *et al.* (2015) used a matched survey of both external and internal auditors in order to investigate the effect of internal audit function quality and the internal audit function's contribution to external audit on audit fees. They found a positive relationship between audit fees and internal audit function quality, as well as a reduction in audit fees as a result of external auditors' reliance on internal audit function. This study has some

limitations, the first being that the study was small in comparison to other studies examining the same factors. Furthermore, the internal auditor questionnaires were distributed to large firms, while the external auditors' responses were derived from Big 4 audit firms, which may have led to bias in the generalisation of the findings. Another study by Novyarni (2014) examined the relationship between the competence of internal auditor and the quality of audit quality. The findings showed that there was a positive association between internal auditors' competence and external audit quality. Intrinsically, the following hypothesis is raised:

*H<sub>5</sub>: There is a positive relationship between external audit quality and the competence of internal auditor.*

Table 3.1, below, summarises the findings of the main studies of corporate governance mechanisms and external audit quality.

Table 3:1 Summary of the main studies of corporate governance mechanisms and external audit quality

Author	Sample (period)	Context	Independent variable	Dependent variable	Main findings
<b>Corporate Governance and External Audit Quality</b>					
(Akhidime, 2015)	19 Banks ( secondary data)	Nigeria	board structure	external audit quality	There is a significant impact of the size of the board of directors on the external audit quality of Nigeria banks.
(Chen and Li, 2008)	Listed firms 2005-2011	Spain	The impact of firm and partner tenure.	external audit quality	Larger boards are associated with poorer performance and negative impact of long audit tenures on audit quality

Author	Sample (period)	Context	Independent variable	Dependent variable	Main findings
<b>Corporate Governance and External Audit Quality</b>					
(Osasu and Okafor , 2013)	primary and the secondary sources	Nigeria	corporate governance	external audit quality	A board member should adhere strictly to the Code of Corporate governance to enhance transparency in banking practices, and members of Audit Committee should also play a significant role in enhancing quality audit.
(Ejeagbasi <i>et al.</i> , 2015)	the annual report from 2007 -2014	Nigeria	corporate governance characteristics	quality of auditor's report	Positive association between the separation of the roles and the audit quality, and between board size and audit quality

Author	Sample (period)	Context	Independent variable	Dependent variable	Main findings
<b>Corporate Governance and External Audit Quality</b>					
(Makni, et al., 2012)	137 firm observations for the period 2005-2009	Tunisia	corporate governance mechanisms	audit quality	The findings show that there is an association between board size, CEO-chairman duality, and the presence of majority shareholders and the demand for higher audit quality.
(Abbott, et al., 2016)	a survey questionnaire	USA	competence and independence of internal auditors	quality of auditor's report	The quality of auditor report depends on the independence (competence) of the internal auditor.

Author	Sample (period)	Context	Independent variable	Dependent variable	Main findings
<b>Corporate Governance and External Audit Quality</b>					
(Abdul Halime et al., 2014)	918 public accountants	Indonesia	auditor's competence and independence	audit quality	Test results proved that auditor's competence and independence positively effect on audit quality
(Beisland et. al , 2015)	Sample of for-profit and non-profit microfinance	70 developing countries	governance mechanisms	audit quality	A significant relationship between external audit quality and governance does exist, the sign of this relationship is always positive.

Author	Sample (period)	Context	Independent variable	Dependent variable	Main findings
<b>Corporate Governance and External Audit Quality</b>					
(Husnin et al., 2016)	300 companies listed on the Malaysian Stock Exchange from 2006 to 2008	Malaysia	corporate governance mechanisms	audit quality	Results have provided evidence that the restructuring of corporate governance may contribute and drive company to enhance the quality of the audit performed
(Tubbs,1992)	72 auditors Big eight firms	USA	identify the internal auditors' error knowledge between experienced auditors and unexperienced auditors	audit quality	He found better error knowledge associated with high audit quality.



Author	Sample (period)	Context	Independent variable	Dependent variable	Main findings
<b>Corporate Governance and External Audit Quality</b>					
(Al-Ajmi, 2009)	A survey of 300 credit and financial analysts	Bahrain	effectiveness of audit committee, and size of the auditing firm	audit quality	The results show that the Big Four audit firms have a higher quality than the small ones. Moreover, the independence of the external auditor is affected by non-audit services provided by external auditors, while the effectiveness of the audit committee improves the quality of audit reports.
(Novyarni, 2014)	Questionnaires	Malaysia	competence and independence of the internal auditor	The quality of financial reporting	Internal auditors' competence affects the quality of financial reporting.

Author	Sample (period)	Context	Independent variable	Dependent variable	Main findings
<b>Corporate Governance and External Audit Quality</b>					
(Al-Twaijry & Elnafabi, 2008)	Questionnaires	Saudi Arabia	external auditors experience  external auditor competence  objectivity when examining financial statements	external audit quality	The results concluded that the strongest factors affecting external audit quality from the auditors' perception were: 1) auditors' experience in auditing, 2) objectivity when examining financial reports, and, 3) auditors' academic qualifications.

Author	Sample (period)	Context	Independent variable	Dependent variable	Main findings
<b>Corporate Governance and External Audit Quality</b>					
(Al-Khaddash, 2013)	Questionnaires	Jordan	audit firms size audit fee audit reputation proficiency of auditor	external audit quality	The results show that the reputation of the audit firm, auditing fees, the size of auditing office, and the proficiency of auditor affect the quality of auditing.
(Osée, 2016)	Qualitative	OHADA	competence and independence	external audit quality	Results suggest the need to take into account the auditor's knowledge of the company, the relevance of the identified zone of risks and the degree of communication with the board of directors affect audit quality.

Author	Sample (period)	Context	Independent variable	Dependent variable	Main findings
<b>Corporate Governance and External Audit Quality</b>					
(Allehaidan, 2012)	Questionnaires	Saudi Arabia	non-audit services	external audit quality	It was found that audit firms in SA were practising non-audit services in Saudi, even though it is prohibited by corporate governance legislation.
(Hai,2016)	Mixed methods	Vietnam.	The size of auditing firms, non-audit services, knowledge and capabilities of the auditor, and quality control from inside and outside the audit firm.	external audit quality	The elements of the cost and staff capacity, ownership of enterprises audit, quality control work outside also have implications significantly to the quality of audit activities in Vietnam.

Author	Sample (period)	Context	Independent variable	Dependent variable	Main findings
<b>Corporate Governance and External Audit Quality</b>					
(Kee et.al, 2017)	Reports (2003-2012)	Malaysia	corporate governance	audit quality	The findings indicated that the AC role has some limitations, which effect the existing corporate governance structure and audit quality.
(Alhababsah, 2016)	Reports(2009-2014) Questionnaires	Jordan	corporate governance	audit quality	The results show that gender diversity and board size affect audit quality. The respondents suggested some improvements/changes to the existing governance code.

Source: researcher design

### **3.3 The Literature Gap**

This chapter has provided a brief discussion of the literature about factors affecting external audit quality. In general, the previous studies showed an inability to provide sufficient evidence of the effect of corporate governance mechanisms on enhancing external audit quality, and so this issue is still ambiguous. Therefore, this study aims to fill this gap in the literature by investigating the effects of certain corporate governance characteristics on external audit quality in SA listed firms, based on different perspectives of participants.

The first section of the chapter focused on external audit quality definitions and the disagreement about the measurement of audit quality. There are two main approaches to measuring audit quality: a direct approach, and an indirect approach. The direct approach depends on the quality of the auditor, whereas the indirect approach depends on surrogates, attributes or factors associated with audit quality.

The second section discussed the factors associated with audit quality, such as external auditors' characteristics, boards of directors' characteristics, audit committee characteristics, and internal auditors' characteristics. The rationale behind selecting the previous characteristics is their significant role in enhancing the quality of financial statements and in protecting shareholders' interests through improving the quality of external audit (Peasnell *et al.*, 2005).

Based on the previous literature, most of the previous initiatives have focused on developed markets, with less attention having been paid to the emerging markets. Therefore, this study aims to fill this gap in the literature by targeting various participants, such as the board of directors' members, audit committee members, internal auditors, and external auditors in SA.

In SA, there have been two studies focusing on audit quality. The first study, by Allehaidan (2012), emphasised non-audit services and audit quality. The other study, by Al-Twajiry and Elnafabi (2008), focused on investigating the auditors' perceptions of the factors relating to external auditors that affect audit quality. However, in order to overcome the main shortfalls (focusing on one dimension to achieve their objectives) in the above studies within the Saudi market, the current study has covered board of directors' characteristics, audit committee characteristics, and internal auditors' characteristics in the questionnaires and interviewed

external auditors and regulators. Furthermore, this study estimates external audit quality based on the perceptions of participants in comparison to other studies, which applied different measurements (surrogates or attributes) to measure audit quality.

In terms of audit quality estimation, the most preferable approaches to measure audit quality have been through analysing a set of secondary data (Makni *et al.*, 2012; Osasu and Okafor, 2013; Kee *et al.*, 2017), or by distributing questionnaires (Al-Ajmi, 2009; Al-Khaddash *et al.*, 2013; Osasu and Okafor, 2013). Hence, this study tried to avoid the bias of applying one approach by using a mixed methodology, which consisted of both questionnaires and interviews.

The previous literature adopted the theoretical framework suggested by agency theory to achieve their researchers' goals; however, this study combined two theories (agency theory- Resource - Dependence theory) to answer the research questions discussed in chapter one.

### **3.4 Chapter Summary**

The main goal of this chapter was to shed light on the main theories used in this study to explain the association between certain corporate governance mechanisms and external audit quality in SA. This section mainly focused on agency theory and resource dependence theory as a solid framework on which to build the research hypothesis and to interpret the research findings. After that, the researcher defined the external audit quality from different points of view, since the previous literature showed a disagreement in terms of measuring and defining external audit quality. The remainder of this chapter explained the previous literature regarding the relationships between external auditors' variables, the board of directors' variables, audit committee variables, internal auditors' variables and external audit quality. The final section discussed the main gaps observed in the previous literature and how this study has tried to fill these gaps under the current settings and conditions in SA. The following chapter explains the research methodology in detail.





## **Chapter 4: RESEARCH METHODOLOGY**

### **4.1 Introduction**

When conducting and developing a research project, an appropriate research approach is an essential step. The importance of the selection of the research method used in a project is key to obtaining reliable results. Consequently, this chapter will present the research methods and the design that was used in this study. Four main areas are discussed. Firstly, this chapter presents the philosophical assumptions of the research paradigms that support the study. Pragmatism was used as the research paradigm in this study. Secondly, it discusses the combination of the research design with the research objectives and questions. Thirdly, the study addresses the challenges of using a mixed methods research design. Fourthly, the qualitative and quantitative approach is explained. Finally, the last section summarises the chapter.

#### **4.1.1 Theoretical Assumptions Underlying the Research Paradigm**

As stated in Chapter One, the main objective of this thesis is to contribute to the literature by investigating the factors affecting external audit quality, by undertaking an empirical investigation into external auditors, regulators, internal auditors, boards of directors, and audit committees in Saudi listed companies. Furthermore, it seeks to find solutions that can be undertaken to enhance external audit quality in SA. From this point of view, a research paradigm is defined as a basic structure that directs how research is accomplished, based on attitudes, philosophies, assumptions, and perceptions (Collis and Hussey, 2009). The research paradigms in the Social Sciences divide into positivism, postpositivism, interpretivism, and pragmatism (Bryman, 2012). The need to distinguish between social sciences and natural sciences leads to the introduction of more research paradigms that could be used mostly in management research, such as positivism and interpretivism (Morgan and Smircich, 1980). Positivism and interpretivism are the main research paradigms used in management research (Bryman, 2012). However, some mixed research methods have used pragmatism as a philosophical design. In this study the selection of pragmatism was based on the nature of the five research questions, and the three components stated by Creswell (2009), namely, philosophical worldviews, strategies of inquiry, and research methods. The plan to conduct research or the research design are influenced by philosophical

worldviews<sup>15</sup>. The definition of worldviews is a “general orientation about the world and the nature of research that a research holds” (Creswell, 2009, P.6). The key features of the pragmatic worldview were summarised by Creswell (2009). Pragmatists focus on actions, consequences, and situations. They place more emphasis on the theme of the research questions than on the methods used. Pragmatism argues that choosing between approaches depends on which approach may be ‘better’ than another for answering particular questions. Furthermore, pragmatism argues that it is possible to adopt both positivist and interpretivist philosophies, which justify the possibility, and the highly appropriate use, of mixed methods in one study, both qualitative and quantitative (Saunders *et al.*, 2007). According to Tashakkori and Teddlie (1998), “a pragmatic study what interest the researcher in which he/she believes appropriate, and uses the results in ways that can bring about positive consequences within his/her value system” (Tashakkori and Teddlie, 1998, p. 30). For that reason, the researcher designed the methods, techniques and procedures of the research to meet the themes and their purpose, as shown in in Table 4.1, below. The mixture of the four components of philosophy, namely, ontology, epistemology, axiological, and rhetorical are acceptable to understanding social phenomena.

Firstly, from the perspective of pragmatism, ontology explains the nature of reality in order to achieve an answer to the research question (Saunders *et al.*, 2007).

Secondly, epistemology explains how we think. In order to determine the truth, we need to use epistemology to determine the proper method of evaluation. It helps to understand the reality and the level of using knowledge to promote our lives and goals. In this study, the researcher used epistemology to determine the best method, by integrating different perspectives to address the research questions and to interpret the data.

As mentioned in Chapter One, the study seeks to attain some objectives to explore the effects of external auditors, boards of directors, audit committees, and internal auditors on audit quality. In this study, using only the interview method would take a lot of time and effort. Moreover, accessing Saudi firms for data collection is not easy. Thus, the best way to solve this issue was to have another method to collect data because it was not practical to use interview alone. This study explored the relationships quantitatively between the boards of directors, audit committees, and internal audit and their effects on audit quality, in order to

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<sup>15</sup> The meaning of Worldview is sometimes referred to research methodologies or epistemology and ontology (Creswell, 2009).

enhance external audit quality practices in SA. In addition, it aimed to determine the factors influencing external audit quality practices among Saudi listed firms. Using interviews gave a deeper understanding and explanation of the quantitative findings; semi-structured interviews were used, in this study, to achieve these purposes. The interviews enriched the study by providing an interpretation of the quantitative results' exploration of external audit quality in SA.

Thirdly, the axiological dimension represents the researcher's view about the role of values in research. According to Heron (1996), these values play an important role in making judgments about what research is conducted and how it is done. In fact, all stages of research will be affected by the researcher's values, such as choice of philosophy, and choice of data collection techniques.

Fourthly, rhetoric is the language used in the research. In this research, two styles of rhetoric were used: informal and formal. Finally, for data collection, mixed methods were adopted, to give the best understanding of the research problems, rather than relying on one approach (Saunders *et al.*, 2007). Table 4.1, below, summarises these components.

Table 4:1Pragmatism and Implication for Practice

<i>Assumption</i>	<i>Concept</i>	<i>Pragmatism</i>	<i>Implication for Practice in this study</i>
<i>Ontological</i>	The researcher's view of nature of reality.	Multiple views chosen to enable answering the research questions.	Test hypotheses and provide multiple perspectives.
<i>Epistemological</i>	The researcher's view regarding what constitutes acceptable knowledge.	Focus on practical applied research.	Integrating different perspectives to address research questions and interpret data.
<i>Axiological</i>	The researcher's view about role of values in research.	Multiple stances.	The researcher adopted both objective and subjective point of views in interpret the results.
<i>Rhetorical</i>	The language of research.	Researcher writes in a formal style and uses the passive voice, accepted quantitative words and set definitions, or informal writing style.	Researcher writes both informal style and formal style.
<i>Methodological</i>	The process of research.	Combining methods.	Collected both quantitative and qualitative data

Source: (Saunders et al., 2007, p. 109)

## **4.2 The Research Design**

One of the important features of research design is to ensure that the evidence found will enable the researcher to answer the research questions as clearly as possible. In this study, the researcher chose a mixed methods research design that included both quantitative and qualitative methods. Hence, this section will discuss mixed methods and the reasons for choosing such a method to conduct this study.

### **4.2.1 Mixed Methods Research Design**

There are two ways of integrating the data in a mixed method approach (Saunders *et al.*, 2007). The first approach is in parallel, which means collecting both sets of data in the same time (Saunders *et al.*, 2007). The other approach is sequential, which means collecting the data sets one after the other (Saunders *et al.*, 2007). According to previous studies, the benefit of using a mixed methods approach is that it helps understanding the governance practice and financial performance (Boyd *et al.*, 2012; Johl *et al.*, 2012; Molina-Azorin, 2012; McNulty *et al.*, 2013; Zattoni *et al.*, 2013). Although the mixed methods approach considered to be a new approach in social sciences, comparing to positivist and interpretivist approach, the importance of the mixed methods approach comes from the limitations of using these two approaches (Collis and Hussey, 2009). Before the mixed methods approach, the two approaches were not able to mix data in the same study (Collis and Hussey, 2009).

The importance of using mixed methods approach has increased over the last 20 years (Molina-Azorin, 2012). In fact, many studies have used a mixed methods approach because of the validity that results by combining two methods (Campbell *et al.* (1959). According to Creswell and Clark (2011), there are many reasons to indicate mixed methods as a research methodology. The role of a mixed methods approach in a study clarify when there are deficiencies in a study as a result of using a single approach. For instance, using only a quantitative approach will not help in answering the “why” questions (Cohen *et al.*, 2002), while using a qualitative approach alone may not solve the problem and may give less credibility and reliability to the results (Morgan and Smircich, 1980; Johl *et al.*, 2012). For that reason, using mixed methods approach is more valuable, as integrating both approaches gives more understanding and clarification of the phenomena (Bryman, 2012; Johl *et al.*, 2012). Compared to the single approach, the mixed methods approach attracts more attention and has a greater tendency to be cited than single method studies (Molina-Azorin (2012).

However, quantitative methods have been most commonly used in corporate governance studies (Cassell *et al.*, 2005; Boyd *et al.*, 2012). Some previous studies of corporate governance have depended only on collecting and analysing quantitative data (Carcello and Neal, 2003; Gramling *et al.*, 2004; Francis and Yu, 2009; Brick and Chidambaran, 2010; Al Najjar, 2011; Alzoubi and Selamat, 2012; Ghafran and O'Sullivan, 2012; Hsu and Wu, 2013; Kim *et al.*, 2014). On the other hand, according to the literature, the qualitative methods has been used by a very limited numbers of studies (Mohiuddin, 2012). There are two reasons for the lack of qualitative research in management studies Cassell *et al.* (2005). The first one is that researchers have more experience and knowledge of the quantitative approach, which makes it easier for them to use this method (Boyd *et al.*, 2012). The second reason is that the difficult and harsh assessment criteria used by reviewers in business journals prevent researchers from using the qualitative approach, which needs a very advanced level of analysis and excellent writing skills (Cassell *et al.*, 2005). Due to the deficiency and limitation of using a single approach, the current research used a mixed methods approach to gain a wider and deeper understanding of external audit quality in the Saudi context.

#### **4.2.2 Principles for Designing Mixed Methods Research**

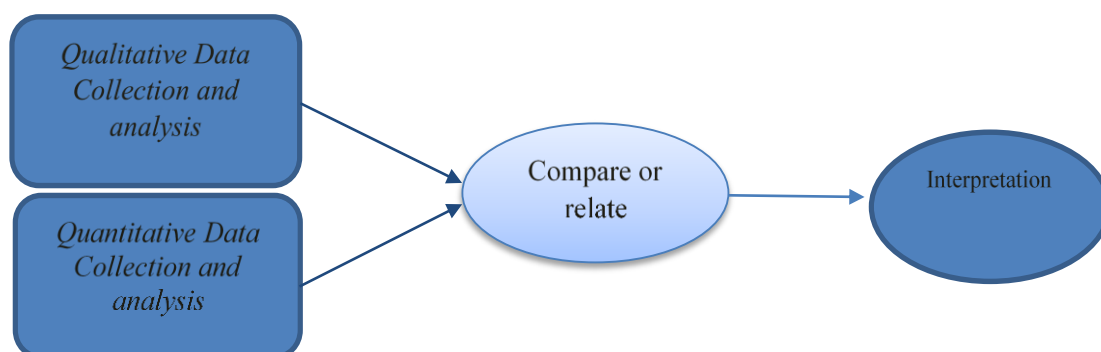
The key principles for designing mixed methods research were suggested by Creswell and Clark (2011). Firstly, the most important factor is the level of interaction between the qualitative and quantitative methods. In fact, the level of interaction is divided into two stages: (i) the interactive stage, and (ii) the independent stage. The interactive approach commonly occurs before the final interpretation of the results, which means that the collaboration of both sets of data happens at different phases of the study. Therefore, one research method follows the other, or relies on the other, throughout the data collection and analysis processes.

The independent stage happens by separating the qualitative and quantitative research questions and the processes of data collection and data analysis. Hence, the independent approach combines the two methods in the conclusions of the study. Secondly, the researcher needs to ensure that the techniques applied are appropriate for meeting the research objectives and research questions of the study (Morgan, 1998). The specialist needs to decide precisely which strategy is more suitable (Greene *et al.*, 1989; Morgan, 1998). Creswell and Clark (2011) suggest that mixed methods has three possible design options: quantitative priority, qualitative priority, and equal priority. Thirdly, another key principle is the

timescale. With mixed methods design, timing can be divided into three forms: sequential, a multiphase combination, or concurrent.

Due to the nature of the research problem, its objectives and questions, it was essential to use a mixed methods approach when designing the framework for this research. In addition, a **convergent parallel design** was used in this study, by collecting and analysing both quantitative and qualitative data. Figure 4.1, below, shows the convergent parallel design.

Figure 4-1 Prototypical versions convergent parallel research designs



Source: Creswell and Clark (2011, p.69).

The convergent parallel design depends on applying qualitative and quantitative methods at the same time (see Figure 4.1). In this design, the researcher separates qualitative and quantitative methods for all the processes, and then mixes the final findings to interpret the overall methods.

This study applied a **convergent parallel design**, which was justified for the following reasons. Firstly, the interviews offered additional analysis of the data to investigate the effect of boards of directors, audit committee, and internal audit on external audit quality in Saudi listed companies. Secondly, it attempted to increase the strength of the empirical findings by understanding or developing a complete understanding of the research problem, by obtaining different, but complementary, data. (Mengoli *et al.*, 2009). Put simply, this design gives more validity to the study.

In the current study, the researcher collected and analysed both quantitative (survey) and qualitative (interview) separately, but at the same time, and then combined the findings of the two approaches, which consisted of merging data, and then comparing the two sets of data and results. To sum up, despite the limited literature on corporate governance, by using a mixed methods approach this study offers new experiences into corporate governance

research. The mixed methods approach was most suited to achieving the research objectives and examining the research questions, as discussed in the following section. Table 4.2, below, shows the relationships between the research questions, research objectives, and the research methods.

Table 4:2 The relationship among research questions, research objectives, and research methods

Research Questions	Research Objectives	Methods
1- <i>Does the board of directors have a relationship with audit quality in listed companies in Saudi Arabia?</i>	Investigating the relationship between the boards of directors' characteristics and audit quality.	Questionnaire (Survey) and Semi-structured interviews
2- <i>Does the audit committee have a relationship with audit quality in listed companies in Saudi Arabia?</i>	Investigating the relationship between audit committee characteristics and audit quality.	Questionnaire (Survey) and Semi-structured interviews
3- <i>Does the internal auditors have a relationship with audit quality in listed companies in Saudi Arabia?</i>	Investigating the relationship between internal auditors' characteristics and audit quality.	Questionnaire (Survey) and Semi-structured interviews
4- <i>What major steps can be undertaken to enhance audit quality in Saudi Arabia?</i>	Identifying good practices and the theoretical framework for the quality of audit and gives suggestions to enhance audit quality.	Questionnaires and Semi-structured

Source: researcher design



#### **4.2.3 The Quantitative and Qualitative Research Questions**

The choice of a methodology depends on the research questions. As shown in Chapter One, the central research question in the current study was; what are the factors affecting external audit quality in Saudi listed firms? This question was divided into four sub-questions. To answer these questions, the researcher reviewed the literature on external audit quality using suitable approaches to answer the sub-questions. As presented in Table 4.2, above, all questions were answered using quantitative and qualitative data. For quantitative data, statistical analysis techniques (ordinal logistic regression model ) were used, in order to ensure that the results were valid, accurate, and reliable (Collis and Hussey, 2009; Creswell, 2009). In addition, all the questions were answered by using interviews. The answering of these questions helped to identify the effects of boards of directors, audit committees, and internal auditors on external audit quality in Saudi listed companies, and whether enhancing the audit practices may help to increase external audit quality.

#### **4.2.4 The Challenges of Using Mixed Methods Research**

Mixed methods, as with any research method, presents challenges, despite the increased attention given to it (Bryman, 2007; Johl *et al.*, 2012). Mixed methods may not be able to solve all research problems (Creswell and Clark, 2011). Some of the challenges that should be considered when using mixed method research will now be discussed. The first challenge is that there is no agreed philosophical framework for the mixed method research design and the mixed method research paradigm (Smith and Heshusius, 1986; Morgan, 1998). Morgan claims that the absence of the mixed methods paradigm has been ignored in previous literature reviews (1998). Molina-Azorin (2012) points out that mixed methods design is comparatively new, compared to applying a single method in research. Creswell and Clark (2011, p. 15) propose that, “*One way to help convince others of the utility of mixed-methods is to locate exemplary mixed-methods studies in the literature on a topic or in a content area and share studies to educate others*”. As a result, researchers need more education to understand the value of mixed-methods, since it is a novel approach. In this research, this problem was solved by further reading and by attending workshops to increase the researcher’s understanding of mixed-methods.

Achieving integration between the quantitative and qualitative research is the second challenge that may face the researcher. The inability to integrate the findings of qualitative and quantitative results does not correspond with improvement of the mixed methods

research (Bryman, 2007). By reviewing 57 mixed methods studies, Greene *et al.* (1989) studied the level of integration between the quantitative and qualitative approaches. They found that 44% of the studies had no integration of the two methods, while 32% of the studies showed only integration when interpreting the findings. The remaining 9% of the studies achieved integration during the analysis and interpretation stages. This lack of integration arises for two reasons (Bryman, 2007). The first reason is that the findings may not at all times be planned. For instance, sometimes integration is not the researcher's intention when using mixed methods, especially when each approach is designed separately from the other (Cassell *et al.* (2005). Bryman (2007) states that, in terms of the analysis and interpretation of mixed methods research, there are gaps in the literature.

When conducting mixed methods research, the other challenges are practical considerations, which the researcher should consider before conducting a mixed methods approach. For instance, certain skills, time, and resources should be considered for extensive data collection and analysis. Creswell and Clark (2011) claim that if the researcher has the requisite skills, the mixed methods design will be a realistic approach. Consequently, before designing mixed methods research, the researcher must have an in-depth understanding of both quantitative and qualitative approaches (Morgan, 1998). For each method, the researcher should develop an understanding of data collection and analysis skills. For example, in quantitative methods, the researcher should consider the logic of hypothesis testing and have the ability to undertake statistical analysis (Collis and Hussey, 2009). In addition, they should pay attention to problems such as reliability and validity (see Chapters Four and Five). On the other hand, qualitative methods require specific skills when collecting and analysing the data. For instance, the researcher ought to be acquainted with the procedure of directing semi-structured interviews (Molina-Azorin, 2012). It is necessary for the researcher, also, to know how to code data and develop terms based on these codes. However, these skills alone are not adequate to conduct mixed methods research.

It is important to guarantee that mixed methods research should be completed within the timeframe of the research in order to conduct the study rigorously (Creswell and Clark, 2011). One of the limitations of mixed methods data collection is the time and effort required, as different data is used in different approaches and, consequently, data collection takes time (Morgan, 1998). Another limitation is the cost of mixed methods data collection. According to Creswell (2009), mixed methods incur greater costs than a single method. While a researcher could collect quantitative data directly from websites at a lower cost, the interviewer may have to travel and spend more time and money to collect the qualitative

data. As the current research was sponsored, the cost of travel, and tickets were covered by the Saudi Arabian Cultural Bureau.

### **4.3 QUANTITATIVE APPROACH**

#### **4.3.1 Questionnaire Design and Study Population and Sample**

A questionnaire survey is a process used to translate concepts into measurable variables (Saunders *et al.*, 2007). There are some considerations, which should be taken into account when designing a questionnaire. As Bourque and Fielder (1995) advise, the questionnaire should be short, precise, and as easy as possible, in order to help potential respondents to fill it out.

In order to represent the population accurately, it is vital to define the population being surveyed and to ensure that the sample selected reflects this population (Thomas, 1996). The population of this study comprised 173 companies that represented all Saudi companies listed in the Saudi stock exchange (Tadawul). Financial services and insurance were excluded, which was, in total, 47 companies, because they have their own regulations and laws. Companies that did not have an audit committee were to be excluded from the population. Therefore, the researcher checked the annual reports for all the listed companies, to ensure the existence of audit committees. After investigation, the researcher found that all the listed companies had an audit committee, so the total of listed companies in this study was 126 companies. In the current study, the boards of directors, the audit committees, the internal auditors, and the external auditors of these companies were the main participants. The reasons for excluding companies that did not have an audit committee were:

- One of the objectives of the current study was to investigate the association between audit committees and external audit quality, so it was important to include companies that had an audit committee.
- The boards of directors were another important element in this study, and a company always has a board of directors and also an audit committee. Thus, it was essential to include companies that had an audit committee.

Choosing boards of directors, audit committees, and internal auditors as survey participants was considered to be appropriate, due to their knowledge and cooperation with external audit practice in SA. The boards of directors were chosen as the first group, because of their essential role in ensuring the effectiveness of internal control systems that external auditors rely on when conducting an audit. In addition, external auditors and boards of directors share

the same objectives, to prevent any fraud in the entity. The reasons for choosing audit committees, as another respondent group, were that, firstly, they are responsible for answering auditors' inquiries, especially if the inquiry relates to fraud or fraud mitigation. Furthermore, they evaluate the external audit performance and resolve any issues between the external auditor and the board of directors, or between the external auditor and the internal auditor.

The reason for choosing internal audit as a participant group was the interaction between external and internal audit. As stated, internal audit adds value to an organization, and is affected by coordination and cooperation between external and internal audit (Albrecht *et al.*, 1988; Bickerstaff, 1996). For instance, external auditors rely on internal auditors' work, as they reduce the volume of audit work that should be performed. The survey questionnaires were distributed to all audit committees, boards of directors, and internal auditors of the 126 companies having an audit committee in place. The total sample of the questionnaire survey was 600, with questionnaires being distributed to audit committee members, internal auditors, and boards of directors. The following Table 4-3 summarises the sample size of the survey.

Table 4:3 Showing Sample Group Proportion of Questionnaire Survey

Sample Group	Sample Size	Percentage
Board of Directors	180	30%
Audit Committee	180	30%
Internal auditors	240	40%
<b>Total</b>	<b>600</b>	<b>100%</b>

Source: researcher design

The non-response bias was mitigated by calling back and/or following up with a reminder, as advised by Thompson (2002). Moreover, a statistical test was run to detect any such bias, which will be explained in a later chapter.

#### 4.3.1 Questionnaire Length

Researchers ought to know that long questionnaires dishearten the target respondents from finishing the items and, thus, it is either returned incomplete or not returned at all (Al-Maotaz, 2003), which affects the validity of the research. In the current research, the researcher made the questionnaire as concise and short as possible, while keeping in mind the need to cover all essential aspects.

#### **4.3.2 Format of the Questions**

Occasionally, the size of question formats is the subject of some disagreement among researchers (Hussey and Hussey, 1997). After seriously considering the usefulness of the questions, it is possible that the questionnaire can include open and/or closed inquiries. Participants are allowed, in open-ended questions, to give their own responses in the form of an essay answer (Weisberg *et al.*, 1996; Peterson, 2000). Having the ability to give their own point of view as accurately as possible is one of the benefits that is offered to respondents when presented with open-ended questions. Academic researchers often use open questions; however, occasionally, the information turns out to be difficult to analyse. (Dillman, 2000) suggests using open questions in two different situations. One is where the respondents need to be able to explain themselves unreservedly, and the other is where it is not possible for the researcher to list all the possible answers, which might raise the level of difficulty of responding to the questions. On the other hand, closed questions offer the respondents the ability to select one answer among a range of options offered, for example, by multiple-choice questions (Weisberg *et al.*, 1996).

Closed questions are appropriate in the process of collecting information and evaluating answers, because the choice of the possible response is limited. In addition, the information that results from this type of question is easy to work with and has lower costs. In the case where a closed question design is selected, the choices of all possible options for the answers should be carefully written and included without any overlapping (Weisberg *et al.*, 1996). Additionally, Dillman (2000) mentions that closed questions are frequently used to state priorities amongst issues and choice amongst alternative strategies. Correspondingly, closed questions are essential for investigative studies in which the primary aim is to find the most salient aspects of the subject. The most common criticism of open questions is that the favoured possibilities of all respondents are not stated (Hussey and Hussey, 1997). The appropriateness of either closed, or open questions, may be contingent on the objective of the questionnaire, the respondents' level of information about the subject in question, the degree to which the subject has been understood by the respondents, the degree to which the respondents are encouraged to communicate about the subject, and the sample extent of the study population (Hussey and Hussey, 1997).

Investigating the present practices of external audit quality in SA was the purpose of the questionnaire survey in this study. Therefore, constructing the questionnaire needed to be done in such way that it was sufficiently specific to get responses to the questions, but

general enough to allow respondents not to expose any sensitive data. As mentioned earlier, closed questions offer a range of responses from which the respondent is requested to choose one. A Five-Point Likert Scale has a value of '1' representing that the respondent totally disagrees with any specific element/part, while the highest value '5' means that the respondent totally agrees with the specific element/part. The Five-Point Likert Scale was used in the questionnaires, rather than the Seven-Point Likert scale, because it is possible that the target respondents could be uncomfortable with a complex scale of six or seven points, a consideration identified by (Bryman and Bell, 2003), (Hussey and Hussey, 1997) and (Zikmund, 2000).

#### **4.3.3 Structure of the Questionnaire**

In the current study, questionnaires were designed for each participant group: board of directors, audit committee, and internal auditors (see Appendix B, C, and D). As mentioned above, a 5 point Likert Scale was used in all parts of the questionnaires. To reduce the possibility of boredom that might lead to the participants giving up, the statements were grouped into small sections. It is also helpful to divide the questionnaire into sub-divisions in order to construct the research hypotheses. Moreover, the questionnaires were designed to ensure that participants followed specified instructions. As mentioned, the primary objective of this study was to investigate the effects of boards of directors, audit committees, internal auditors on external audit quality in listed companies in SA.

The questionnaires were adopted from the previous study in corporate governance and external audit quality e.g. (Mohiuddin, 2012; Dunakhir, 2016). Each groups' questionnaire is explained as follows. The questionnaire for the boards of directors was divided into two general parts. Part I covered background information, such as education, experience, and qualifications. Parts II was the main part of the questionnaire and aimed to gather respondents' opinions on statements regarding the role of a board of directors and its effect on external audit quality. The second questionnaire was for audit committee groups. It contained two groups. The background information was collected in part I, while part II covered the main objective of the study, to collect participants' opinions about the role of an audit committee on external audit quality. In addition, the statements were classified into two different aspects of an audit committee: financial expertise, and meetings. Finally, the last questionnaire was for the internal auditors group. The questions were divided into two main parts. Part I covered background information, such as qualifications, education, etc. Part II covered the key objectives of the study that aimed to gather respondents' opinions on statements about the role of internal control, and its effect on external audit quality

#### **4.3.4 Administration of the Questionnaire Survey**

A self-administrated questionnaire was used in the current study. The questionnaires were given to the sample participants in May 2016 after reviewing the questions and sending them to academics and professionals in the field to check the contents and language of the questions. The questionnaires were distributed to three groups: boards of directors, audit committees, and internal auditors. The questionnaire pack included a set of questionnaires, and two covering letters. The first letter explained the objective, and the importance, of the study, which was a helpful tool to obtaining a higher response rate. Furthermore, it stated a commitment to the participant that the completed questionnaire would be handled under terms of strict confidentiality and participant anonymity. In addition, the researcher offered to send a copy of the research findings to the respondents. The second covering letter was from the researcher's supervisor to explain the objective of study, persuade the participants to fill out the survey questionnaire, and inform them of the importance of their response. A reminder letter was sent and/or a call made after three weeks from the first questionnaire distribution. A second reminder was sent between four to five weeks from the first questionnaires. A final follow-up letter or call was made after six weeks following the first questionnaire distribution, because researchers should conduct follow-ups to increase the response rate. For instance, the researcher used different, and as many as possible, forms of communication, such as a visit, e-mail, fax, telephone etc., to motivate and persuade participants to respond.

#### **4.3.5 Questionnaire Survey Responses**

Of the 600 questionnaires, a total of 269 questionnaires were received in different phases. 10 of them were unusable for the research, but the rest were considered usable.

Table 4:4 presented the breakdown of the questionnaire survey responses.

<b>Descriptions</b>	<b>Total Survey Sent</b>	<b>Received within 3 Week</b>	<b>Received between 4-5 Week</b>	<b>Received Within 6 Week</b>	<b>Total Received</b>	<b>Response Rate</b>	<b>Total Usable</b>
<b>Board of Directors</b>	180	25	30	25	80	44.44	77
<b>AC Members</b>	180	40	35	38	113	62.78	73
<b>Internal Auditors</b>	240	28	33	15	76	31.67	109
<b>Total</b>	<b>600</b>	<b>93</b>	<b>98</b>	<b>78</b>	<b>269</b>	<b>44.83</b>	<b>259</b>

Source: researcher design

The table above presents the response rate (44.83) to the questionnaires (or 269 out of 600). A total of 10 of the received questionnaires could not be used because they had missing response statements; therefore, 259 questionnaires were used for analysis. The group response rates were: 44.83%; (AC members) 62.78% (BOD members) 44.44 and 31.67% (IA members). A possible reason for the lower response rate for AC and BOD members is because they were not regularly available in the company. Furthermore, some of AC members were members of more than one listed company in SA. The number of returned questionnaires by internal auditors was high in comparison to AC and BOD, due to the fact that the internal auditors have offices in the companies and they were more willing to participate in the study. The overall response rate was considered to be acceptable, in spite of the sensitivity of the research issue in the Saudi corporate environment.

#### **4.3.5.1 Validity**

Spector (1994) emphasises the significance of validating the research instrument. Most researchers are concerned about two types of validity: construct validity and content validity (Churchill and Iacobucci, 2002).

##### **4.3.5.1.1 Construct Validity**

Construct validity measures the degree to which the instrument's scale represents the concept being measured (Tull and Hawkins, 1993). This type of validity is difficult to measure; however, researchers still want to be sure that their measurements have a satisfactory level of validity. In the current study, the questions used were clear and direct. Furthermore, not using only interviews contributed positively to the construct, and also using the Five Point Likert scale in the questionnaire contributed to enhancing the construct validity.



#### 4.3.5.1.2 Content Validity

Content validity is the level to which the instrument provides adequate coverage of the subject under study. In order to evaluate this kind of validity, the researcher should first decide on what component constitutes adequate coverage of the issue. In this thesis, the questionnaire covered all the essential elements mentioned in the literature discussed in Chapter Three. Furthermore, the validity was determined by asking a number of academics and professionals in accounting about the subject matter and whether the questionnaires were clear and easy to understand. The researcher also looked at other research to see if there were some other elements that needed to be included, to help to answer specific aspects of the research. Table 4.5, below, shows the names of academics and professionals and their contacts.

Table 4:5 showing the details of academics and professionals.

	Name	Positions	Email address
1	Dr Ali Mohammed Al-zahrani	Accounting Professor	A.m@ksu.edu.sa
2	Dr Salam Baajajah	Accounting Professor	<a href="mailto:s.baagagah@tu.edu.sa">s.baagagah@tu.edu.sa</a>
3	Khaled Ali Algamdi	External Auditor	Khaled.a@ubc.com
4	Wajdan Salah Bogari	External Auditor	W.S.B1@ <a href="http://kpmg.com.sa">kpmg.com.sa</a>
5	Dr Salem Abdalsatar Al-monofi	Accounting Professor	S-21@nu.edu.sa
6	Dr Samiah Ahmad Tashkanti	Accounting Professor	S.A.T@ yu.edu.sa
7	Alaa Huseen Alghunim	Internal Auditor	Alaa201h@tagi.com
8	Dr Abdurrahman Al-tammemi	Accounting Professor	A-Altammemi@ekku.edu.sa
9	Salam Mohhmed Al-ansari	External Auditor	Salam.alansari@sa.pwc.com
10	Majid Faisal Al-harbi	Board of Directors	Majid- alharbi@alsafidanone.com
11	Hamad Mohammed Al-dosari	External Auditor	Hamad. Aldosari@sa.pwc.com

Source: researcher design

#### **4.3.5.2 Reliability**

As Sekaran (2003) states, reliability refers to the precision of the measurement procedure and its accuracy, in other words, that the data collection methods used are fit for purpose. However, Oppenheim (1992) suggests that reliability is about consistency between methods. Reliability is about accordance between two similar methods to measure the same trait, whereas validity is about the accordance between two different methods to measure the same trait (Churchill and Iacobucci, 2002). Reliability also covers the consistency of an instrument to generate the same results each time it is used. Consistency of the results refers to similar observations being undertaken by different researchers on different occasions (Saunders *et al.*, 2007). For an instrument to be considered as reliable, it should be refined to the degree that it provides useful results at different times and under different conditions. Furthermore, evaluating the reliability of the data is significant before making any statistical analysis.

#### **4.3.6 Statistical Methods to Analysis the Questionnaires**

The objective of this section is to illustrate the statistical methods adopted for questionnaire data analysis.

Usually two types of statistical methods are used, namely, parametric and non-parametric. In this study, the researcher used non-parametric methods because the data was not normally distributed. According to Balian, using parametric testing is subject to several assumptions that require that the data should be normally distributed (Balian, 1982). The researcher used Kolmogorov-Smirnov and Shapiro-Wilk to test the normality of the data, and the results showed that the data was not normally distributed, given P.values were less than 5% (See Appendix F). Moreover, because the data contained ordinal dependent variables, parametric testing could not be applied. Non-parametric testing is more suitable for questionnaires which have nominal and ordinal data (Newbold *et al.*, 2003). Consequently, the main statistical techniques applied in this part of the research were as follows:

- **Descriptive Statistics:**

This section summarises and describes the main components of the data used in a study. Mainly, they include the mean, median, mode and standard deviations, graphical presentations, frequency tables, ranks, skewness and kurtosis of the data. In addition, a mean group is used in order to understand respondents' perceptions of different questions.

- **A Principal Components Analysis**

A principal components analysis is a technique that reduces a set with a large amount of variables to a smaller set of new variables called “principle components”(Kaiser, 1974). This technique is used if there are many variables and the researcher believes that some of the variables are highly correlated, and would like to ensure that all items in the variable measure the same concept (Thurstone, 1947). Therefore, this technique helps to reduce the items that are chosen and were not sufficiently represent this variable. Moreover, it helps to reduce the items that measuring more than one items. This technique was chosen in this study because there was no difference in the results between factor analysis and principle components analysis (Comrey, 1988). However, factors analysis is used when a researcher wishes to test a theoretical model of latent factors causing observed variables, while principal components are used when a researcher wants to reduce correlated observed variables to a smaller set of important independent composite variables (Laerd Statistics, 2016).

There are four assumptions should be met before running the test;

- 1- The multiple variables that are measured are at the continuous level or ordinal data
- 2- There should be a linear relationship between all variables
- 3- There should be no outliers.
- 4- There should be large sample sizes for a principal components analysis to produce a reliable result.

Several tests should be used in order to validate the hypothesis of principle components analysis. One of these is the test of the existence between variables, and the other test is the Kaiser-Meyer-Olkin (KMO) test to determine the intensity of connection. The KMO value should be no less than 0.7 to be acceptable (Kaiser, 1960). Many previous studies in auditing have used principal components analysis for the reduction of large datasets (e.g. Davies and P., 1980; Mironiuc *et al.*, 2012; Robu and Istratea, 2015). A principal components analysis was run for all three questionnaires and the score loadings were used in an ordinal logistic regression test (Sakar *et al.*, 2011). All the assumptions were met; detailed analysis is given in the questionnaires analysis chapter (See Chapter 5).

- **KENDALL'S TAU-B Test ( $\tau_b$ )**

This is a non- parametric test, which is adopted to test the strength and direction of the association that exists between two variables measured on at least an ordinal scale. This test is a nonparametric alternative to the Pearson correlations. So, the researcher used Kendall's Tau-B Test because of the nature of the data in this study ( ordinal scale), and the data is non- normally distributed (Laerd Statistics, 2016).

- **Kruskal-Wallis Test**

This is a non-parametric test, which was adopted to test the differences between respondents' perceptions (board of directors, audit committees, and internal auditors). This test was adopted because the data in this study was measuring in the ordinal scale and the data was non- normally distributed (Laerd Statistics, 2016). This test is a nonparametric alternative to the one-way ANOVA. The tests for normality for all three questionnaires is given in Appendix F.

- **Mann- Whitney Test**

This is a rank-based nonparametric test that can be used to determine whether there are differences between two groups on a continuous or ordinal dependent variable (Mann and Whitney, 1947). Because the data in this study failed to reach the assumption of normal distribution, the researcher used the Mann- Whitney Test instead of the independent-samples t-test.

- **Multivariate Analysis**

This is a statistical process to analyse multiple independent (or predictor) variables with multiple dependent (outcome or criterion) variables, using matrix algebra (most multivariate analyses are correlational). There are more than one techniques for multivariate Analysis, such as logistic regression or multiple regression. Logistic regression analysis does not use ordinary least squares in weighting the  $x$  variables, but uses a more complex process of maximum likelihood estimation. The following section explains the process of analysing ordinal logistic regression.

#### **4.3.7 Process of Analysing the Hypotheses (Ordinal Logistic Regression)**

Ordinal logistic regression was used because of the nature of the questionnaires' data. Furthermore, in order to use ordinal logistic regression four assumptions needed to be met (O'Connell, 2006). The first and the second assumptions were related to the choice of study design and the measurements that were used in this research, while the other two assumptions were related to the characteristics of the data was collected (O'Connell, 2006). These assumptions were:

- One dependent variable should measure on the ordinal level.
- There should be at least one or more independent variables that are continuous, ordinal or categorical.

These two assumptions related to how the data fitted the ordinal logistic regression model in order to provide a valid result (O'Connell, 2006).

- The creation of dichotomous cumulative categories for the dependent variable, based on the cumulative splits of the ordinal dependent variable. These new dependent variables were used on separate binomial logistic regressions in order to establish the viability of the assumption of proportional odds.
- There should be no multicollinearity: this occurs when you have two or more independent variables that are highly correlated with each other.

All assumptions were met, and then researcher ran an ordinal regression of the three models separately (BOD, AC, IA), representing each of the factors that had been selected, based on principle components to give more reliable data. The interpretation followed four steps (O'Connell, 2006):

- The researcher determined whether the overall model was sufficient, using the likelihood ratio test based on  $\chi^2$  to compare the full model to a model using a constant as a predictor.
- The *pseudo-R<sup>2</sup>* value was an estimated value.
- Goodness-of-fit, to assess the overall fit of the ordinal regression model. The result should be not significant to indicate a good model fit (i.e.,  $p > .05$ ). The smaller the value of -2 (Log Likelihood), the better the fit. The model fit table should be significant ( $p < .005$ ).
- The parameter estimates table, which explains the results of the model, consisting of the thresholds and the slope coefficients for each variable used in the study. The results of each models are explained in questionnaires analysis chapter (See Chapter Five).

#### **4.3.8 Ordinal Logistic Regression Model**

To look at the relationship between the number of independent variables and the single dependent variable, a multivariate regression analysis was applied in order to reduce the likelihood of overstating the overall apparent explanatory strength of an independent variable, which could occur in a series of bivariate analyses (Patton and Zelenka, 1997).

According to Long (1997), in the field of social science, multiple regression analysis is the most common statistical method that is used. It is believed that the dependent variables are continuous, and they are calculated for each case in the sample. However, many of the results are not continuous and not all the data is usually observed (Long, 1997). For a many reasons, logic regression is often considered optional in similar cases. In this study, it was seen that the dependent variable was ordinal and, as such, logic regression analysis was picked for the purpose of multivariate analysis, as has been done in previous auditing research (Franck and Sundgren, 2012; Bame-Aldred *et al.*, 2013; Issa and Kogan, 2014). The variables can come in different forms, such as, ordinal, binary, censored variable, nominal, and count. The model estimation is likely to be biased when the form of the dependent variables is not known and is joined to the model that is used for the categorical variable type (Long, 1997). The probit and logic models explicitly deal with variables that are dependent on an ordinal scale, whereas the Probit model and Binary logit are appropriate for the outcomes of binary variables. In this study, the dependent variable was in an ordinal form. The external audit quality variable was transferred as dichotomous that is in binary form in the beginning of the relationship that is the first relationship where there was two possible outcomes; a score of 1 was given when the external audit quality was very high and 0 when the quality of the external audit was low. In another relationship, the ordinal dependent variable was seen as a 5point Likert scale that measured the perceptions of participation of the factors that were affecting the quality of the external audit. Hence, the method that was best for explaining the relationship between the dependent variable and the independent variable in the first case was binary logistic regression analysis, while ordinal/ ordered logistic regression analysis was the appropriate method for the second situation. The change that can occur in the ordinal dependent variable depends on the linearizing sigmoid distributions of proportions (Armitage and Berry, 1994).

The variable of the transformation was determined using the formula below:

$$\text{Odds ratio} = \frac{P(\text{event})}{1 - P(\text{event})}$$

$$1 - P(\text{event}),$$

P stands for the probability of a specific event occurring and 1-p (event) stands for the probability of an event not occurring. It could be converted to a probability through the use of this formula:

$$P(\text{event}) = \text{odds}(\text{event}) / [1 + \text{odds}(\text{event})]$$

The above formulas do not extend the value of the outcome that has been predicted below zero and, since 0 represents an event that will can never happen, that simply means the probability of 0 as such, the final stage will result in taking the natural log of (log) of the odds ratio, so as to allow the value that has been predicted to go below zero. In fact, the natural log for the odds ratio is set between + and – infinity. However, when it is changed back to a probability, it will fall between 0 and 1.

$$\text{Logit}(p) = \ln [p / 1-p]$$

The equation that represents the relationship between dependent variable and the independent variable is:

$$\text{logit}(p) = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X \dots + \beta_k X_k$$

Through the use of exponentiation, the logit (p) can be converted to the odds, and the calculation of odds is = e logit (p), the resulting equation is:

$$\text{Odds}(p) = e^{\ln[\text{Odds}(p)]} = e^{\alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \dots + \beta_k X_k}$$

It can further convert the odds back to probability through the use of this equation:

$$P(\text{event}) = \frac{e^{\alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X \dots + \beta_k X_k}}{1 + e^{\alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X \dots + \beta_k X_k}}$$

#### **4.3.8.1 Assumptions in Regression Analysis**

Certain assumptions are needed in most statistical test before they can be met, so as to make the results more accurate. The first dependent variable that was used in the analysis was in the form of a binary; thus, the first assumption that was underlined was achieved. The second dependent variable made use of an ordinal regression model, which is an extension of the binary logit model for dependent variables in ordinal form. When it came to choosing link functions, the two models (binary and ordinal) were both transformed through the use of the logit function. The second choice was the probit model. Long (1997) stated that the choice of using both models depends greatly on the preference of the individual, because the result are not always distinguishable. In the current study, the researcher used the logic model because she was very familiar with the model.

#### **4.3.8.2 Multicollinearity Assumption**

Multicollinearity simply means that some or all of the independent variables are highly correlated (Field, 2000). Multicollinearity makes it very risky to make use of coefficients as an indicator, simply because it has an effect on the estimated regression coefficients, which may fluctuate from one sample to another (Cooper and Emory, 1995). Some previous statistics literature or research has examined the issue of multicollinearity through the assessment of the value of tolerance and its inverse -the Variance Inflation Factor (VIF) (Hair *et al.*, 2006), which are the product of the independent variables. 1-R<sup>2</sup> was used to calculate the tolerance and the variables that were considered were used as the dependent variables in a regression analysis, and the remaining variable functions were used as independent variables, calculated between 1 and 0. Assuming the variable has a value of tolerance that is equal to 1, it simply means that the variable does not correlate with the other independent variables (Miles and Shevlin, 2005). The variance inflation factor (VIF) reciprocates to tolerance by using the formula  $VIF = 1 / \text{tolerance}$ . It shows the amount of the standard that results from collinearity (Miles and Shevlin, 2005). The VIF value, as well as



the Tolerance value, represents the power of the relationship among the independent variables included in the regression analysis. Hair *et al.* (2006) discussed how a multicollinearity problem occurs if the tolerance value becomes 0.10 or below or, rather, if the VIF becomes 10 or above. The tests for the VIF and tolerance of the 3 questionnaires are discussed in detail in the analysis chapter of the questionnaire (See Chapter 5).

#### **4.3.8.3 Goodness-of-Fit Coefficients**

In the ordinal regression model, Pearson and deviance were used to measure how poorly the model fits the data. In order to indicate a good model fit, the result of these tests should be not significant (i.e.,  $p > .05$ ). The Pearson test is implemented by calculating an overall summary measure of the Pearson residuals (O'Connell, 2006). On the other hand, the deviance goodness-of-fit statistic is the difference in fit between the current model and a full model; a full model being a model that fits the data perfectly. The deviance is preferred in case there are many cells with zero frequencies (Agresti, 2010). Another way to test the fit of a model is pseudo-R-squares measures. As provided in ordinary least-squares linear regression, there are a number of measures in ordinal regression that attempt to provide a similar "variance explained" measure. However, these measures do not have the direct interpretation that they do in ordinary linear regression; therefore, they are referred to as "pseudo"  $R^2$  measures. The three measures are Cox and Snell, Nagelkerke and McFadden and they are the three most common measures of  $R^2$ . When all is said and done, none of these measures are particularly good and their use is not universally appreciated (Long, 1997). There is some thought that the McFadden measure might be the best measure of the three (Long, 1997).

#### **4.3.8.4 Model Fitting Analysis**

In ordinal regression analysis, there are two approaches to testing the null hypothesis, namely, the Wald test and the Likelihood ratio test. The Wald test is similar to a t-test, and it is designed to test one slope parameter at a time, while the likelihood ratio test is similar to the F-test and it can test several slope parameters at once (Azen and Walker, 2011). The likelihood is a probability that the observed values of the dependent variable may be predicted from the observed values of the independent variables (Silva and Abreu, 2010). The Chi-Square  $-2 \log$  likelihood is used to determine whether the model is significant ( $p < 0.05$ ) and to measure how well the independent variables affect the outcome or dependent

variable (Silva and Abreu, 2010), and to determine whether the individual predictor is significant ( $p < 0.05$ ) the Wald test used. The next chapter discusses the results for all three models (See Chapter 5).

#### **4.3.9 Research Models**

To examine the effects of the independent variables on the dependent variable (external audit quality), the three subsequent models were used to test the hypotheses (for more details about the definitions of variables see table 4.6).

$$AQ1 = \alpha + \beta_1 BODSIZE + \beta_2 BODIND + \beta_3 EXIND + \beta_4 EXTENURE + \beta_5 AUDSIZE + \beta_6 EXCOMPET + \varepsilon$$

$$AQ2 = \alpha + \beta_1 ACMEET + \beta_2 FINEXPERTIS + \beta_3 EXIND + \beta_4 EXTENURE + \beta_5 AUDSIZE + \beta_6 EXCOMPET + \varepsilon$$

$$AQ3 = \alpha + \beta_1 IACOMPE + \beta_2 EXIND + \beta_3 EXTENURE + \beta_4 AUDSIZE + \beta_5 EXCOMPET + \varepsilon$$

##### **4.3.9.1 Measurement of Variables**

In this study, questionnaires were used as the source for the collection of primary data for analysis. As stated before, external audit quality measurement has been an issue for a long time, due to lack of agreement among scholars, because people have different perceptions of external audit quality (Jueming *et al.*, 2014). A new concept, of using people's perception of audit research, has recently been used to measure external audit quality (Jamal and Sunder, 2011; Svanström, 2013; Bing *et al.*, 2014). For instance, a study by Jamal and Sunder (2011) used baseball cards to assess the role of independence related to other auditor attributes, such as service, competence, and the price of external audit quality. Another study by (Svanström, 2013) studied the relationship between external audit quality and non-audit services using the management's perception to measure external audit quality (Svanström, 2013).

##### **4.3.9.2 Measurements of the Dependant Variable (External Audit Quality)**

The literature review chapter highlighted different measurements of external audit quality, such as, audit size, audit fee, auditor characteristics, as a measure (proxy) for external audit quality. In this study, external audit quality was measured by using the perceptions of boards of directors, audit committees, and internal auditors to determine the level of overall AQ

achieved by external auditors in a recent audit engagement (Jamal and Sunder, 2011; Svanström, 2013; Bing *et al.*, 2014).

#### **4.3.9.3 Measurements of the Independent Variables**

The literature review chapter covered the board of director's characteristics, audit committee characteristics, and internal auditor's characteristics and their effects on external audit quality in depth. Moreover, the literature review section presented, briefly, a summarised debate regarding the effects of independent variables (board of directors, audit committee, and internal auditors) on a dependent variable (external audit quality), together with the theoretical development of the hypotheses. In this section, the measures of all independent variables are derived from the literature review. The justification behind the selection of these variables is that there is an agreement in the auditing literature that these variables express the role of the board of directors, the audit committee, and internal auditors on external audit quality. This study contains three models to examine the research hypotheses using primary (questionnaires) data.

In terms of the board of directors, the study covers the board of directors' size, meetings and their independence. Board size influences the external audit quality. Many studies have emphasised the effectiveness of a small board of directors (Lipton and Lorsch, 1992; Linck *et al.*, 2008; Mustafa *et al.*, 2009), while some studies have found no significant relationship (Beiner *et al.*, 2004; Limpaphayom and Connelly, 2006). The other factor is the board of director meetings. Although the Saudi Code of corporate governance mandates no specific number of meetings, the boards of directors should meet regularly upon a request by the Chairman<sup>16</sup> (CODE, 2006). As stated by (Carcello *et al.*, 2002; Krishnan and Visvanathan, 2009), the frequency of meetings is helpful in improving the board of directors' effectiveness. Other study has found a positive relationship between audit fees and a greater number of board of directors' meetings, which is because the extra work leads to higher external audit quality (Krishnan and Visvanathan, 2009). The last factor is the independence of the board of directors. Boards of directors should be independent in order to maintain the value of firm. Moreover, Akhidime found that there was a positive relationship between

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<sup>16</sup> The Board of the Capital Market Authority Article 16 (Board meetings). Pursuant to Resolution No. 1-212-2006 Dated 21/10/1427H Corresponding to 12/11/2006 Based on the Capital Market Law issued by Royal Decree No. M/30 dated 2/6/1424H Amended by Resolution of the Board of the Capital Market Authority Number 1-10-2010 Dated 30/3/1431H corresponding to 16/3/2010G.

independent directors, directors' ownership, and bank size on external audit quality (Akhidime, 2015).

In terms of the audit committees' variables, the researcher focused on the financial expertise of the audit committee (at least one member), and audit committee meetings.

The code of corporate governance in SA requires at least one member of the audit committee to have financial experience. Financial expertise<sup>17</sup> in the Saudi corporate governance code is based on educational and career background data. Financial expertise is very important in a firm and, according to some studies; there is a relationship between strong corporate governance and financial expertise in firms (Raghunandan *et al.*, 2001; Abbott *et al.*, 2004; DeFond and Francis, 2005). Audit committee meetings play a significant role in improving the effectiveness of audit committee members (Yin *et al.*, 2012) and strengthen the effectiveness of internal control functions (Hsu, 2007). The quality of a firm's financial issues associate positively with the numbers of audit committee meetings (Abbott *et al.*, 2004) and decrease the amount of fraud (Raghunandan *et al.*, 1998).

Finally, the internal auditor variables in the study were the size of internal auditor departments and internal auditor experience. The size of the department and the expertise of the members can play a vital role in a firm. Some studies have found that companies with a large amount of members can have the largest and best governance practice in their audit committee, and that regular meetings (Bedard and Johnstone, 2010). Moreover, experienced auditors result in higher audit performance (Libby and Frederick, 1990; Tubbs, 1992; O'Leary and Stewart, 2007).

#### **4.3.9.4 Measurements of Control Variables**

In this study, besides the independent variables stated earlier, a number of control variables were covered. In order to test the relationship between external audit and the factors affecting external audit quality it is essential to include control variables that can be associated with external audit quality. The control variables help to ensure that the tests concentrate more accurately on the differences created by variations in external audit quality. In this section, the measurements of these control variables are detailed.

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<sup>17</sup> A financial expert is a specialist in financial and accounting matters. The Board of the Capital Market Authority issued resolution Number (1-36-2008) Dated 12/11/1429H corresponding to 10/11/2008G making Article 14 of the Corporate Governance Regulations mandatory on all companies listed on the Exchange effective from year 2009.

#### **4.3.9.4.1.1 Audit firm size**

Many studies have presented evidence that a large audit size affects external audit quality positively (Davidson and Neu, 1993; Becker *et al.*, 1998; Ferguson and Stokes, 2003; Abu Baker *et al.*, 2005; Choi *et al.*, 2010; Rusmin, 2010; Lawrence *et al.*, 2011). However, from a different viewpoint (Larn and Chang, 1994; Bauwhede and Willekens, 2004; Jackson *et al.*, 2008) did not find differences between small and large audit firms in terms of their effect on external audit quality. This study assumed that large audit firms have a positive effect on external audit quality in the listed companies in SA.

#### **4.3.9.4.1.2 Auditor competence**

Previous studies have concluded that the qualifications and the expertise of the auditor have an influence on enhancing external audit quality (Lee and Stone, 1995; Al-Twaijry and Elnafabi, 2008; Octavia and Widodo, 2015; Osée, 2016). On the other hand, another study found there was no significant relationship between auditor expertise and external audit quality (Augustine *et al.*, 2014; James and Izien, 2014). This study assumed that there was a positive relationship between auditors' competence and external audit quality.

#### **4.3.9.4.1.3 Auditor independence**

Numerous studies have found that auditor independence is affected by many threats, such as management (Carcello and Neal, 2003). In addition, non-audit services may effects external audit quality (Francis, 2004; Chen *et al.*, 2005; Jeong *et al.*, 2005; Gul *et al.*, 2007; Allehaidan, 2012; Thornton and Shaub, 2014). Most studies have argued that there is a positive association between auditor independence and external audit quality. According to the majority of the previous studies, this research assumed there was a positive relationship between auditor independence and external audit quality.

#### **4.3.9.4.1.4 Audit tenure**

There are two opposite opinions regarding the effects of audit tenure and external audit quality. Most of the studies concluded that the lengthening associations between auditor and clients affects external audit quality (Deis and Giroux, 1992; Chen *et al.*, 2008; Adenuyi and Mieseigha, 2013; Belen *et al.*, 2015). Conversely, some studies determined that the longer the audit rotation, the stronger the external audit quality (Jackson *et al.*, 2008; Manry *et al.*, 2008). This study assumed that a long audit tenure affects external audit quality. The table below presents the measurements of the independent, dependent, and control variables.

Table 4:6 The definitions of variables

Dependent Variables	Definitions	Measurements	Sources
<b>AQ</b>	Perceived Audit Quality	Respondent's perception of the level of overall audit achieved by the company's external auditors in a recent audit engagement. From strongly disagree = 1 if the audit quality is low to strongly agree=5 if the audit quality is high.	(Jamal & Sunder, 2011)  (Sanvstrom, 2013)
Control Variables	Definitions	Measurements	Expected sign
<b>AUDSIZE</b>	Audit Size	Size of audit firm. A nominal scale of "1" is assigned for companies audited by any of the Big 4, and "0" for those audited by non- Big4. In Saudi the Big 4 used at the time of this study were; KPMG, PWC, Ernst and Young and Deloitte and Touche.	<b>+V</b>
<b>EXIND</b>	Perceived External Auditors Independence	The ability to report the real situation of the companies to management and owners of businesses without any influences. Ordinal scale for the perception of respondents from strongly disagree = 1, if the external auditors is not an independent to strongly agree= 5 if the external auditors is independent.	<b>+V</b>
<b>EXTENURE</b>	Audit Tenure	Length of audit tenure measured in years (According to Saudi code every 5 years). A nominal scale of "1" is assigned for company rotated off auditor every 5 years, and "0" if not.	<b>+V</b>
<b>EXCOMPET</b>	External Auditor Competence	Auditor qualification according to Saudi Auditing Standards is "professional knowledge, professional skills, and professional value, ethics, and attitude" Perceived external auditor qualifications, ordinal scale for the perception of respondents for strongly disagree= 1 if this requirement does not meet, to strongly agree=5 if the requirements meet.	<b>+V</b>

Independent variables	Hypotheses	Definitions	Measurements	Expected sign
<b>BODSIZE</b>	<b>H<sub>1</sub></b>	Perceived the effect of the size of the board of directors on audit quality	According to Saudi code, board size should be between 3-11 members. nominal scale for the perception of respondents “1” if the members of board directors effect audit quality, and “0” if the members of board of directors do not affect audit quality.	<b>-V</b>
<b>BODIND</b>	<b>H<sub>2</sub></b>	Perceived board of directors independence	According to Saudi code, in order for board members to be independent, they shall not be less than two members, or one- third of the members, whichever is great. One of the requirements for board independent, the role of chief executive office officer should be separated, and the board ember should not have any consultations to their company. Ordinal scale for the perception of respondents from strongly disagree=1 if the board not independent	<b>+V</b>
<b>FINEXPER</b>	<b>H<sub>3</sub></b>	Perceived audit committee financial expertise	According to Saudi code, a financial expertise is a specialist in finance and accounting matters (education and qualification). Ordinal scale for the perception of respondents from strongly disagree=1 if the member is not a financial expert to strongly= 5 if the member is a financial expert.	<b>+V</b>

Independent variables	Hypotheses	Definitions	Measurements	Expected sign
<b>ACMEET</b>	<b>H<sub>4</sub></b>	Perceived audit committee meeting	According to Saudi code, the meetings per year held four times by the audit committee. Ordinal scale for the perception of respondents from strongly disagree=1 if the meetings held less than four times a year, to strongly agree=5 if the meetings held four times a year.	<b>+V</b>
<b>IACOMPETE</b>	<b>H<sub>5</sub></b>	Perceived internal audit competence	The experience and certificate of internal auditors' member. Ordinal scale for the perception of respondents from strongly disagree=1 if the member does not have certificate and experience, to strongly agree=5 if the member has certificate and experience.	<b>+V</b>

Source: researcher design



Table 4:7 The following table presents the hypotheses used in this study

<i><b>Hypotheses</b></i>
<i><b>H<sub>1</sub></b>: There is negative association between external audit quality and the size of the board of directors.</i>
<i><b>H<sub>2</sub></b>: There is a positive relationship between external audit quality and board of directors' independence.</i>
<i><b>H<sub>3</sub></b>: There is a positive relationship between external audit quality and audit committee financial expertise.</i>
<i><b>H<sub>4</sub></b>: There is a positive relationship between external audit quality and the frequency of audit committee meetings.</i>
<i><b>H<sub>5</sub></b>: There is a positive relationship between external audit quality and competence of internal audit members.</i>

Source: researcher design

## **4.4 QUALITATIVE APPROACH**

### **4.4.1 Interview Survey**

The necessity of using the interview in research began because of the shortcomings of questionnaire surveying, with one of the shortcomings being closed questions, where the pre-set response options can cause response bias or wrong answers, whereas if respondents are given more flexibility to answer for themselves, they may give different, fuller answers. An interview is a communication between two or more people in order to gather information and knowledge about a specific subject (Marshall and Rossman, 1999). What a person thinks, likes, or knows can be obtained from an interview (Cohen *et al.*, 2007 ). An interview gives the researcher control when they need to ask open-ended, longer, difficult questions to get additional and more detailed responses (Warwick and Lininger, 1975; Moser and Kalton, 1985; Frey and Oishi, 1995; De Vaus, 1996; Frankfort-Nachmias and Nachmias, 2008).

#### **4.4.2 Types of Interviews**

There are four different personal interview types, namely, *structured*, *unstructured*, *semi-structured*, and *focus group* (Morse and Field, 1995). In the structured interview, the questions are closed and the order of the questions that are asked is the same in every interview. This type of interview is less flexible; however, it is more objective and easy to analyse. In the unstructured interview, known as an informal conversational interview, the questions are open-ended questions (Fontana and Frey, 2000). This kind of interview enables the interviewees to answer using their own references and experience, and gives them the opportunity to choose the length of the conversation. Furthermore, the unstructured interview offers more flexibility to obtain information in whatever way appears to be appropriate. The semi-structured interview uses standardised questions, such as age, educational qualification, and sex. This type also uses open questions to gain more qualitative information (Clarke, 1999). The semi-structured interview is more flexible in terms of response options, sequence of questions, and probing questions, even though a clear list of questions is used. The strength of the semi-structured interview is elevated when the problems discovered change from one interview to the next, as different parts of the topic are revealed (Hussey and Hussey, 1997). Finally, the focus group interview takes place with a small group of people on a specific topic. In this type of interview, the researcher can focus on the group norms and issues that he/she wishes to investigate. The degree of control of the group discussion depends on the nature of the data collected by this method. *"Focus groups typically consist of eight to twelve members randomly chosen, with a moderator leading discussions regarding a particular topic, item, or product"* (Sekaran, 2003, p. 220)

#### **4.4.3 Interview Method Used in the Study**

In this study, the key objective of conducting interviews was to give the respondents the chance to develop their opinions and views, because the closed statements of questionnaire imposed limited alternatives on the respondents (Foddy, 1999). Both questionnaire survey and structured interviews are similar; therefore, it is not appropriate to have them in the same research (Saunders *et al.*, 2007). Moreover, using both of these tools will not allow wider insights into the issue. In contrast, using an unstructured interview method was not appropriate for this research, because it is time consuming and impractical from the interviewees' perspective (Saunders *et al.*, 2007). In addition, using unstructured interviews would give the researcher the feeling of losing the focus of the main idea. Likewise, a focus group interview was not a good choice for this study, because it would be difficult to

interview groups of external auditors in SA, due to their busy work schedules and geographical spread. One of the reasons for choosing a semi-structured interview method was that the researcher could facilitate more control over the content, sequence, and timing of the interview. Additionally, it gave the interviewer the opportunity to ask additional or supplementary questions, which could bring out more understanding of the research problem. Thus, semi-structured interviews were conducted in order to interpret the results obtained from the questionnaire survey and to obtain a better understanding of the results. In fact, semi-structured interviews play an essential role in the preparation of a systematic form of investigation and in developing an exploratory model (Weller, 1998). As Miller (1991) states, semi-structured interviews regularly yield a high percentage of return. In addition, semi-structured interviews help to generate empirical data by asking people their opinions.

#### **4.4.4 Administration of the Interview**

The interviews focussed on two groups, namely, external auditors and the regulatory body (The General Secretary of Saudi Organization for Certified Public Accountants) (SOCPA). The external auditor participants were chosen from the audit firms that audit the Saudi listed companies. They were selected by investigating the report for every company listed in the Saudi Capital Market Authority (Tadawul). The interviewees consisted of 19 external auditors and 1 regulator from SOCPA. The interviews were conducted in May and June 2016.

The researcher sent emails to the interviewees to seek their acceptance to be interviewed. After deciding the date and the time, the researcher sent the interview checklist beforehand, so that they knew what was to be discussed. As a final courtesy reminder and confirmation, the researcher contacted each interviewee on the working day before the scheduled interview. Before starting the interview, an interview consent form was given to each interviewee to ensure confidentiality and anonymity, which was signed by each interviewee. The researcher introduced herself, described the study purpose, and ensured the confidentiality of the interview. Each interview took around 60 to 90 minutes. A checklist was used in order to facilitate smooth progress. Before finishing the interview, the researcher discussed the questions and their responses with each external auditor to be sure that no key point was missing from the list. The interviewee's background, such as education, experience, qualifications, etc. was included in the first section. The last section covered questions on the current practice of auditing in SA and included factors affecting the quality of external audit, audit regulations, and overall effectiveness of external audit in SA. The

researcher was aware that some participants may not want their interview to be recorded; there were 2 participants for whom this was the case. In these cases, during the interview the researcher made detailed notes to record all the major points. Most participants did allow the recording of their interview using a tape recording. At the end of the interview, the researcher thanked the interviewees for their effort and time, and offered them a copy of the results of the research.

#### **4.4.5 Profile of the Interviewees**

Table 4.6, below, shows the detailed position, background, professional qualifications, years of experience, and size of audit firms for the 20 interviews. The section of external auditors' firms was divided into two groups, namely, Big 4<sup>18</sup> and Non-Big 4. The table shows that 8 respondents had between 1 to 10 years of experience in auditing, while 5 respondents had experience of between 11 to 20 years in auditing. The last 7 respondents had between 21 to 30 years of experience in auditing. With regards to academic qualifications, 1 participant had completed a PhD degree, 3 participants had finished Master's degrees, whereas 16 participants had finished Bachelor degrees. All respondents had an Accounting major. The majority (13 out 20 or 65%) of the interview respondents had obtained one or more professional qualification (i.e. AC, ACCA, ACPA, CPA, SOCPA, and CMA). The profiles of interviewees were highly educated and experienced enough to make a significant contribution to the study by sharing the perceptions, thoughts, and opinions of external auditors regarding the factors affecting the quality of external audit in SA.

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<sup>18</sup> There are four local audit firms in SA that are affiliates of the big 4 auditors i.e. Price Waterhouse Coopers, Deloitte Touche Tohmatsu, and Ernst& Young and KPMG, respectively.

Table 4:8 Analysis Showing the Profile of Interviewees

Interview	Position	Background	Academic Qualification	Professional Qualification	Years of Experience	Size of the Company
I1	External Auditor (Senior Auditor )	Accounting	Bachelor	ACCA	5 Years	Non- Big4
I2	External Auditor (Senior Auditor )	Accounting	Bachelor	No	3 Years	Non- Big4
I3	External Auditor (Partner)	Accounting	Bachelor	SOCPA	30 Years	Non- Big4
I4	External Auditor (Audit Manager)	Accounting	Bachelor	NO	16 Years	Non- Big4
I5	External Auditor (Partner)	Accounting	Master	SOCPA	29 Years	Non- Big4
I6	External Auditor (Senior Audit)	Accounting	Bachelor	No	2 Years	Big 4
I7	External Auditor (Audit Manager)	Accounting	Bachelor	ACCA- CMA	8 Years	Non- Big4
I8	External Auditor (Senior Auditor)	Accounting	Bachelor	No	6 Years	Big 4
I9	External Auditor (Audit Manager)	Accounting	Bachelor	CA	37 Years	Non- Big4
I10	External Auditor (Senior Auditor)	Accounting	Bachelor	No	6 Years	Non- Big4
I11	External Auditor (Audit Manager)	Accounting	Bachelor	ACPA	12 Years	Non- Big4
I12	External Auditor (Senior Auditor)	Accounting	Bachelor	No	1 Year	Non- Big4
I13	External Auditor (Partner)	Accounting	Master	SOCPA- CPA	25 Years	Big 4
I14	External Auditor (Senior Auditor)	Accounting	Bachelor	ACPA	18 Years	Non- Big4
I15	External Auditor (Audit Manager)	Accounting	Bachelor	CPA	12 Years	Big4
I16	External Auditor (Senior Audit)	Accounting	Bachelor	SOCPA	2 Years	Big 4
I17	External Auditor (Partner)	Accounting	Bachelor	SOCPA-CMA-CFE	20 Years	Non- Big4
I18	External Auditor ( Senior Audit)	Accounting	Master	CPA	14 Years	Big 4
I19	External Auditor (Partner)	Accounting	Bachelor	SOCPA - ACCA	20 Years	Big 4
I20	The General Secretary of Saudi Organization for Certified Public Accountants	Accounting	PhD	No	25 Years	–

Source: researchers' design

#### 4.4.6 Analysis of Interview Survey Responses

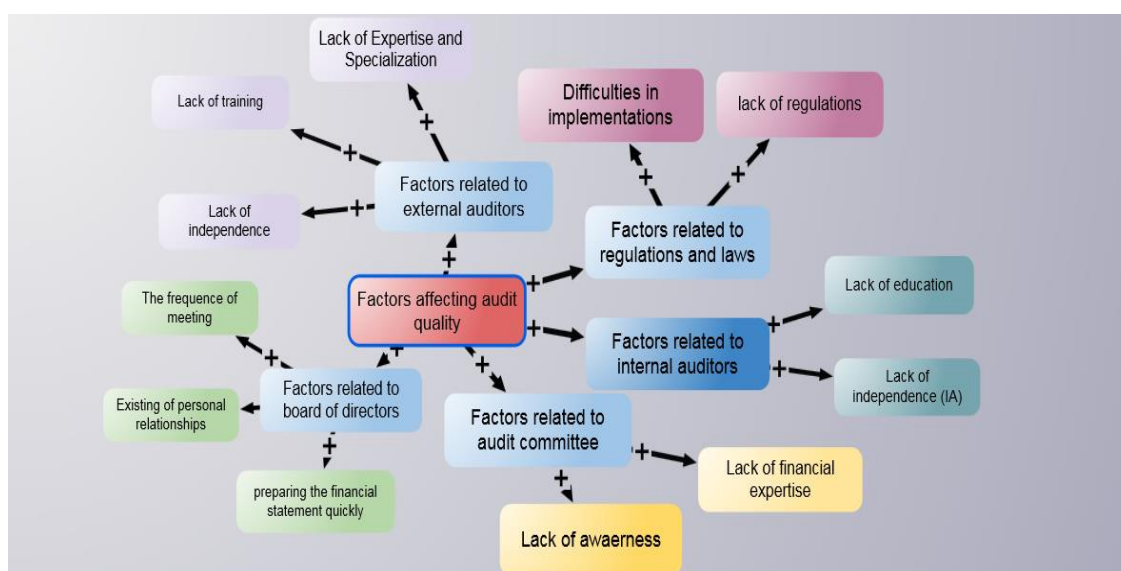
The interview responses were analysed using the “thematic analysis” approach (Boyatzis, 1998; Cicon *et al.*, 2012). This method helps to identify, analysis, and report patterns (themes) within data. The benefit of using thematic analysis was to help explore, in depth, the factors affecting external audit quality. Moreover, this approach was used to analysis the questions about people’s perspectives and experiences. The thematic approach provides a useful and flexible tool that provides rich and detailed data (Braun and Clarke, 2006). There is no clear agreement about what thematic analysis is, and how you go about doing it, due to the wide use of this approach (Boyatzis, 1998; Tuckett, 2005). Thematic analysis can also be used within different theoretical frameworks, in contrast to ground theory or narrative or discourse methods. According to Braun and Clarke, “Thematic analysis can be an essentialist or realist method, which reports experiences, meanings and the reality of participants, or it can be a constructionist method, which examines the ways in which events, realities, meanings, experiences and so on are the effects of a range of discourses operating within society” (Braun and Clarke, 2006, p. 10).

Each researcher chooses his own style of data analysis, such as using memos, coding cards and diagrams to make notes (Corbin and Strauss, 2008). The researcher used coding cards to facilitate the process of categorising the data. Another benefit of thematic analysis is its flexibility. Two phases were used for data analysis in this study, namely, the pre-coding phase, and the coding, or categories, phase (Bailey and Peck, 2013). In the first stage, the researcher transcribed all the 20 interviews. The software “express scribe transcription software” helped the researcher to type the response answers clearly and quickly. Each interview took about one to two hours to transcribe using the software. In total, each transcribed interview was an average of four pages. To ensure accuracy, the transcription was read again while listening to the recording. The researcher wrote the transcripts of the two interviewees who refused to record their interviews by handwriting during the interviews. All interviews were in the Arabic language, so the interviews were analysed in Arabic. The researcher read and re-read the transcripts, trying to label variables as concepts, properties, and categories, and to find the interrelationships between them. In order to enhance the validity of the coding, the researcher read the interviews twice. According to Saldana, the transcripts should be read at least twice to get a good coding framework (Saldana, 2013).

There were some sentences and phrases that were not valuable to include in the data, because the use of some of these explanations were extensive and could have complicated the process of coding (Bryman, 2012). Then, the researcher identified, categorized, and described the phenomena, using the sentences and paragraphs in the text, which is called coding (e.g., Bailey and Peck, 2013). A researcher does not normally check the earlier text to code, but creates a codebook in order to maintain data that is considered as being a useful tool (Parker and Roffey, 1997).

In the second phase, the researcher tried to relate the codes to each other in categories and properties, by combining inductive and deductive thinking. This process fits codes under a basic frame of generic relationships. As stated by (Corbin and Strauss) the coding process is “*extracting concepts from raw data and developing themes of their properties and dimensions*”(2008, p. 159). After the coding process, the researcher identified 12 concepts, as shown in Figure 4-2, below. From the first transcriptions, the researcher found many categories, and then fewer new categories were found from successive transcripts. The same process was applied to each transcript. In order to check all the categories, the researcher assigned an independent person to check the work. The figure presents the relationships among coding system and themes related to factors affecting external audit quality, based on interviews respondents.

Table 4:9 The Coding system and data structure



Source: researchers' design

The sources for identifying the concepts in this research were: (i) the research problem, and, (ii) the literature on external audit quality. As defined by Corbin and Strauss (date), codes are words that can be categorised into group of actions and events that have common

characteristics (2008). Furthermore, the researcher used cards to determine the differences, similarities, sequence, and frequency in memos and transcripts (Saldana, 2013). The researcher used a constant comparison approach, by examining the similarities and differences between the groups. This approach is important because, (i) it helps to make connections and links between codes, themes, and subthemes using axial coding, (ii) it helps to clear any ambiguity about the issues, (iii) it helps the researcher to test basic assumptions, biases and perspectives, and, (iv) it helps the researcher to observe the obtained results. As Strauss and Corbin (1998) state, in each study a core concept always exists. This is a way of validating the story line against the data.

At the end of this stage, a list of categories was created in order to facilitate the next stage. In ‘axial coding’, the researcher reviewed the list by combining or deleting some categories and tried to make some connections between the categories and defined properties. Then the researcher identified the broad themes and core categories that helped to infer the general findings and theories. The researcher used software to generate some figures, but the analysis was done manually. The use of a software program sometimes is not recommended, due to the complexity of qualitative data. *“Software was effective for data management, but inadequate for nuanced and complex work of data analysis. The software package gave us style, but not substance... In effect, we returned to a manual coding system that respected the sheer quantity and complexity of qualitative data and the surrounding contexts”*(As cited by, Saldana, 2013, p. 26).

To improve the reliability of the coding system, a constructed diagram of themes, developed from the interview data, was discussed with the researcher’s supervisor and academic colleagues. In addition, researcher discussed the questions, the coding, and the approach to analysis with colleagues and experienced researchers at some doctoral conferences and workshops. In this research, by preparing questions that attracted them, the interviewees were interested in imparting valuable information about the practices of auditing in SA.

## **4.5 Chapter Summary**

This chapter has presented the mixed methods research design selected for this study, which investigated boards of directors, audit committees, external auditors, and internal control, and their impact on external audit quality in SA. Firstly, the chapter presented the philosophical assumptions of the research methodology. This study employed the pragmatic research paradigm, which was chosen due to its appropriateness for the scope of the research problem, the research questions, and the researcher’s psychological characteristics. In



addition, the chapter showed an investigative mixed-methods research design, clarified why this methodology was chosen, and explained the questionnaire survey, interview process and the model, in detail. There were four reasons for choosing mixed methods: (i) it helps to reduce the shortcoming of a single method, (ii) it offered a full understanding of the research problem, (iii) it was suitable to answer the research questions, and, (iv) mixed methods enhance the reliability of the findings of corporate governance studies, because it studies the behaviour of individuals and firms alike. In this study, the convergent parallel design was chosen. The chapter has identified the limitations of using a mixed methods research design, which include: (i) the absence of a philosophical structure, (ii) accomplishing coordination integration between qualitative and quantitative research, and, (iii) the subsequent cost resulting from the time and resources needed. Furthermore, the chapter has presented the approaches used in the analysis of the questionnaires and interviews. Finally, the study used convergent parallel design, using both a quantitative and qualitative data design for collecting and analysing data, using qualitative data, from the semi-structured interviews, to compare and contrast with the results of the quantitative data from the survey questionnaires.



## **Chapter 5: ANALYSIS OF THE QUESTIONNAIRE (SURVEY)**

### **5.1 Introduction**

This chapter aims to find whether there were any significant associations between the external audit quality and the certain corporate governance characteristics or to find whether there were any associations between the dependent variable and the explanatory variables. To test the relationships between variables, Kendall's Tau-B was used, whereas Kruskal-Wallis and Mann-Whitney U tests were used to find the differences between the groups.

Summary statistics for each individual survey (BOD, IA, and AC) items are presented in the Appendices. In order to assess the consistency of scales, comprising a 5-point scale, and to assess the fit of our measurement models, we have conducted reliability analysis and principal components (PCA). The scores loaded from the principle component analysis were used in ordinal regression. In order to test the hypotheses of the models, multivariate tests were conducted, by using ordinal logistic regression analysis on 126 Saudi listed companies for three groups (BOD, AC, and IA). The justification for using logistic regression analysis has been explained in detail in the methodology chapter. Furthermore, all concepts and assumptions mentioned in this chapter have been discussed in depth in the methodology chapter (See Chapter 4).

### **5.2 Reliability Analysis**

Before starting the analysis, the researcher first had to test for reliability. Reliability is the testing of items that refers to the degree to which a test is stable and consistent in measuring what it is proposed to measure. There are three methods of measuring reliability, which are: the test-retest, parallel-forms, and the split-half. (Frankfort-Nachmias and Nachmias, 2008) and Hussey and Hussey (1997) noted three approaches to measuring the reliability of the data, namely, the test-retest method, the split half method, and the alpha coefficient. As stated, there are more methods to measure reliability; however, the most common method is a Cronbach's Alpha, which is a commonly used test of internal reliability and used for both questionnaires and questions implementing scales such as the Likert Scale (Oppenheim, 1992). The Cronbach's Alpha measures the average correlation of items and then the results will vary "between" 1 to 0 (Bryman and Bell, 2003). This research applied Cronbach's Alpha

as a measurement of consistency, because it seemed more appropriate and less biased, and gives more accurate findings than other methods. The other methods are more difficult to apply than Cronbach's Alpha, so the researcher decided to use the co-efficient alpha score to measure the reliability of the questionnaires. A coefficient of 0.8 is recommended by most studies. However, De Vaus (1996), Nunnally and Bernstein (1994) recommend that the Alpha coefficient should be 0.7 or above. Reliability tests were carried out on the three (3) groups: (1) Board of Director, (2) AC Members, and (3) Internal Auditors, as shown in Tables 5.1 below.

Table 5:1 The Reliability Analysis-Scale (ALPHA) for BOD, AC, IA Survey

	Variables name	Definition	Items in the questionnaire	Number of items	Cronbach's alpha
Board of directors' Survey	<b>BODIND</b>	Independence of board of directors	7-10	4	<b>0.776</b>
	<b>EXIND</b>	External auditor independence	14-19	6	
	<b>EXCOMPE</b>	External auditors competence	21-24	4	
Audit Committee' Survey	<b>FINEXPER</b>	Financial expertise	8-10	3	<b>0.776</b>
	<b>ACMEET</b>	Audit committee' meetings	11-13	3	
	<b>EXCOMPE</b>	External auditors' competence	14-16	3	
	<b>EXIND</b>	External auditors' independence	20-22	3	
Internal Auditors' Survey	<b>IACOMPE</b>	Internal auditors' competence	7-10	4	<b>0.728</b>
	<b>EXCOMPE</b>	External auditors' competence	15-18	3	

Source: researchers' design

The above tables show that the alpha coefficients in all cases were more than 0.7. These results indicate that the data obtained from questionnaires was reliable and suitable for further analysis.

## **5.3 Principle Component Analysis**

### **5.3.1 Board of Directors Survey**

A principal Component analysis (PCA) was run on an 18 question questionnaire. It was used to measure the board of director characteristics for the Saudi listed firms. The suitability of the PCA was determined before the analysis. After the PCA was run, the board of directors meetings' items were eliminated by the PCA. However, the researcher did not remove the variable from the literature review because the interviewees mentioned it as a factor that was affecting the quality of the external audit and, as such, the researcher keep it in, in order to support the interviewee findings. The examination of the correlation matrix showed that each of the correlations had at least one correlation coefficient that was greater than 0.3. The total Kaiser-Meyer-Olkin (KMO) that was calculated was 0.749, and the individual KMOs that were measured were all greater than 0.7; this is the classification of 'middling' to 'meritorious' according to Kaiser (1974). Bartlett's Test of Sphericity was significant ( $p < .0005$ ), showing that the data could be factorized.

The PCA showed three components, which had eigenvalues that were greater than 1 and that gave meaning to 29.06%, 24.69% and 17.9% of the whole variance accurately. Visual inspection of the scree plot showed that 3 components should be retained (Cattell, 1966). Also, a 3-component solution met the criterion for the interpretability and so three components were retained. 71.66% was explained by the t-component solution of the whole variance. A Varimax orthogonal rotation was used to support interpretability. The interpretation of data was consistent with the characteristics of the personality that the questionnaire was actually designed to measure, with strong loadings for external auditors' independence on Component 1 items, board of director's independence on Component 2 items, and the external auditors' competency on Component 3. Table 5.2, below, shows the component loadings for the rotated solution. Appendix E gives further explanation.

Table 5:2 Rotated Structure Matrix for PCA with Varimax Rotation of a Three-Component Questionnaire

Items	Component 1	Component 2	Component 3	Communalities
There are no personal relationships or prior knowledge between the board of directors and audit team members.	<b>.841</b>	.006	-.215	.939
AC resolve any dispute between the external auditors and board of directors.	<b>.820</b>	.082	.032	.882
External auditors are appointed and removed upon the recommendation of the AC.	<b>.812</b>	.044	.096	.945
The AC enhances the independence of external auditors of the company.	<b>.775</b>	.223	.030	.893
The external auditors are not exposed to any effects by management when conducting the audit.	<b>.771</b>	-.257	.166	.907
The AC reviews and monitors the independence and effectiveness of the external auditing process.	<b>.755</b>	.054	-.108	.952
The roles of the chief executive officer and the manager are separated.	.030	<b>.923</b>	-.118	.961
Board members do not provide consultation to their company.	.089	<b>.914</b>	.038	.923
Board members are not affiliated with a company that is an adviser or consultant to the company or senior management.	-.010	<b>.895</b>	-.106	.891

The members of the Board of Directors are independent.	.056	<b>.836</b>	-.065	.923
The external auditor with professional experience is able to plan, audit and evaluate the ability of the entity to continue its activity.	.020	-.004	<b>.916</b>	.891
The external auditors' members have experience in industry of the client.	.096	.115	<b>.858</b>	.928
The majority of external auditors' members have professional qualification.	.090	-.200	<b>.801</b>	.928
External auditors' members have high ethical standards.	-.242	-.176	<b>.630</b>	.896

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\*Major loadings for each item are bolded

### 5.3.2 Audit Committee Survey

A principal component analysis (PCA) was run on the questionnaire of 24 questions that was used to measure the Audit Committee characteristics for companies that were listed in the Saudi market. The suitability of the PCA was determined before the analysis. The examination of the correlation matrix showed that each of the correlations had at least one correlation coefficient that was greater than 0.3. The total Kaiser-Meyer-Olkin (KMO) that was calculated was 0.734, and the individual KMO that were measured were all greater than 0.7; this is the classification of 'middling' to 'meritorious' according to Kaiser (1974). Bartlett's Test of Sphericity was significant ( $p < .0005$ ), showing that the data could be factorized. The PCA showed four components, which had eigenvalues that were greater than 1 and that gave meaning to 32.86%, 22.91% 18.51% and 14.79% of the whole variance accurately. Visual inspection of the scree plot showed that four components should be kept (Cattell, 1966). Also, a four-component solution met the criterion for the interpretability and so four components were retained. 89.09% was explained by the t-component solution of the

whole variance. A Varimax orthogonal rotation was used to support interpretability. The interpretation of the data was consistent with the characteristics of the personality that the questionnaire was actually designed to measure. Component 1 item was the audit committees' financial expertise. Audit committee qualifications were Component 2 items, the external auditors' independence were Component 3 items, and audit committee meetings were Component 4 items. Table 5.3, below, shows the component loadings for the rotated solution. Appendix E gives further explanation.

Table 5:3 Rotated Structure Matrix for PCA with Varimax Rotation of four components questionnaires

	Component 1	Component 2	Component 3	Component 4	Communalities
The audit team members have experience in the industry of the client.	<b>.972</b>	-.039	.058	.106	.960
The majority of audit team members have professional qualifications.	<b>.967</b>	.028	.087	.088	.951
Audit team members have high ethical standards.	<b>.949</b>	-.009	.122	.014	.915
The external auditor with professional experience is able to plan, audit and evaluate the ability of the entity to continue its activity.	<b>.930</b>	-.078	.071	.146	.898
The AC members have sufficient experience in accounting and/or finance.	-.007	<b>.967</b>	.028	.122	.878
The AC members have sufficient knowledge on the entity's business.	-.055	<b>.966</b>	.016	.041	.939
The AC members have sufficient knowledge in accounting and/or finance.	-.023	<b>.936</b>	-.020	.038	.882
External auditors are appointed and/or removed upon the recommendation of the AC.	.079	.081	<b>.955</b>	.012	.924
The Audit Committee resolve any dispute between the external auditor and board of directors.	.056	-.010	<b>.947</b>	.080	.906
The external auditor is not exposed to any effects by management when conducting the audit.	.157	-.049	<b>.936</b>	.124	.918
The chairperson finalizes the agendas of the AC meetings.	.032	-.034	.106	<b>.909</b>	.841
The AC meets with the external auditors, without the presence of the	.125	.050	.011	<b>.880</b>	.792



management, to discuss any issues, problems or reservations arising from the audit.	.125	.050	.011	<b>.880</b>	.792
The frequency of the AC meetings is sufficient to carry out its responsibilities.	.123	.184	.087	<b>.809</b>	.711

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\*Major loadings for each item are bolded

### 5.3.3 Internal Auditors Survey

Principal components analysis (PCA) was run on the questionnaire of 19 questions that was used to measure the internal auditors' characteristics in Saudi listed firms. The suitability of the PCA was determined before the analysis. After the PCA was run, the size of the internal audit items were eliminated by the PCA. However, the variable was not removed from the literature review, because the variable was discussed by the interviewees as a major factor that was affecting the external audit quality so the researcher kept it in order to support the findings of the interviews. The examination of the correlation matrix showed that each of the correlations had at least one correlation coefficient that was greater than 0.3. The total Kaiser-Meyer-Olkin (KMO) that was calculated was 0.719, and the individual KMOs that were measured were all greater than 0.7; this is the classification of 'middling' to 'meritorious' according to Kaiser (1974). Bartlett's Test of Sphericity was significant ( $p < .0005$ ), showing that the data could be factorized. The PCA showed two components, which had eigenvalues that were greater than 1 and that gave meaning to 39.45%, and 30.97% of the whole variance accurately. Visual inspection of the scree plot showed that two component should be kept (Cattell, 1966). 70.43% was explained by the t-component solution of the whole variance. A Varimax orthogonal rotation was used to support interpretability. The interpretation of data was consistent with the characteristics of the personality that the questionnaire was actually designed to measure. Component 1 items consisted of external auditors' items,

whereas component 2 items consisted of the competence of internal auditors. Component loading is presented in Table 5.4, below. Appendix E gives further explanation.

Table 5:4 Rotated Structure Matrix for PCA with Varimax Rotation of a Two-Component Questionnaire

Items	Component 1	Component 2	Communalities
The internal auditor has a CIA.	<b>.884</b>	.142	.801
The internal auditor obtaining the membership of the Institute of Internal Auditor (IIA).	<b>.873</b>	.068	.766
The number of members of the internal audit team recipients of certificates.	<b>.865</b>	.013	.661
Competence of the members of the internal audit is represented by academic certificates.	<b>.585</b>	-.057	.854
The external auditor with professional experience is able to plane, audit and evaluate the ability of the entity to continue its activities.	-.013	<b>.924</b>	.748
The audit team members have experience in the industry of the client.	-.012	<b>.868</b>	.346
The majority of audit team members have professional qualification.	.117	<b>.804</b>	.753

\*Major loading for each item are bolded.

## 5.4 Correlation Analysis and ANOVA

To analysis the questionnaire surveys, three test were run, namely, A Kendall's tau-b.

A Kendall's tau-b is a test measure of the strength and direction of the association that exists between two variables, while the Kruskal-Wallis Test and the Mann Whitney U Test measure the differences between groups.

Based on Kolmogorov-Smirnov and Shapiro-Wilk normality tests (see Appendix F), the researcher used nonparametric bivariate correlation analysis (Kendall's Tau-B correlation coefficients) as part of the preliminary data analysis, because of the ordinal nature of the variables measured on a 5-point scale.

Kendall's tau-b ( $\tau_b$ ) correlation coefficient (Kendall's tau-b, for short) is a nonparametric measure of the strength and direction of the association that exists between two variables measured on at least an ordinal scale. Kendall's tau-b (Kendall, 1945) is one of a number of measures of ordinal association that bases its analysis on concordant and discordant pairs. It assesses the degree to which there is a monotonic relationship and it is suitable when there are ties in the data (Siegel and Castellan, 1988). There are three assumptions that should be met in order to run this test:

- Two variables are measured on an ordinal scale.
- The two variables represent paired observations
- Kendall's tau-b determines whether there is a monotonic relationship between the two variables, and such an association makes sense.

After testing these assumptions, the data met these assumptions.

#### 5.4.1 Kendall's Tau-B for Board of Directors Survey

Based on the factors analysis results, the researcher studied the association between external audit quality and each of the board of directors' survey variables, namely, board of directors' independence, external auditors' competence, and external auditors' Independence (See Table 5.5, below).

Table 5:5 Kendall's Tau-B correlations between high external audit quality and board of directors' explanatory variables measured on a 5-point scale

			High Audit Quality	BODIND	EXIND	EXCOMPE
Kendall's tau_b	High Audit Quality	Correlation Coefficient	1.000	-.075	.031	.338**
		Sig. (2-tailed)	.	.457	.767	.001
		N	77	77	77	76
	BODIND	Correlation Coefficient	-.075	1.000	-.005	.300**
		Sig. (2-tailed)	.457	.	.964	.006
		N	77	77	77	76
	EXIND	Correlation Coefficient	.031	-.005	1.000	.099
		Sig. (2-tailed)	.767	.964	.	.375
		N	77	77	77	76
	EXCOMPE	Correlation Coefficient	.338**	.300**	.099	1.000
		Sig. (2-tailed)	.001	.006	.375	.
		N	76	76	76	76

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### 5.4.1 Kendall's Tau-B for Audit Committee Survey

Based on the factors analysis results, the researcher studied the association between external audit quality and each of audit committee' survey variables, namely, audit committee financial expertise, audit committee meetings, external auditors independence, and external audit competence (See Table 5.6, below).

Table 5:6 Kendall's Tau-B correlations between high external audit quality and audit committee's explanatory variables measured on a 5-point scale

			High Audit Quality	FINEXPER	ACMEET	EXIND	EXCOMP
Kendall's tau_b	High Audit Quality	Correlation Coefficient	1.000	-.241*	-.071	.164	-.067
		Sig. (2-tailed)	.	.032	.526	.144	.550
		N	73	73	73	73	73
	FINEXPER	Correlation Coefficient	-.241*	1.000	-.217	-.037	-.095
		Sig. (2-tailed)	.032	.	.066	.752	.420
		N	73	73	73	73	73
	ACMEET	Correlation Coefficient	-.071	-.217	1.000	.136	.088
		Sig. (2-tailed)	.526	.066	.	.247	.458
		N	73	73	73	73	73
	EXIND	Correlation Coefficient	.164	-.037	.136	1.000	.078
		Sig. (2-tailed)	.144	.752	.247	.	.505
		N	73	73	73	73	73
	EXCOMP	Correlation Coefficient	-.067	-.095	.088	.078	1.000
		Sig. (2-tailed)	.550	.420	.458	.505	.
		N	73	73	73	73	73

\*. Correlation is significant at the 0.05 level (2-tailed).

#### 5.4.1 Kendall's Tau-B for Internal Auditors Survey

The researcher studied the association between external audit quality and each of internal auditors' survey variables, namely, internal auditors' competence, and external auditors' competence. (See Table 5.9).

Table 5:7 Kendall's Tau-B correlations between high external audit quality and internal auditors' explanatory variables measured on a 5-point scale.

Correlations		High audit quality	IACOMPAVE	EXCOMPAVE
High audit quality	Pearson Correlation	1	.276**	.059
	Sig. (2-tailed)		.004	.539
	N	109	109	109
IACOMPAVE	Pearson Correlation	.276**	1	.020
	Sig. (2-tailed)	.004		.834
	N	109	109	109
EXCOMPAVE	Pearson Correlation	.059	.020	1
	Sig. (2-tailed)	.539	.834	
	N	109	109	109

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## 5.5 Differences between groups Tests (Kruskal-Wallis and Mann-Whitney U Test)

Researcher also tested the differences in external audit quality, and external auditors' competence among the different groups, board of directors, audit committee, and internal auditors (BOD, AC, IA), using Kruskal-Wallis, while using the Mann-Whitney U Test for external auditors' independence perceptions between board of directors and audit committee members (BOD, AC).

### 5.5.1 Kruskal-Wallis for External Audit Quality

A Kruskal-Wallis H test was run to determine whether there were differences in External Audit Quality score between three groups of participants (BOD,AC,IA). Distributions of External Audit Quality scores were not similar for all groups, as assessed by visual inspection of a boxplot. The distributions of the External Audit Quality scores were significantly different among the groups,  $\chi^2 (2) = 34.100$ ,  $p = .000$

Figure 5-1 A visual inspection of a boxplot

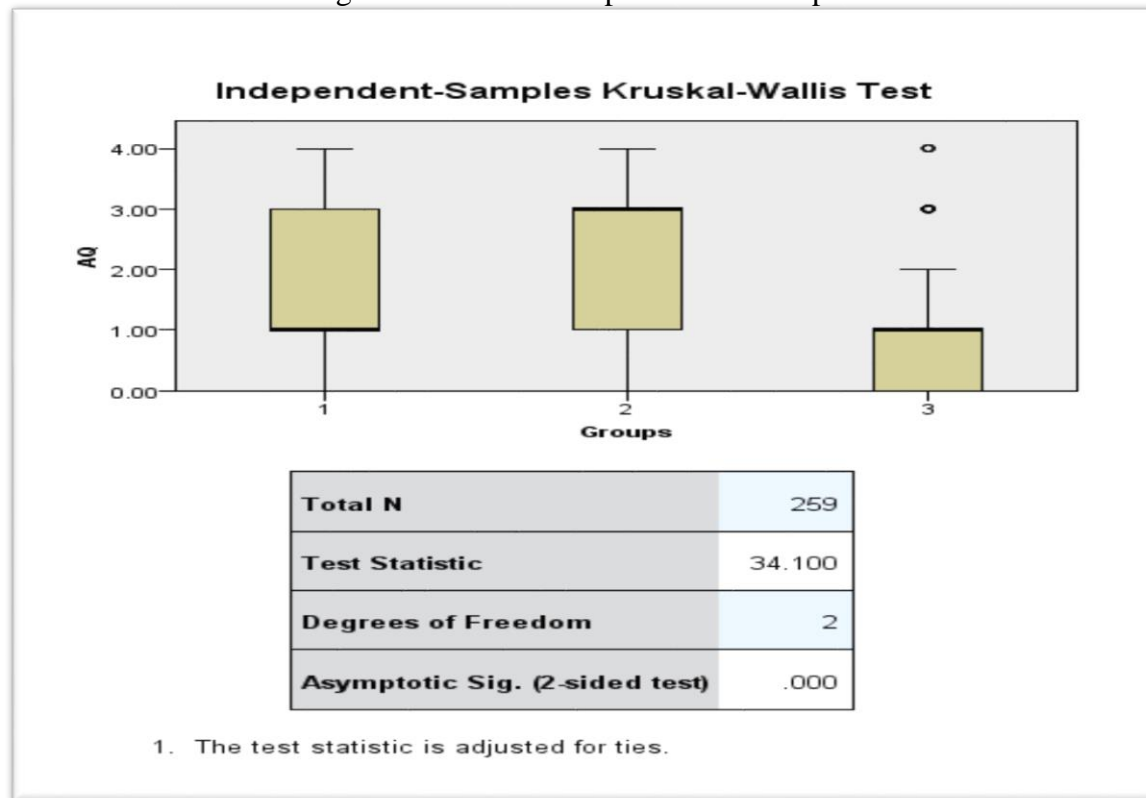


Table 5:8 Non- Parametric Test Kruskal-Wallis for External Audit Quality

Grouping variables	Items	Mean	Number of Sample	Kruskal-Wallis test p-value
BOD	The external auditor engaged by your company in recent audit assignments achieved high audit quality.	1.00	77	***
AC		3.00	73	***
IA		1.00	109	***
*p < 0.05    **p <0.01    p*** <0.001				

### 5.5.1 Kruskal-Wallis for External Auditors' Competence

A Kruskal-Wallis H test was run to determine whether there were differences in the External Auditor's Competence score between the three groups of participants (BOD,AC,IA). Distributions of the External Auditor's Competence scores were not similar for all groups, as assessed by visual inspection of a boxplot. The distributions of the External Audit Quality scores were significantly different among the groups,  $\chi^2 (2) = 157.257$ ,  $p = 0.000$ .

Figure 5-2 A visual inspection of a boxplot

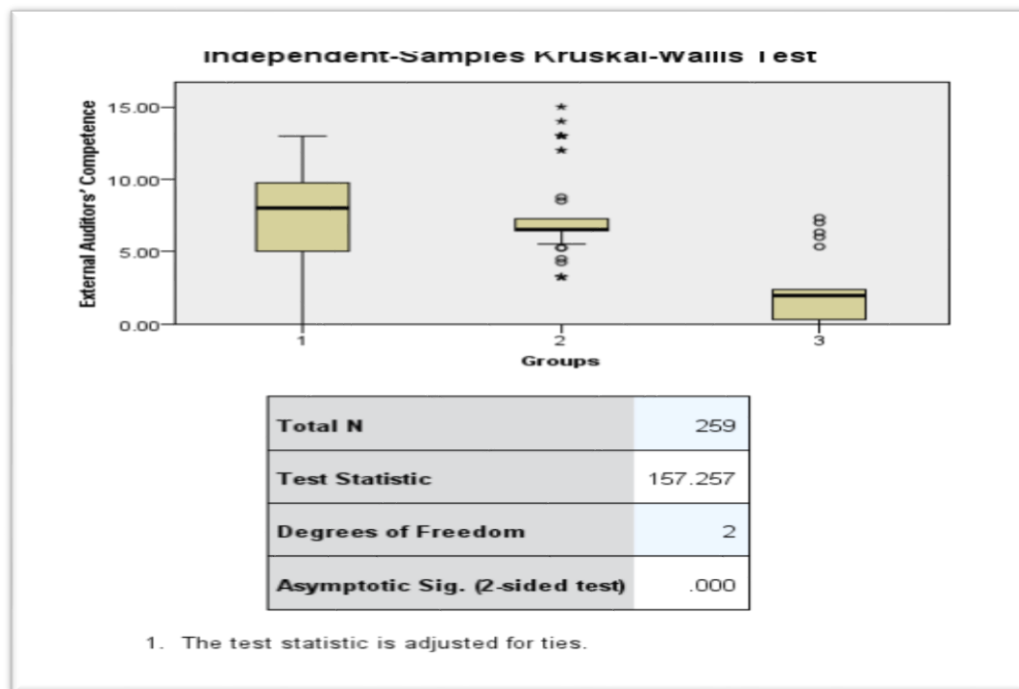


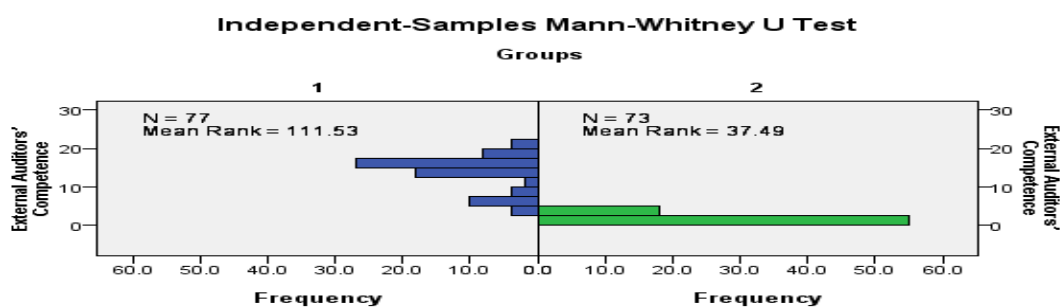
Table 5:9 Non- Parametric Test Kruskal-Wallis for External auditors' Competence

Grouping variables	Items	Mean	Number of Sample	Kruskal-Wallis test p-value
<b>BOD</b>	1-The external auditor with professional experience is able to plan, audit and evaluate the ability of the entity to continue its activity.	1.00	77	***
<b>AC</b>	2-The majority of audit team members have professional qualifications.	3.00	73	****
<b>IA</b>	3-The audit team members have experience in the industry of the client.	1.00	109	***
<p><b>*p &lt; 0.05    **p &lt; 0.01    p**** &lt; 0.001</b>  (Strongly Disagree", "Disagree", "Natural", "Agree", And "Strongly Agree)</p>				

### 5.5.1 Mann- Whitney U Test for External Auditors' Independence

A Mann- Whitney U was run to determine whether there were differences in the External Auditor's independence score between two groups of participants, board of directors and audit committee, (BOD, AC). Distributions of the External Auditor's Independence scores were not similar for both groups, as assessed by visual inspection of a boxplot. There was a significantly difference in the External Auditors' Independence between BOD and AC,  $U = 36$ ,  $p = .000$ , using an exact sampling distribution for U. Engagement scores for BOD (mean rank =111.53 ) were significantly higher than for AC (mean rank =37.49),  $U = 36$ ,  $z = -10.541$ ,  $p = .000$  (Dineen and Blakesley, 1973).

Figure 5-3 Independent Sample Mann- Whitney U Test



<b>Total N</b>	150
<b>Mann-Whitney U</b>	36.000
<b>Wilcoxon W</b>	2,737.000
<b>Test Statistic</b>	36.000
<b>Standard Error</b>	263.214
<b>Standardized Test Statistic</b>	-10.541
<b>Asymptotic Sig. (2-sided test)</b>	.000

Table 5:10 Mann- Whitney U Test for External Auditors' Independence

Grouping variables	Mean	N	Mann-Whitney test p-value
BOD	111.53	77	There is significant difference between board of directors and audit committee perceptions.
AC	37.49	73	
*p < 0.05    **p < 0.01    p*** < 0.001			



## **5.6 MULTIVARIATE ANALYSES (HYPOTHESES TESTS).**

This research employed ordinal regression analysis, which is considered to be one of the most common techniques of multivariate analysis. It helped to test the study's hypotheses by examining the effect of exploratory variables (BOD, AC, and IA) on external audit quality as a dependent variable. In this study, non-parametric tests were used, due to the fact that the data was not normally distributed. The test for skewness and kurtosis indicated high values for some variables. According to previous studies, the data is normally distributed if standard skewness is within  $\pm 1.96$  and standard kurtosis is  $\pm 2$  or  $\pm$  (Pallant, 2013). However, most of the variables exceeded the range. Ordinal logistic regression was employed as a multivariate test technique.

### **5.6.1 Regression Analysis for Board of Directors' Survey**

For the multivariate analysis of our data, the researcher applied an ordinal logistic regression approach, because the dependent variable was measured on a 5-point scale. Running an ordinal logistic regression can attain two objectives: (a) determine which of the independent variables have a significant effect on the dependent variable, and, (b) determine how well the ordinal logistic regression model predicts the dependent variable.

The four assumptions of ordinal regression explained in the methodology chapter were met. After running the ordinal regression model for board of directors' survey, the results are shown below.

$$\text{AQ1} = \alpha + \beta_1 \text{BODSIZE} + \beta_2 \text{BODIND} + \beta_3 \text{EXIND} + \beta_4 \text{EXTENURE} + \beta_5 \text{AUDSIZE} + \beta_6 \text{EXCOMPET} + \varepsilon$$

#### **5.6.1.1 Testing the assumption of multicollinearity**

As illustrated in Table 5.11, all the Tolerance values were greater than 0.1 (the lowest is 0.956) and the VIF values were much less than 10, so researcher was fairly confident that the data did not have a problem with collinearity in this particular data set. Moreover, there were no effects of the outcome of either hypothesis of any logistic multivariate analysis. The table below presents the VIF and Tolerance of the board of directors' independent variables.

Table 5:11 Testing the assumption of multicollinearity

Coefficients <sup>a</sup>			
Model		Collinearity Statistics	
		Tolerance	VIF
1	AUDIT_SIZE	.956	1.046
	BOD_SIZE	.975	1.026
	Audit Tenure	.990	1.010
	BODINDAVE	.957	1.045
	EXINDAVE	.970	1.031

a. Dependent Variable: High audit quality

#### 5.6.1.2 Full likelihood ratio test

According to Azen and Walker (2011), the Wald test and the Likelihood ratio test are two approaches that are used to test the null hypothesis that the response is not affected by the predictor or  $H_0: \beta = 0$ . The test of the likelihood ratio is equivalent to the F-test, as it can test different slope parameters, while the Wald test is equal to the t-test, because it is designed to test one slope parameter at a time. The whole model was examined using the Chi-Square-3 log likelihood test. The extent to which the independent variables affect the dependent variable is measured by the test, while the Wald test statistic was run in order to determine whether the individual predictor was significant ( $p < 0.05$ ). As seen in Table 5.12, below, the model fit is (the "-2 Log Likelihood" column) compared between two separate cumulative odds models. The difference between these two models was very small and not significant ( $p > .05$ ), and so the proportional odds assumption was met. The proportional odds assumption was met, as examined by a full likelihood ratio test that compared the fit of the proportional odds location model to a model that had varying parameters of location,  $\chi^2 (18) = 6.845$ ,  $p = .991$

Table 5:12 Full likelihood ratio test

Goodness-of-Fit			
	Chi-Square	df	Sig.
Pearson	138.243	126	.215
Deviance	99.618	126	.960

Link function: Logit.

#### 5.6.1.3 Overall goodness-of-fit coefficients

In order to assess the model fits, both the Pearson and deviance statistics are designed to provide a measure of how poorly the model fits the data. These tests should be not significant to indicate a good model fit (i.e.,  $p > .05$ ). Both tests indicated a good model fit (See table 5.13).

Table 5:13 Overall goodness-of-fit coefficients

Test of Parallel Lines <sup>a</sup>				
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	133.662			
General	126.817 <sup>b</sup>	6.845 <sup>c</sup>	18	.991

The Pearson goodness-of-fit test indicated that the model was a good fit to the observed data,  $\chi^2(126) = 138.243$ ,  $p = .215$ .

The deviance goodness-of-fit test indicated that the model was a good fit to the observed data,  $\chi^2(126) = 99.618$ ,  $p = .960$ .

#### 5.6.1.4 Important statistics in the logistic regression analysis for board of directors' survey

This section explained the results of the final models for logistic regression analysis. These results consisted of the following important statistics that determined the robustness of the model and the significance of the independent variables.

#### 5.6.1.4.1 Model Fitting Analysis

As shown in Table 5.14, in order to assess the model fit, by comparing the full model to the intercept-only model, the model should be significant if the  $p < .05$ .

Table 5:14 Model Fitting Analysis

Model	-2 Log Likelihood	Chi-Square	Df	Sig.
Intercept Only	157.645			
Final	133.662	23.983	6	.001

Link function: Logit.

The final model was significantly and predicted the dependent variable over and above the intercept-only model,  $\chi^2(6) = 23.983$ ,  $p = .001$ , which means at least one independent variable was significant.

#### 5.6.1.5 PARAMETER ESTIMATES USING THE GENLIN PROCEDURE

A cumulative odds ordinal logistic regression that had proportional odds was run, in order to determine the effect of board of directors' size, and also the board of directors' independence, on the assumption that the quality of external audit was high. Proportional odds were examined by a full likelihood ratio test that compared the fitted model to a model that had varying parameters of location,  $\chi^2(18) = 6.845$ ,  $p = .991$ . The deviance goodness-of-fit test showed that the model was a good fit to the observed data,  $\chi^2(126) = 99.618$ ,  $p = .960$ , but most of the cells were sparse, with frequencies of 0 in 73.2% of the cells. However, the last model significantly assumed the dependent variable above and over the intercept-only-model,  $\chi^2(6) = 23.983$ ,  $p < .001$ . An increase in the size of the external auditors' competence was associated with an increase in the odds of considering high quality of external audit, with an odds ratio of 50.360 (95% CI, 7831 to 323.865), Wald  $\chi^2(1) = 17.035$ ,  $p < .0005$ . An increase in the size of the board of directors' independence was linked to an increase in the odds of considering external high audit quality, with an odds ratio of 341

(95% CI, .120 to .967), Wald  $\chi^2(1) = 4.091$ ,  $p < .0005$ . Table 5.15, below, presents the board of directors' model for the cumulative odds of ordinal logistic regression.

Table 5:15 Parameter estimates for (BOD) Survey

Parameter Estimates											
Parameter	B	Std. Error	95% Wald Confidence Interval		Hypothesis Test			Exp(B)	95% Wald Confidence Interval for Exp(B)		
			Lower	Upper	Wald Chi-Square	df	Sig.		Lower	Upper	
Threshold [High_Audit_Quality=0]	-1.971	.5950	-3.137	-.805	10.973	1	.001	.139	.043	.447	
[High_Audit_Quality=1]	.000	.5455	-1.069	1.069	.000	1	1.000	1.000	.343	2.913	
[High_Audit_Quality=2]	.276	.5467	-.795	1.348	.255	1	.614	1.318	.451	3.848	
[High_Audit_Quality=3]	2.731	.6974	1.364	4.098	15.337	1	.000	15.348	3.913	60.207	
[AUDITSIZ=0]	.678	.4838	-.270	1.626	1.965	1	.161	1.970	.763	5.086	
[AUDITSIZ=1]	0 <sup>a</sup>	.	.	.	.	.	.	1	.	.	
[BODSIZE=0]	-.631	.4811	-1.574	.312	1.720	1	.190	.532	.207	1.366	
[BODSIZE=1]	0 <sup>a</sup>	.	.	.	.	.	.	1	.	.	
[ EXTENURE =0]	-.481	.4823	-1.427	.464	.996	1	.318	.618	.240	1.590	
[EXTENURE=1]	0 <sup>a</sup>	.	.	.	.	.	.	1	.	.	
BODIND	-1.076	.5321	-2.119	-.033	4.091	1	.043	.341	.120	.967	
EXIND	-.450	.7183	-1.857	.958	.392	1	.531	.638	.156	2.607	
EXCOMPE	3.919	.9496	2.058	5.780	17.035	1	.000	50.360	7.831	323.865	
(Scale)	1 <sup>b</sup>										

Dependent Variable: High audit quality

Model: (Threshold), BODSIZE, BODINDAVE, AUDTENURE, AUDITSIZ ,EXINDAVE, EXCOMPEAVE



Predictors are in bold

#### **5.6.1.6 Findings and Discussion of the First Model (Board of Directors' Survey).**

The first model examined the relationship between boards of directors' characteristics as independent variables with external audit quality. Hence, ordinal logistic regression of the board of director's characteristics and external audit quality is presented in Table 5.15 above. Based on the statistical analysis shown in the same table, there were significant associations between some board of directors' characteristics (board of directors' independence) and external audit quality.

##### **5.6.1.6.1 Board of Directors Size (BODSIZE)**

Hypothesis **H<sub>1</sub>** suggested a non-significant association between board of directors' size and external audit quality. As expected, this finding concurred with many studies (Lipton and Lorsch, 1992; Mustafa *et al.*, 2009; Alzoubi and Selamat, 2012; Makni *et al.*, 2012; Akhidime and 2015; Beisland *et al.*, 2015; Alhababsah, 2016) . According to some studies, the reason for a non-significant association between board size and external audit quality is that the size is not an important factor that affects external audit quality. The more important factor is the effectiveness of board of directors' members (Beiner *et al.*, 2004; Limpaphayom and Connelly, 2006). The most previous studies have viewed a small board size to be more effective than a large board size. The small board size has the ability to increase the monitoring on CEOs and to make useful decisions (Beiner *et al.*, 2004; Alhababsah, 2016) . However, a large board size causes more problems because there is more communication among board members and more associated with poorer performance (Chan and Li, 2008).

##### **5.6.1.6.2 Board of Directors' Independence (BODIND)**

Hypothesis **H<sub>2</sub>** suggested a significant positive relationship between board of directors' independence and external audit quality. The results were consistent with studies, such as (Dahya and McConnell, 2005; Kim *et al.*, 2014; Akhidime, 2015). The study by Kim *et al.* (2014) found that the independence of the external members and their academic majority may influence a firm's value. Another study by Dahya and McConnell (2005) stated that, if the board of director is an external director, the independence of this member will influence board decisions positively. As has been previously observed, in the Saudi listed companies

there was a significant positive association between board of directors' independence and external audit quality. So, according to the Saudi Code, it is important that the board of director should be at least two members, or that one-third of the members should be independent, by separating the role of chief executive officer and other directors, and that the board members should not have any consultations to their company (CODE, 2006).

### **Control Variables: Results and Discussion of the First Model (board of directors' Survey)**

There were four control variables in this study, namely, audit firm size, external auditors' competence, external auditors' independence, and external auditors' tenure. However, only external auditors' competence had a significant statistic association with external audit quality. This result concurred with some studies, such as (Lee and Stone, 1995; Al-Twaijry and Elnafabi, 2008; Octavia and Widodo, 2015). The skills and education of external auditors increased the ability to discover and detect material misstatements and errors (Arruñada, 2000). The study by Al-Twaijry and Elnafabi (2008) from SA found that there was a strong association between external auditors' competence and external audit quality. However, the other control variables failed to provide any consistent or coherent evidence of any relationships.

#### **5.6.2 Regression Analysis for Audit Committee' Survey**

The four assumptions of ordinal regression, explained in the methodology chapter, were met. After running the ordinal regression model for audit committee survey, the results are shown below.

$$AQ2 = \alpha + \beta_1 ACMEET + \beta_2 FINEXPERTIS + \beta_3 EXIND + \beta_4 EXTENURE + \beta_5 AUDSIZE + \beta_6 EXCOMPET + \varepsilon$$

##### **5.6.2.1 Testing the assumption of Multicollinearity**

As illustrated in Table 5.16, all the Tolerance values were greater than 0.1 (the lowest is 0.845) and the VIF values were much less than 10, so the researcher was fairly confident that there was no problem with collinearity in this particular data set.



Table 5:16 Testing the assumption of Multicollinearity

Coefficients <sup>a</sup>		
Model	Collinearity Statistics	
	Tolerance	VIF
FINEXPER	.916	1.091
ACMEET	.845	1.183
EXIND	.948	1.054
EXCOMP	.979	1.021
AUDIT FIRM SIZE	.926	1.080
EXTENURE	.903	1.107

a. Dependent Variable: High Audit Quality

### 5.6.2.2 Full likelihood ratio test

As shown in Table 5.17, this test compared the model fit (the "**-2 Log Likelihood**" column) between two different cumulative odds models. Because the differences between these models were small and not significant ( $p > .05$ ), the assumption of proportional odds was met.

The assumption of proportional odds was met, as assessed by a full likelihood ratio test comparing the fit of the proportional odds location model to a model with varying location parameters,  $\chi^2(18) = 24.657$ ,  $p = 0.135$

Table 5:17 Full likelihood ratio test

Test of Parallel Lines <sup>a</sup>				
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	76.472			
General	51.815 <sup>b</sup>	24.657 <sup>c</sup>	18	.135

The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.

a. Link function: Logit.

### 5.6.2.3 Overall goodness-of-fit coefficients

In order to assess the model fits, both the Pearson and deviance statistics are designed to provide a measure of how poorly the model fits the data. These tests should be not significant to indicate a good model fit (i.e.,  $p > .05$ ). Both tests indicated a good model fit (See table 5.18).

Table 5:18 Overall goodness-of-fit coefficients

Goodness-of-Fit			
	Chi-Square	df	Sig.
Pearson	51.963	94	1.000
Deviance	45.684	94	1.000

Link function: Logit.

The Pearson goodness-of-fit test indicated that the model was a good fit to the observed data,  $\chi^2(94) = 51.963$ ,  $p = 1.000$ . The deviance goodness-of-fit test indicated that the model was a good fit to the observed data,  $\chi^2(94) = 45.684$ ,  $p = 1.00$ .

#### 5.6.2.4 Model Fitting Information

As shown in Table 5.19 in order to assess the model fit comparing the full model to the intercept-only model, the model should be significant if  $p < .05$ .

Table 5:19 Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	91.832			
Final	76.472	15.360	6	.018

Link function: Logit.

The final model significantly predicted the dependent variable over and above the intercept-only model,  $\chi^2(6) = 15.360$ ,  $p = .018$ , which means that at least one independent variable was significant.

#### 5.6.2.5 PARAMETER ESTIMATES USING THE GENLIN PROCEDURE

A cumulative odds ordinal logistic regression that had proportional odds was run in order to determine the effect of audit committee's financial expertise and the meetings of the audit committee, with the assumption that the external audit was of high quality. Proportional odds were examined by a full likelihood ratio test that compared the fitted model to a model that had varying parameters of location,  $\chi^2(18) = 24.657$ ,  $p = .135$ .

The deviance goodness-of-fit test showed that the model was a good fit to the observed data,  $\chi^2 (94) = 45.684$ ,  $p = .1.000$ , but most of the cells were sparse, with frequencies of 0 in 60.2% of the cells. However, the last model significantly assumed the dependent variable above and over the intercept-only-model,  $\chi^2 (6) = 15.360$ ,  $p < .018$ . The odds of the tenure of the external auditors rotated every 5 years, with the consideration that external audit was of high quality, was 0.240 (95% CI, 0.058 to 0.991) times that of tenure that did not always rotate every 5 years, an important effect  $\chi^2 (1) = 3.891$ ,  $p = .049$ . An increase in the size of the financial expertise was associated with an increase in the odds of considering high quality external audit, with an odds ratio of 0.266 (95% CI, 0.082 to 0.861), Wald  $\chi^2 (1) = 4.877$ ,  $p < .0005$ . An increase in the number of meetings of the audit committee was linked to an increase in the odds of considering high external audit quality, with an odds ratio of 0.227 (95% CI, 0.059 to 0.874), Wald  $\chi^2 (1) = 4.647$ ,  $p < .0005$ . Table 5.20, below, represents the cumulative odds of the ordinal logistic regression for the audit committee model.

Table 5:20 Parameter Estimates for AC survey

Parameter	B	Std. Error	95% Wald Confidence Interval		Hypothesis Test			Exp(B)	95% Wald Confidence Interval for Exp(B)	
			Lower	Upper	Wald Chi-Square	df	Sig.		Lower	Upper
Threshold [High Audit Quality =1]	-4.862	.9141	-6.654	-3.071	28.293	1	.000	.008	.001	.046
[ High Audit Quality =2]	-3.876	.7869	-5.418	-2.334	24.261	1	.000	.021	.004	.097
[ High Audit Quality=3 ]	-3.061	.7230	-4.478	-1.644	17.920	1	.000	.047	.011	.193
[ High Audit Quality= 4 ]	1.345	.5788	.210	2.479	5.399	1	.020	3.837	1.234	11.931
[AUDISIZE=0]	-1.002	.8296	-2.628	.624	1.459	1	.227	.367	.072	1.866
[AUDISIZE=1]	0 <sup>a</sup>	.	.	.	.	.	.	1	.	.
[EXTUNRE=0]	-1.426	.7228	-2.842	-.009	3.891	1	.049	.240	.058	.991
[EXTUNRE=1]	0 <sup>a</sup>	.	.	.	.	.	.	1	.	.
FINEXPER	-1.326	.6003	-2.502	-.149	4.877	1	.027	.266	.082	.861
ACMEET	-1.484	.6884	-2.833	-.135	4.647	1	.031	.227	.059	.874
EXIND	.860	.5545	-.226	1.947	2.408	1	.121	2.364	.797	7.008
EXCOMP	-.622	.5550	-1.710	.466	1.256	1	.262	.537	.181	1.593
(Scale)	1 <sup>b</sup>									

Dependent Variable: High Audit Quality

Model: (Threshold), FINEXPER, ACMEET, AUDISIZE, EXTUNRE, EXIND, EXCOMP



Significant predictor in bold

#### 5.6.2.6 Findings and Discussion of the Second Model (Audit Committees' Survey).

The second model examined the relationship between audit committee characteristics as independent variables with external audit quality. Hence, ordinal logistic regression on audit committee characteristics and external audit quality is presented in Table 5.20, above. Based on the statistical analysis shown in the same table, there were significant association between audit committee characteristics (financial expertise and audit committee' meetings) and external audit quality.

$$AQ2 = \alpha + \beta_1 ACMEET + \beta_2 FINEXPER + \beta_3 EXIND + \beta_4 EXTENURE + \beta_5 AUDSIZE + \beta_6 EXCOMPET + \varepsilon$$

##### **Audit Committee Financial Expertise (FINEXPER)**

Hypothesis **H<sub>3</sub>** suggested a significant relationship between audit committee financial expertise and external audit quality. These findings support the recommendations of the Saudi Corporate Governance Code (CODE, 2006), that audit committees should have at least one member as a specialist in financial and accounting matters, in order to interact with external auditors and to understand the financial reporting process effectively. This result was consistent with other studies, such as (Raghunandan *et al.*, 2001; DeZoort *et al.*, 2002; McDaniel *et al.*, 2002; Abbott *et al.*, 2004; DeFond and Francis, 2005; Krishnan and Visvanathan, 2009). In summary, the current study found that there was a relationship between audit committee characteristics and external audit quality. For that reason, it is important for Saudi listed companies to have at least one financial expert, in order to improve the level of external audit quality, and to enhance organizational effectiveness by implementing the corporate governance code.

##### **Audit Committee Meetings (ACMEET)**

Hypothesis **H<sub>4</sub>** suggested a significant relationship between audit committee meetings and external audit quality. This result was expected because many studies that have examined the association between audit committee meetings and external audit quality have found that this relationship exists (Anderson *et al.*, 2004; Sharma *et al.*, 2009). These results were consistent with the studies by Raghunandan *et al.* (1998) and Abbott *et al.* (2004) that claim

that the number of audit committee meetings can reduce the possibility of financial fraud. Furthermore, the study by Menon and Deahl Williams (1994) concluded that a small number of meetings and an inactive audit committee were unlikely to supervise management effectively. Additionally, a study by Lin *et al.* (2008) stated that the roles of an audit committee were critical, because audit committee members monitor auditing processes, as well as corporate financial reporting. Based on the Saudi corporate governance code, the number of audit committee meetings per year should be four times a year. In fact, audit committee members need to meet with external and internal auditors to enhance both the competence of the financial parties and the technical information that helps to solve any issues arising from financial and accounting tasks.

### **Control Variables: Results and Discussion for the Second Model (Audit Committee Survey)**

In the current study, the control variables were audit firm size, external auditors' tenure, external auditors' independence, and external auditors' competence. This section shows the findings of control variables on the model. Among all variables, only external auditor tenure (EXTENURE) was significant, whereas AUDSIZE, EXIND, and EXCOMPETE did not show any significant findings.

#### **5.6.1 Regression Analysis for Internal Auditors' Survey**

The four assumptions of ordinal regression, explained in the methodology chapter, were met. After running the ordinal regression model for the internal auditors' survey, the results are shown below.

$$\text{AQ3} = \alpha + \beta_1 \text{IACOMPE} + \beta_2 \text{EXIND} + \beta_3 \text{EXTENURE} + \beta_4 \text{AUDSIZE} + \beta_5 \text{EXCOMPET} + \varepsilon$$

##### **5.6.1.1 Testing the assumption of multicollinearity**

As illustrated in Table 5.21, all the Tolerance values were greater than 0.1 (the lowest is 0.909) and the VIF values were much less than 10, so the researcher was fairly confident that the data did not have any problem with collinearity in this particular data set.

Table 5:21 Testing the assumption of multicollinearity

Coefficients <sup>a</sup>		
Model	Collinearity Statistics	
	Tolerance	VIF
AUDSIZE	.925	1.081
EXTUNRE	.909	1.100
IACOMPAVE	.909	1.100
EXCOMPAVE	.996	1.004

a. Dependent Variable: High audit quality

### 5.6.1.2 Full likelihood ratio test

As shown in Table 5.22, this test compared the model fit (the "**-2 Log Likelihood**" column) between two different cumulative odds models. Because the differences between these models were small and not significant ( $p > .05$ ), the assumption of proportional odds was met.

The assumption of proportional odds was met, as assessed by a full likelihood ratio test comparing the fit of the proportional odds location model to a model with varying location parameters,  $\chi^2(12) = 127$ ,  $p = 1.000$ .

Table 5:22 Full likelihood ratio test

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	70.336			
General	70.209 <sup>b</sup>	.127 <sup>c</sup>	12	1.000

### 5.6.1.3 Overall goodness-of-fit coefficients

In order to assess the model fits, both the Pearson and deviance statistics are designed to provide a measure of how poorly the model fits the data. These tests should be not significant to indicate a good model fit (i.e.,  $p > .05$ ). The Pearson and Deviance tests indicated a good model fit (See table 5.23).

Table 5:23 overall goodness-of-fit coefficients

Goodness-of-Fit			
	Chi-Square	df	Sig.
Pearson	41.354	40	.411
Deviance	35.355	40	.679

Link function: Logit.

The Pearson goodness-of-fit test indicated that the model was not a good fit to the observed data,  $\chi^2 (40) = 41.354$ ,  $p = .411$ . The deviance goodness-of-fit test indicated that the model was a good fit to the observed data,  $\chi^2 (40) = 35.355$ ,  $p = .679$ .

### 5.6.1.4 Model Fitting Information

As shown in Table 5.24, in order to assess the model fit comparing the full model to the intercept-only model, the model should be significant if  $p < .05$ .

Table 5:24 Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	80.521			
Final	70.336	10.185	4	.037

Link function: Logit.

The final model significantly predicted the dependent variable over and above the intercept-only model,  $\chi^2 (4) = 10.185$ ,  $p = .037$ , which means that at least one independent variable was significant.



#### **5.6.1.5      PARAMETER ESTIMATES USING THE GENLIN PROCEDURE**

A cumulative odds ordinal logistic regression that had proportional odds was run in order to determine the effect of the competence of internal auditors on the assumption that the audit was of high quality. The proportional odds were examined by a full likelihood ratio test that compared the fitted model to a model that had varying parameters of location,  $\chi^2 (12) = .127$ ,  $p = .1000$ . The deviance goodness-of-fit test showed that the model was a good fit to the observed data,  $\chi^2 (40) = 35.355$ ,  $p = .679$ , but most of the cells were sparse, with frequencies of 0 in 76.2% of the cells. However, the last model significantly assumed the dependent variable above and over the intercept-only-model,  $\chi^2 (4) = 10.185$ ,  $p < .037$ . The odds of the four big audit firms that considered external audit quality to be high was 2.521 (95% CI, 1.022 to 6.220) compare to the four non big audit firm, an important effect  $\chi^2 (1) = 4.026$ ,  $p = .045$ . An increase in the competence of internal auditors was associated with an increase in the odds of considering high quality external audit, with an odds of ratio of 3.431 (95% CI, 1.116 to 10.547), Wald  $\chi^2 (1) = 4.631$ ,  $p < .0005$ . Table 5.25, below, presents the cumulative odds of the ordinal logistic regression for the internal audit model.

Table 5:25 Parameter Estimates for (IA) Survey

Parameter	B	Std. Error	95% Wald Confidence Interval		Hypothesis Test			Exp(B)	95% Wald Confidence Interval for Exp(B)	
			Lower	Upper	Wald Chi-Square	df	Sig.		Lower	Upper
Threshold [Ex_auditors_high=0]	-.471	.2449	-.951	.009	3.700	1	.054	.624	.386	1.009
[Ex_auditors_high=1]	2.166	.3439	1.492	2.840	39.682	1	.000	8.726	4.447	17.121
[Ex_auditors_high=2]	2.439	.3700	1.714	3.164	43.458	1	.000	11.463	5.551	23.671
[Ex_auditors_high=3]	3.994	.6289	2.762	5.227	40.339	1	.000	54.296	15.828	186.253
[AUDSIZE=0]	.925	.4608	.021	1.828	4.026	1	.045	2.521	1.022	6.220
[AUDSIZE=1]	0 <sup>a</sup>	.	.	.	.	.	.	1	.	.
[EXTUNRE=0]	-.616	.4490	-1.496	.264	1.881	1	.170	.540	.224	1.302
[EXTUNRE=1]	0 <sup>a</sup>	.	.	.	.	.	.	1	.	.
EXCOMP	-.005	.8119	-1.596	1.587	.000	1	.995	.995	.203	4.887
IACOMP	1.233	.5729	.110	2.356	4.631	1	.031	3.431	1.116	10.547
(Scale)	1 <sup>b</sup>									

Dependent Variable: High audit quality  Predicators are in bold

Model: (Threshold), IACOMPAVE, AUDSIZE, EXTUNRE, EXCOMPAVE,

#### 5.6.1.6 Findings and Discussion of the Third Model (Internal Auditor's Survey).

The third model examined the relationship between internal auditors' characteristics as independent variables with external audit quality. Hence, ordinal logistic regression on internal auditors' characteristics and external audit quality is presented in Table 5.25 above. Based on the statistical analysis shown in the same table, there were significant associations between internal auditors' characteristics (internal auditors' competence) and external audit quality.

$$AQ3 = \alpha + \beta_1 IACOMPE + \beta_2 EXIND + \beta_3 EXTENURE + \beta_4 AUDSIZE + \beta_5 EXCOMPET + \varepsilon$$

##### **Internal Auditors' Competence (IACOMPE)**

Hypothesis **H<sub>5</sub>** suggested a significant relationship between external audit quality and internal auditor's competence. As predicted, the findings showed a positive association between external audit quality and internal auditor's competence (IACOMPE). The competence of internal auditors is built through years by education and experience. The higher experience and knowledge, the better developed and effective their work (Rentsch *et al.*, 1994). This result confirmed with many studies, such as (Libby and Frederick, 1990; Tubbs, 1992; Kusharyanti, 2003; O'Leary and Stewart, 2007; Zulkifflee *et al.*, 2012; Zain *et al.*, 2015; Abbott *et al.*, 2016a; Jarrar, 2016). The study conducted by Tubbs (1992) shows that the greater the internal auditor's competence, the greater of understanding errors and the ethical attitude. Furthermore, Libby and Frederick (1990) stated that internal auditors helped to give a complete and clear picture about the financial statements, which led to the occurrence of high auditing performance.

##### **Control Variables: Results and Discussion for the Third Model (Internal Auditor's Survey)**

The control variables were the audit firm size, external auditors' tenure, external auditors' independence, and external auditors' competence. Only the Audit Size (AUDSIZE) was significant in the model. These findings were consistent with (Craswell *et al.*, 1995; Carcello and Nagy, 2004; Al-Twaijry and Elnafabi, 2008; Cahan and Jerry, 2015). Other variables (AUDSIZE, EXTENURE, EXIND, and EXCOMPET) were not significant.

## **5.7 Chapter Summary**

This chapter has reported the results of the questionnaires, reliability, principle components, correlations and logistic regression analysis of data obtained from the listed companies in SA. The purposes of the analysis were, firstly, to find the correlations and the differences between the perceptions of participants regarding external audit quality. Secondly, they were to investigate whether there was any significant relationship between the dependent variable (Audit Quality) and the exploratory variables (BOD, AC, and IA). In order to investigate these hypothesized relationships, ordinal logistic regression analysis was employed. The objective of this chapter has been to examine statistically the relationship between external audit quality and board of directors' characteristics, audit committee characteristics, and internal auditors' characteristics. The study shows that some significant statistical relationships affected external audit quality in SA that consistent with agency theory's expectations, such as internal auditors' competence, audit committee financial expertise, audit committee meetings, audit size, external auditors' tenure, external auditors' competence, and board of directors' independence.

In respect of external auditors, the audit practice in SA has experienced difficulties, because of the auditors' lack of competence and the length of tenure of the audit, which affects external audit quality. In respect of audit committees and boards of directors, there was lack of knowledge and awareness of each members' responsibilities and a lack of independence. Additionally, corporate governance mechanisms in SA suffered from non-implementation of the regulations and a lack of control by regulators.

## **Chapter 6: ANALYSIS OF QUESTIONNAIRE SURVEYS AND THE RESULTS OF SEMI-STRUCTURE INTERVIEWS**

### **6.1 Introduction**

The objective of this chapter is to analyse and integrate the results of the interview and questionnaire findings. The interviews covered the same issues as were covered in the survey questionnaires. Therefore, the chapter is structured as follows. As mentioned previously, the primary purpose of this study was to find solutions that can be undertaken to enhance external audit quality in SA. In addition, this study sought to investigate the effects of external auditors' characteristics, boards of directors' characteristics, audit committee characteristics, and internal auditors' characteristics on external audit quality in listed companies in SA.

External auditors and regulators are a cornerstone of auditing in SA, so interviewing external auditors and regulators helped to gain a deeper understanding of the audit practice in SA and the factors which most effected external audit quality, while boards of directors, audit committees, and internal auditors also played a vital role in external audit quality in the Saudi listed companies.

Section 6.2 outlines the descriptive analysis of the characteristics of the interview respondents and the questionnaire participants. Section 6.3 discusses the interview results and the questionnaire findings, and shows the integration between them in relation to the factors affecting external audit quality: the effects of external auditors, internal auditors, audit committees, and the boards of directors on external audit quality. Furthermore, some recommendations about how external audit quality can be improved are discussed. Finally, Section 6.4 is a summary of the interview results and questionnaire findings.

## 6.2 Descriptive statistics of the respondents

### 6.2.1 Descriptive Statistics of the participants' demographic information (questionnaires)

The questionnaire was distributed to 600 participants in Saudi listed firms, which included the board of director members, audit committee members, and internal auditors. The respondents' background was of great importance to the survey, in order to provide additional information to aid in the interpretation of the findings. However, the education, experience and educational background of the respondents in the questionnaire survey are the major focus of discussion in this chapter, in order to explain their background. This table 6.1 shows the level of the three selected sample groups' last experience, educational degree and majors. Table 6.1, below, shows the response rate for each group. The total response rate was 44.83%, which was considered to be an acceptable level (Shih and Fan, 2009; Sulaiman, 2011). Only 259 of the 269 returned questionnaires were used and analysed, due to the fact that 10 of the questionnaires were unusable. The group with the highest percentage return was the internal auditors, at 31.67% of the completed questionnaires. The reason for the low percentage return rate from other groups was the difficulty that occurred in meeting the boards of directors (44.44%).

Table 6:1 The Distribution of Respondents of Questionnaires for all groups

Descriptions	Total Survey Sent	Total Received	Response Rate	Total Usable
Board of Directors	180	80	44.44	77
AC Members	180	113	62.78	73
Internal Auditors	240	76	31.67	109
<b>Total</b>	<b>600</b>	<b>269</b>	<b>44.83</b>	<b>259</b>

Source: constructed by researcher

In relation to education, a respondent's qualifications was an important indicator of the respondent's background. Hence, Table 6.2 , shows that more than half of the board of directors members had a Bachelor degree (53%), while 10% (or 8 out of 77) of the respondents in this group held a PhD degree, and 12 out of 77 (16%) of the respondents in this group had Degrees other than a Bachelor, Masters or PhD. It was noted that 21% (or 16

out of 77) of the respondents in this group held a Master's degree. The table also shows that 66% (or 48 out of 73) of the Audit Committee members that responded to the questionnaire held a Bachelor degree. While none of the members of this group held other degrees apart from a Bachelor, Masters or a PhD, only 11% actually held a PhD (or 8 out of 73), and 23% (or 17 out of 73) held a Master's degree. However, none of the Internal Auditors had a PhD, with just 4% (or 4 out of 109) having other degrees; the majority of the Internal Auditors were Bachelor degree holders, with 29% (or 32 out of 109) having a Master's degree. 162 respondents had obtained a Bachelor degree, 16 respondents had a PhD and 16 respondents had another qualification (such as: Master, Bachelor, or below Bachelor degree). Overall, more than 95% of the respondents had completed a Bachelor degree, or a higher level of education.

This result is of concern, because the education of the board of directors is important, and could affect the effectiveness of corporate governance in SA(Al-Matari *et al.*, 2012b). Moreover, it helps board of director members to be familiar with company functions, such as operations, and also helps to keep directors up to date with any matters relevant to their positions, such as legal or regulatory matters. Education is also important for audit committee members and internal auditors, as it helps to improve compliance with regulatory requirements, the understanding of financial reporting, and their responsibilities.

In Table 6.2, below, the Experience section shows that most of the respondents in the BOD group had more than 20 years of experience , with 47% (or 36 out of 77) of respondents in this category, while only one person had less than 5 years' experience, (2% of the board of directors members who responded). Meanwhile, 27% (21 out of 77) of the respondents had between 15 to 20 years of experience, while 5%, and 19%, of the BOD members who responded had between 5 to 10, and 10 to 15, years of experience, respectively. However, none of the AC members had less than 5 years of experience, while more than half (56%) of the AC members who responded had more than 20 years of experience, and 31% (or 23 out of 73) had from 15 to 20 years of experience, while 2%, and 11%, of the respondents had from 5 to 10, and 10 to 15, years of experience, respectively. Furthermore, it was observed that many of the Internal auditors respondents' had from 5 to 10 years of experience, making up 38% (or 41 out of 109) of the respondents, just ahead of which were IA respondents' who had less than 5 years' experience, making up 39% (or 42 out of 109) of the respondents. It was noted that very few of the internal auditors who responded had more than 20 years' experience, making up just 5%, while those with experience from 15 to 20 year were only

slightly above those with more than 20 year experience, making up only 8% of the respondents, while those with from 10 to 15 years were only 10 out of 109 (or 9 % of the respondents).

In general, 32% (83 out of 259) of the respondents had more than 20 years of experience, while 13% (or 34 of the respondents) of the 259 respondents had from 10 to 15 years of experience. Also, 16%, and 18%, of the 259 respondents had less than 5 years of experience, and from 5 to 10 years of experience, respectively, while those with years of experience ranging from 15 to 20 years made up 21% of the 259 respondents.

Table 6:2 The respondents' profile

<i><b>Education ( Degree)</b></i>	<i><b>Board of Directors</b></i>		<i><b>AC Members</b></i>		<i><b>Internal Auditors</b></i>		<i><b>Total</b></i>	
	<b>Freq</b>	<b>%</b>	<b>Freq</b>	<b>%</b>	<b>Freq</b>	<b>%</b>	<b>Freq</b>	<b>%</b>
Bachelors	41	53	48	66	73	67	<b>162</b>	<b>62.54</b>
Masters	16	21	17	23	32	29	<b>65</b>	<b>25.09</b>
PhD	8	11	8	11	0	0	<b>16</b>	<b>6.17</b>
Other (Below Bachelor)	12	15	0	0	4	4	<b>16</b>	<b>6.17</b>
<b>Total</b>	<b>77</b>	<b>100</b>	<b>73</b>	<b>100</b>	<b>109</b>	<b>100</b>	<b>259</b>	<b>100</b>
<i><b>Experience</b></i>	<i><b>Board of Directors</b></i>		<i><b>AC Members</b></i>		<i><b>Internal Auditors</b></i>		<i><b>Total</b></i>	
	<b>Freq</b>	<b>%</b>	<b>Freq</b>	<b>%</b>	<b>Freq</b>	<b>%</b>	<b>Freq</b>	<b>%</b>
Less than 5 years	1	2	0	0	41	38	<b>42</b>	<b>16.21</b>
From 5-10 years	4	5	1	2	42	39	<b>47</b>	<b>18.14</b>
From 10-15 years	15	19	8	11	11	10	<b>34</b>	<b>13.12</b>
From 15-20 years	21	27	23	31	9	8	<b>53</b>	<b>20.46</b>
More than 20 years	36	47	41	56	6	5	<b>83</b>	<b>32.04</b>
<b>Total</b>	<b>77</b>	<b>100</b>	<b>73</b>	<b>100</b>	<b>109</b>	<b>100</b>	<b>259</b>	<b>100</b>

Source: constructed by researcher

Table 6.3, below, shows that 40% (or 30 out of 73) of the AC respondents held an Accounting degree, which means that a larger percentage of the Audit committee held a



degree in Accounting, while 12 % (or 9 out of 73) respondents held a Finance degree. An Engineering degree 24% (18 out of 73) was the second highest percentage of the other degrees. Other participants held Economics, Marketing, and Management at, respectively, 5 %, 6.7, and 9.3. The high percentage of audit committee members with an Accounting degree indicates that those members might benefit the company through their knowledge of Accounting. In fact, their roles in a company require in-depth Accounting and Finance knowledge, in order to develop compliance with the regulatory requirements and to understand financial reporting (SOX, 2002).

Table 6:3 Audit Committee Member respondents

<i>Major</i>	<i>Frequency and percentages</i>	
Accounting	30	40.0
Finance	9	12.0
Economics	4	5.3
Marketing	5	6.7
Management	7	9.3
Other (Engineering)	18	24.0
<b>Total</b>	<b>73</b>	<b>100</b>

Source: constructed by researcher

Table 6.4, below, shows that 48% (or 35 out of 73) of the AC respondents had professional certificates, while 52% (or 38 out of 73) of respondents did not have a professional certificate, which means that a larger percentage of the audit committee lacked a professional qualification in Auditing. Also, the table shows that the majority of the respondents, 93% (or 68 out of 73), had previous experience in Finance and Accounting, while only 7% did not have previous experience in Finance and Accounting. This implied that the large number of AC Members who had previous experience would understand very well the questions related to the role of AC and give appropriate answers to them, which would thus lead to a reliable inference. Moreover, AC Members who had had previous experience would be more knowledgeable in auditing matters.

Since the current research was mainly related to auditing and corporate governance, it was important to know whether the AC respondents had professional qualifications and also to know whether they had had previous experience in Finance and/or Accounting.

Table 6:4 Audit Committees' Professional Education and Certifications

AC Members		Yes	No	Total
Professional Certificates	Freq	35	38	73
	%	48	52	100
Experience in Finance or Accounting	Freq	68	5	73
	%	93	7	100

Source: constructed by researcher

To summarise, the frequency test of the participants clearly shows that they were highly experienced and educated participants, who could make an important contribution to the study by sharing their perceptions, and opinions regarding external audit quality in SA. Moreover, according to Saudi code, it is important that a company have at least one member on the audit committee who has an educational and career background in Accounting and/or Finance and have experience in these two fields. The information gathered in section helped to answer the question related to audit committee expertise and helped with the interpretation in general.

### 6.2.1 Descriptive Statistics of respondents' information (Semi-structure interview)

A series of semi-structured open-ended interviews were conducted with 19 external auditors and the General Secretary of the Saudi Organization for Certified Public Accountants (SOCPA). The interview sample was taken from Big4 and non-Big4 audit firms in SA.

The interviews started by asking the external auditors and the regulator to express their opinions on the most important factors effecting external audit quality in SA. Then the researcher asked them to talk about their perceptions of their roles and responsibilities when auditing and how these affected external audit quality. The second groups of questions addressed the external auditors' opinions about the boards of directors' role in the audit and which board characteristics affected external audit quality. The third and fourth groups of questions were asked to show the external auditors' opinions about the roles of the internal auditors and the audit committee and their effects on external audit quality. The last group of questions was about the regulators and their effects on, and efforts towards, enhancing external audit quality for the listed companies in SA (see Appendix A for the interview questions for both groups).

The interviews were held in Saudi audit firms (Big4- Non-Big4), each interview lasting approximately 60 to 90 minutes. Table 6.5, below, shows the professional certificate, academic qualification, years of experience, and the size of the company.

Table 6:5 Profile of Interviews

Position	Academic Qualification	Professional Qualification	Years of Experience	Size of the Company
External Auditor (Senior Auditor )	Bachelor	ACCA	5 Years	Non- Big4
External Auditor (Senior Auditor )	Bachelor	No	3 Years	Non- Big4
External Auditor (Partner)	Bachelor	SOCPA	30 Years	Non Big4
External Auditor (Audit Manager)	Bachelor	NO	16 Years	Non- Big4
External Auditor (Partner)	Master	SOCPA	29 Years	Non- Big4
External Auditor (Senior Audit)	Bachelor	No	2 Years	Big 4
External Auditor (Audit Manager)	Bachelor	ACCA- CMA	8 Years	Non- Big4
External Auditor (Senior Auditor)	Bachelor	No	6 Years	Big 4
External Auditor (Audit Manager)	Bachelor	CA	37 Years	Non- Big4
External Auditor (Senior Auditor)	Bachelor	No	6 Years	Non- Big4
External Auditor (Audit Manager)	Bachelor	ACPA	12 Years	Non- Big4
External Auditor (Senior Auditor)	Bachelor	No	1 Year	Non- Big4
External Auditor (Partner)	Master	SOCPA- CPA	25 Years	Big 4
External Auditor (Senior Auditor)	Bachelor	ACPA	18 Years	Non- Big4
External Auditor (Audit Manager)	Bachelor	CPA	12 Years	Big4
External Auditor (Senior Audit)	Bachelor	SOCPA	2 Years	Big 4
External Auditor (Partner)	Bachelor	SOCPA-CMA-CFE	20 Years	Non- Big4
External Auditor ( Senior Audit)	Master	CPA	14 Years	Big 4
External Auditor (Partner)	Bachelor	SOCPA - ACCA	20 Years	Big 4
The General Secretary of Saudi Organization for Certified Public Accountants	PhD	No	25 Years	—

Source: constructed by researcher

### **6.3 External Audit Quality and Agency Theory**

Based on agency theory, it appears that the issue of external audit quality is related to the separation between ownership and management (Jensen and Meckling, 1976). The relationship arises when one or more owners engage external auditors to perform an audit service on their behalf. The quality of performance of the audit service might cause the owner to question the trust that they place in external auditors. According to agency theory, the external auditor is a monitoring mechanism in a firm to provide reasonable assurance about the financial information and report any misleading data. However, sometimes the external auditors are the reason for losing trust in audit engagement. In order to solve the agency problem, management should use higher levels of governance mechanisms, and increase external audit quality (Cohen *et al.*, 2004). By providing evidence from a developing country, SA, this study contributes to the previous research on factors affecting external audit quality.

#### **6.3.1 Factors Affecting External Audit Quality**

From the coding system discussed in Chapter Four, there Five main themes were extracted, including factors related to external auditors, boards of directors, audit committees, internal auditors, and regulations (see Figure 6.1, below).

The analysis of the interview data showed that the interviewees placed most emphasis on factors related to external auditors, including lack of training, lack of expertise and specialization, and the lack of independence happened when external auditors are preparing financial statements, or performing non- audit services. The findings related to internal auditors are; the lack of independence caused by pressure from management, and the difficulty of segregating their duties. Moreover, the participants emphasised the internal auditors' lack of education and experience. The findings related to audit committee members presented two main themes: the lack of awareness about their roles and responsibilities, and their lack of financial expertise. For the findings related to boards of directors, the focus was more on the requests from boards of directors' members to prepare financial statements quickly, the relationship between external auditors and board members, and the negligence of boards of directors to attend frequent meetings. The last factor is related to regulations

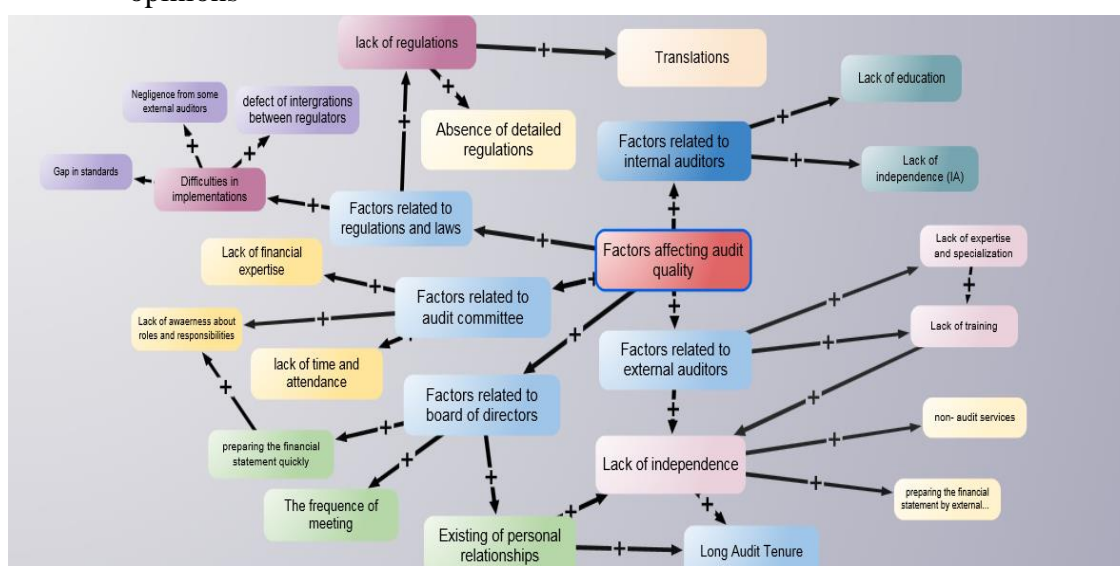
and laws. Regarding this factor, the interviewees focused more on the lack of regulations, due to the translation of international standards and laws, and the difficulties in implementing regulations because of the gap in standards, the negligence of some external auditors, and the defects in the integration between regulators.

As mentioned by the interviewees, there was some integration of the codes and themes, which may influence both groups. For instance, the existence of a relationship between boards of directors and external auditors can impair the independence of external auditors. Another example is that external auditors' lack of experience and training can lead to a lack of independence. For example, based on the interviewees' opinions, an external auditor with insufficient education and experience would not be able to distinguish or determine the factors that may influence his or her independence.

As discussed in Chapter Four, a mixed-methods approach was used in this study, based on a convergent parallel design. Both questionnaires and interviews were collected in the same time, and then the researcher compared and contrasted the results of the quantitative data from the survey questionnaires to provide richer insights into external audit quality in SA.

Figure 6.1, below, shows the relationships among the themes and codes extracted by using a thematic analysis approach, which has been explained in more detail in the methodology chapter (Chapter Four). Each section below explains in detail the codes and themes related to each of the factors extracted from the interviews.

Figure 6-1 The factors affecting external audit quality, based on the interviewees' opinions

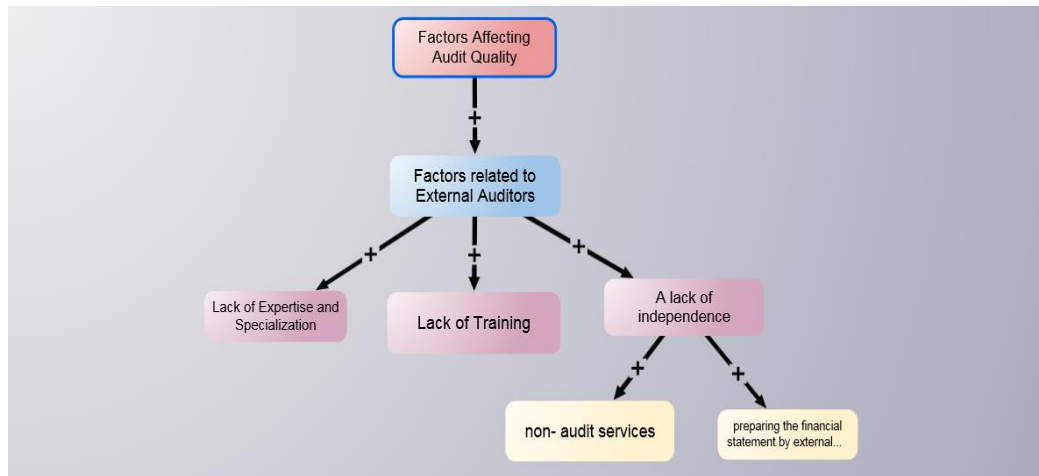


Source: constructed by researcher

### 6.3.1.1 Factors related to External Auditors

This section answers the first research question, which investigated the effect of external audit on external audit quality for the listed companies in SA, namely, *What are the factors affecting external audit quality in Saudi listed firms?* Figure 6.2, below, is a part of Figure 6.1, above.

Figure 6-2 explains the codes and themes related only to external auditors.



Source: constructed by researcher

As discussed in the external audit quality literature review, the external auditor plays a serious role in corporate scandals (Agrawal and Chadha, 2005; HosseinniaKani, 2014). In this regard, poor external audit quality is considered to be the major reason for corporate scandals. In this study, the findings showed that some external auditors had not played a serious role in validating company financial statements. Investors, lenders, regulators and other beneficiaries require audited financial statements before dealing with a company. If they discover that the external auditors have failed to detect material misstatements, they lose trust in them, and this will reflect poorly on the firm and the profession in general.

The interviewees focused on three factors that related to external auditors: the lack of independence, lack of training, and lack of expertise and specialization. All these factors influenced the quality of the audit; however, the interviewees placed most emphasis on the lack of independence of external auditors. An auditor might lose his independence in several ways, which lowered the credibility and assurance of an external audit. Auditors frequently faced many challenges that affected their independence, such as being paid, hired, or fired by the firm. Because of this, boards of directors in some Saudi listed companies applied pressure on external auditors and forced them to prepare the financial statements themselves.

Highlighting the lack of independence, an interviewee stated that:

***“There are illegal breaches in some Saudi listed companies. However, the last year witnessed a rapid improvement and development in the field of auditing, due to the new companies law and control of Saudi Organization for Certified Public Accountants (SOCPA). The problem may be that big auditing firms make some breaches and manipulations in the financial statements. Unfortunately, some clients select such big 4 audit which are sometimes less performance than many local offices. I observed that audit quality in some big 4 offices is low and the auditing procedures are not sufficient” (Interviewee 2).***

An external auditor in one of the big 4-audit firm in SA noted:

***“Board of directors’ knowledge helps the management to understand its functions, such as assuring the integrity of financial statements before the external auditor starts auditing. However, we find some listed companies that cannot prepare their financial statements by themselves due to a lack of management to understanding its roles and responsibility, and the poor efficiency of accountants and internal auditors” (Interviewee 16).***

On the other hand, building a relationship with the board of directors, or owners, might be the reason for impaired independence. All these factors might affect external auditors’ judgment of the financial statements and affect the external audit quality in general. Another external auditor stated:

***“Sometimes there is some pressures by the company's board of directors as there is relationship exist. The external auditor may require banking conformations on certain accounts but the board of directors does not give them to the auditor unless after writing the report, which affects the reliability of the audit report” (Interviewee 2).***

However, one of external auditor expressed a different perspective, and said:



***“We are not allow to audit if there is independence issue”***  
**(Interviewee 8).**

In this study, the respondents further highlighted that some external auditors provided non-audit services, such as consultations for the same firms that they audited, although they knew that it was prohibited by the Saudi Corporate Governance Code to do these kinds of services for the same firms that they audited. However, the general feeling among the interviewees was that non-audit services impaired external audit quality. An external auditor from one of the big 4-audit firm in SA stated:

***“Non-audit services were being provided by external auditor impaired auditor’s independence because it may influence the auditor’s opinion in financial statements”*** (Interviewee 13).

Conversely, a minority of the interviewees believed that non- audit services would not lead to any reduction in the external audit quality, and felt that they would definitely enhance it. They provided these services to clients, and considered them to be a good thing:

***“As a partner in audit office, we offer an audit consultation and review for the client. Non-audit services always provided by a qualified and professional auditor. It aims to correct client’s financial statements. It is supposed that such consultancy does not affect auditor’s opinion in the financial statements. The service is provided by auditing offices as a competitive service to clients before starting the audit. It has become a habit in Saudi, and is considered to be a tool to improve auditing practice in the future”*** (Interviewee 3).

For the questionnaires participants’ perspectives, A Kendall's tau-b correlation test was run to determine the relationship between external Audit Quality (AQ) and External auditors’ Independence (EXIND) among the 77 participants in the BOD survey (See Table 6.6). There was a weak, positive association between high external audit quality and external auditors’ independence, which was not significant, at  $\tau_b = 0.31$ ,  $p = .767$ . Therefore, there was none significant association between high external audit quality and external auditors’ independence.

To determine the relationship between external Audit Quality (AQ) and External auditors’ Independence (EXIND) among the 73 participants in the AC survey, a Kendall's tau-b

correlation was run (See Table 6.7). There was a weak positive association between external Audit Quality (AQ) and External Auditor's Independence (EXIND) among the 73 participants in the AC survey, which was none significant, at  $\tau_b = .144$ ,  $p = .164$ . Therefore, there was none significant association between high external audit quality and external auditors' independence.

The results of the interviews for both groups (BOD, and AC) contradicted the results of the questionnaires. The results of the interviews were consistent with many previous studies, such as (Allehaidan, 2012; Abdul Halim *et al.*, 2014; Octavia and Widodo, 2015; Sulanjaku and Shingjergji, 2015). However, the questionnaires findings, supported by Savanstrom (2013) and Francis (2004), indicated that the level of non-audit service could affect external audit quality and impaired, but it depended on the level of non-audit services provided (Francis, 2004; Savanstrom, 2013).

Another test, the Mann-Whitney U, (See Table 6.8) was run to determine whether there were differences in the External Auditor's Independence score between the two groups of participants (BOD, AC), using the different scale levels: "strongly disagree", "disagree", "neutral", "agree", and "strongly agree". Distributions of the external auditor's independence scores were not similar for all groups, as illustrated in the table (See page 192). There was a significant difference in the External Auditors' Independence between the BOD and AC groups,  $U = 36$ ,  $p = .000$ , using an exact sampling distribution for U. Engagement scores for BOD (mean rank = 111.53) were significantly higher than for AC (mean rank = 37.49),  $U = 36$ ,  $z = -10.541$ ,  $p = .000$  (Dineen and Blakesley, 1973). In summary, the results indicated that the boards of directors agreed that external auditors were independent, and that they were not exposed to any influence by management when conducting an audit. There were no personal relationships between clients and external auditors. Moreover, the role of the audit committee was effective, especially their role in appointing and/or removing external auditors, enhancing the independence of external auditors, and solving any disputes between external auditors, all of which led to more independence. It is a role of an audit committee to ensure that the external auditor is independent, and that there is no conflict of interest that would weaken the external auditor's ability to issue his opinion about the organization's financial statements and financial position (Turley and Zaman, 2004). These results were supported by (Turley and Zaman, 2004; Khalil and Ozkan, 2016). One of the main problems leading to audit failure and scandal is the lack of independence of external auditors (Church *et al.*, 2015).

With regards to the external audit quality provided in Saudi listed firms, a Kruskal-Wallis H Test was run to determine the differences in the perceptions of the three groups about the external audit quality service. The different scales for the external Audit Quality score given to the three groups of participants were; "strongly disagree", "disagree", "neutral ", "agree", and "strongly agree" (See Table 6.9). Distributions of the external Audit Quality scores were not similar for all groups, which meant that there were significant differences in the three groups with regards to the statement: "The external auditor engaged by your company in recent audit assignments achieved high external audit quality". The overall mean in the Audit Committee group was 3.00, which was the highest of all the groups, as shown in Table 6.9 (See page 193). The majority (79%) of the audit committee group (AC) strongly agreed, or agreed, that the external auditor engaged by their company in recent audit assignments had achieved high external audit quality, while BOD and IA showed low levels of agreement with the statement, at 55.9%, and 68.3%, respectively, compared to AC.

Table 6:6 The Kendall's Tau-B Correlation Representing the Associations between external Audit Quality and External Auditor Independence (BOD Survey

Non- Parametric Correlations- Kendall's tau-b Test				
			High Audit Quality	EXTERNAL AUDITORS 'INDEPENDENCE
Kendall's tau_b	High Audit Quality	Correlation Coefficient		.031
		Sig. (2-tailed)	.	.767
		N	77	77
	External AUDITORS' INDEPENDENCE	Correlation Coefficient	.031	1.000
		Sig. (2-tailed)	.767	.
		N	77	77

Table 6:7 The Kendall's Tau-B Correlation Representing the Associations between external Audit Quality and External Auditor Independence (AC Survey)

**Non- Parametric Correlations- Kendall's tau-b Test**

			High Audit Quality	EXIND
Kendall's tau_b	<b>High Audit Quality</b>	Correlation Coefficient	.164	.144
		Sig. (2-tailed)	.	.248
		N	73	73
	<b>EXIND</b>	Correlation Coefficient	.144	.164
		Sig. (2-tailed)	.248	.
		N	73	73

Table 6:8 Non- Parametric Test Mann- Whitney U Test for External Auditors' Independence

Grouping variables		Mean	N	Mann-Whitney Test p-value
BOD	1-The AC reviews and monitors the independence and effectiveness of the external auditing process.  2-The external auditor is not exposed to any effects by management when conducting the audit.	111.53	77	There is significant difference between board of directors and audit committee.
AC	3-External auditors are appointed and/or removed upon the recommendation of the AC.  4-The Audit Committee resolve any dispute between the external auditor and board of directors.  5-The AC enhances the independence of the external auditors of the company.  6-There are no personal relationships or prior knowledge between the client and audit team members.	37.49	73	
*p < 0.05    **p <0.01    p**** <0.001				

Table 6:9 Non- Parametric Test Kruskal-Wallis for external Audit Quality

Grouping variables	Items	Mean	Number of Sample	Kruskal-Wallis test p-value
BOD	1-The external auditor engaged by your company in recent audit assignments achieved high audit quality.	1.00	77	***
AC		3.00	73	***
IA		1.00	109	***
<b>*p &lt; 0.05    **p &lt;0.01    p*** &lt;0.001</b> (Strongly Disagree", "Disagree", " Neutral ", "Agree", And “Strongly Agree)				

Secondly, lack of training was considered to be one of the major problems among the majority of the external auditors. Some previous violations had related back to lack of training. When employees have been trained well, their contribution to the success of a company will increase and the company will benefit from this training. A partner of an audit firm stated:

***“Definitely, staff have to be trained continuously. There are new standards released, new information been provided, the audit tool we used is updated frequently, so staff need to get training to be coping with changes in industry and markets and so on” (Interviewee 5).***

Another external auditor gave his opinion of what being a qualified auditor meant, and indicated that:

***“The true meaning of training and qualifying is not limited to just certificates, but it extends to how to measure auditor's ability to be an expert and independent in his field to express his opinion in all trustfulness and transparency in order to gain beneficiaries' trust. When such conditions are fulfilled, I think this trust shall lead to increase auditing quality (Interviewee 8).***

Another external auditor remarked:

***“Training and getting Accounting fellowships are so important for public auditor, owing to facilitating auditing and reducing mistakes as well as creating a kind of respect and trust” (Interviewee 4).***

As stated by the interviewees, the training providing by the Saudi Organization for Certified Public Accountants was not enough and the materials for the courses had not been updated and were useless. Furthermore, sometimes the external auditors felt that they had more knowledge than the trainers did in some auditing areas. An external auditor from one of the big 4-audit firms in SA stated:



***“Before 4 years ago, subjects of SOCPA are old but recently a slight difference began to appear. Being a partner of the auditing office, we noticed the high cost of courses despite being useless with regard to content. Sometime the courses' providers are professors at universities and we feel his knowledge is not enough in some area because he does not have practical experience. The last two years witnessed large developments and great efforts compare with the previous years” (Interviewee 16).***

Some of the participants answered that the reason for not participating in an SOCPA course was the high cost of the fees. Most of the participants agreed that:

***“Materials are available by the high cost led some external auditors not to participate in the courses. In addition, many courses' subjects are repeated and not updated” (Interviewee 2).***

A female external auditor stated that:

***“Big auditing companies provide training programs for their staff and care about their development not waiting Saudi Organization for Certified Public Accountants programs. I face shortage of training being a woman. Some audit managers margin my auditing abilities and assign easy tasks to me, although I am licensed from SCOPA to practice profession, while some other colleagues do not have such license. This makes me feel disappointed” (Interviewee 2).***

External audit quality and the accuracy of error detection was increased by the auditor's knowledge of a specific industry. The majority of this study's respondents were concerned about the lack of expertise and specialization in the Saudi listed companies. An external auditor mentioned that:

***“Before ten years, we did not need specialized external auditors. Currently, with the increase and complication of auditing operations, it has become essential to have external auditors having experience in a specific industry in order to help increase auditing quality and understand the complicated operations such as insurance industry, which is new in Kingdom of Saudi Arabia” (Interviewee 13).***

The need to have a specialized external auditor had increased, due to the complicated transactions in some industries in SA. However, as some external auditors stated, some industries did not need specialized auditors, for example:

***“I think that presence of a specialized external auditor is very important because auditing differs from a company to another according to activity type. For example, auditing in private schools are easier than giant joint venture companies, oil sectors, or industrial sectors” (Interviewee 18).***

A Kendall's tau-b correlation was run to determine the relationship between external Audit Quality (AQ) and External Auditors' Competence (EXCOM) amongst 77 participants in the BOD survey (See Table 6.10). From the questionnaires the researcher found that there was a weak, positive association between high external audit quality and external auditors' competence, which was significant, at  $\tau_b = .338$ ,  $p = .001$ . Therefore, there was a significant association between high external Audit Quality and External Auditors' Competence. These results from the questionnaires supported the interviewees' perceptions regarding the effect of external auditors' competence on external audit quality and supported the concept that external auditor's competence is a very important factor affecting external audit quality. Moreover, both results were consistent with prior studies, such as (Lee and Stone, 1995; Arruñada, 2000; Al-Twaijry and Elnafabi, 2008; Al-Khaddash *et al.*, 2013; Octavia and Widodo, 2015; Osée, 2016).

Another Kendall's tau-b Test correlation was run to determine the relationship between external Audit Quality (AQ) and External Auditors' Competence (EXCOM) among the 109 participants in the IA survey (See Table 6.11). There was a strong, positive association between high external Audit Quality and External Auditors' Competence, which was not significant, at  $\tau_b = .059$ ,  $p = .539$ . Therefore, there was not significant association between high external audit quality and external auditors' competence according to internal auditors' perceptions, which not supported the interviewees' opinions regarding the effect of external auditors' competence on external audit quality. The findings of the interviews was consistent with such studies as (Al-Twaijry and Elnafabi, 2008; Al-Khaddash *et al.*, 2013; Octavia and Widodo, 2015; Sulanjaku and Shingjergji, 2015).

Other Kendall's tau-b correlation Test was run to determine the relationship between external Audit Quality (AQ) and External auditors' competence (EXCOM) among the 77 participants in the AC survey (See Table 6.11). There was a strong, negative association between high external Audit Quality and External Auditors' Competence, which was not significant, at  $\tau_b$

=- .067,  $p = .550$ . Therefore, there was a non-significant association between high external audit quality and external auditors' competence according to audit Committee's perceptions, which contradicted the board of directors, and the internal auditors' survey and the interviewee opinions regarding the effect of external auditors' competence on external audit quality. The results from the interviews, BOD and IA questionnaires confirmed that external audit quality was affected by external auditor's competence (Al-Twajjry and Elnafabi, 2008; Al-Khaddash *et al.*, 2013). However, the audit committees' questionnaires were consistent with some previous studies that did not find any relationship between external audit quality and external auditor's competence, such as (Augustine *et al.*, 2014; James and Izien, 2014; Xiaoke W. *et al.*, 2015).

A Kruskal-Wallis H test was run to determine whether there were differences in the three groups of participants regarding external auditors' competence, using the different scale levels: "strongly disagree", "disagree", "neutral ", "agree", and "strongly agree" (See Table 6.13). The scores for external auditors' competence showed that there were significant differences among the BOD, AC, and IA, with regard to the statements: "The external auditor with professional experience is able to plan, audit and evaluate the ability of the entity to continue its activity", "The majority of audit team members have professional qualifications", and "The audit team members have experience in the industry of the client".

Table 6:10 Kendall's Tau-B Test Correlations Representing the Associations between External Audit Quality and External Auditors Competence (BOD Survey)

**Non- Parametric Correlations - Kendall's tau-b**

			High audit quality	EXTERNAL AUDITORS' COMPETENCE
KENDALL'S TAU_B	HIGH AUDIT QUALITY	Correlation Coefficient	1.000	.338**
		Sig. (2-tailed)	.	.001
		N	77	77
	EXTERNAL AUDITORS' COMPETENCE	Correlation Coefficient	.338**	1.000
		Sig. (2-tailed)	.001	.
		N	77	77

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 6:11 Kendall's Tau-B Test Correlations Representing the Associations between External Audit Quality and External Auditors Competence (AC Survey)

**Non- Parametric Correlations- - Kendall's tau-b**

			High Audit Quality	EXCOMPETE
Kendall's tau_b	High Audit Quality	Correlation Coefficient	1.000	.059*
		Sig. (2-tailed)	.	.539
		N	109	109
	EXCOMPETE	Correlation Coefficient	.059	1.000
		Sig. (2-tailed)	.539	.
		N	109	109

Table 6:12 Kendall's tau-b test correlations representing the associations between audit quality and external auditors' competence (IA Survey)

Grouping variables	Items	Mean	Number of Sample	Kruskal-Wallis test p-value
BOD	1-The external auditor with professional experience is able to plan, audit and evaluate the ability of the entity to continue its activity.  2-The majority of audit team members have professional qualifications.  3-The audit team members have experience in the industry of the client.	8.00	77	***
AC		6.00	73	***
IA		2.00	109	***
*p < 0.05    **p <0.01    p*** <0.001  (Strongly Disagree", "Disagree", " Neutral ", "Agree”, And “Strongly Agree)				

Table 6:13 Non- Parametric Test Kruskal-Wallis for External Auditors' Competence

**Non- Parametric Correlations- - Kendall's tau-b**

			High Audit Quality	EXCOMP
Kendall's tau_b	High Audit Quality	Correlation Coefficient	1.000	-.067
		Sig. (2-tailed)	.	.550
		N	73	73
	EXCOMP	Correlation Coefficient	-.067	1.000
		Sig. (2-tailed)	.550	.
		N	73	73

Table 6:14 Non- Parametric Test Kruskal-Wallis for External Auditors' Competence

Grouping variables	Items	Mean	Number of Sample	Kruskal-Wallis test p-value
BOD	1-The external auditor with professional experience is able to plan, audit and evaluate the ability of the entity to continue its activity. 2-The majority of audit team members have professional qualifications. 3-The audit team members have experience in the industry of the client.	8.00	77	***
AC		6.00	73	***
IA		2.00	109	***
*p < 0.05    **p <0.01    p*** <0.001 (Strongly Disagree", "Disagree", " Neutral ", "Agree”, And “Strongly Agree)				



Another external auditor added:

***“I noticed in some listed companies, the internal auditors are not trained or qualified well. When we begin the engagements, we were surprised that there were no financial statements prepared, which force us to prepare financial statements by ourselves and then audit them, which consider a common practice. I know it is a big mistake and it is difficult to confess, that as we follow the steps of old certified public accountants”***  
(Interviewee 3).

The General Secretary of Saudi Organization for Certified Public Accountants explained:

***“The financial statements submitted last year reached 23000. Certified public accountants reviewed 15400 only while 7600 statements were not reviewed. The only way to eliminate the forgery financial statements can be done when organizations stop issuing paper financial statements”***  
(Interviewee 20).

This indicated that some accountants in the Saudi listed firms were not qualified, and that they did not have a minimum requirement to prepare the financial statement by themselves. In fact, it is the job a firm’s accountants to prepare the financial statements, not the external auditor. The external auditor is not there to fix problems, but he/she there to provides reasonable assurance that the financial statements are audited according to auditing standards and are free from any material misstatements (ISA, 2009b).

According to the interviewees, some external auditors in SA had made other violations of rules and regulations, when they signed off more than one financial statement for the same company. Emphasizing the falsified financial statements, an external auditor in one of the big 4-audit firm in SA remarked:

***“As external auditor, we faced many problems in auditing due to our work nature. Some certified public accountants certify three financial***

*statements to be provided to Ministry of Commerce, Zakat<sup>19</sup> Agency, and the third to banks to facilitate getting loans. However, this year, the financial statements program prepared by Ministry of Commerce reduced such transgressions, as there is only one financial statement that must be submitted to Ministry of Commerce website by the company or the auditor electronically” (Interviewee 8).*

One participant indicated that one of the reasons for manipulation of the financial statements was the Zakat. He stated that:

*“We have seen a few cases of listed companies manipulating the amount of Zakat. Usually tolerance in the financial statements includes the change of Zakat duty legally to avoid being in trouble with regulators” (Interviewee 1).*

Similarly, an external auditor added:

*“Mostly, errors or misleading in the financial statements are discovered too late, i.e. after the bankruptcy of the company or complaint from of the shareholders. This is due to absence of experts watching companies' performance in general as well as unavailability of sufficient control from the concerned bodies” (Interviewee 15).*

Furthermore, the General Secretary of Saudi Organization for Certified Public Accountants mentioned:

*“There are three types of fraud: an external works in an audit firm, cooperates with them, and asks only for stamping the financial statements, an external auditor who take advantage of the office paper and stamps to certify the financial statements and the third type is falsifying the stamps and paper of a certain office. In fact, the forgery cases are assessed with only 1 office out of 151 annually all over the*

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<sup>19</sup> Zakat Agency: is a government agency that allows Zakat (amount of money) duty to be collected in full in accordance with the provisions of Islamic law (Shariah) from all Saudi persons, shareholders of Saudi companies where all shareholders are Saudi, and Saudi shareholders of joint companies whose shareholders are Saudi and non-Saudi.

*kingdom. I believe if all bodies limited their use to the electronic financial statements, all other multi- financial statements shall come to an end”*

**(Interviewee 20).**

To overcome these issues, the General Secretary of Saudi Organization for Certified Public Accountants suggested that:

*“The new program “Qawaem<sup>20</sup>” provided one source of unified financial statements that would help Zakat & Income Agency, banks, and other government agencies to get real information about the company’s financial statements” (Interviewee 20).*

The Qawaem program is one of the Ministry of Commerce and Industry's initiatives, aiming to convert paper financial statements into an electronic form, enabling them to be submitted electronically in order to support the credibility and transparency of the financial statements for the beneficiaries. In addition, it helps in providing the concerned authorities with the required information quickly and accurately, as well as providing a financial, economic database supportive of the national database. It will link companies and establishments' financial statements to the international standard industrial classification, "ISIC", approved by the UN. The program will allow analysis of the economic sectors and activities with different financial types, as well as studying and controlling their performance and allocating their investments as per investments.

Overall, the interviewees' opinions and the questionnaires' participants indicated that there was a real concern about the auditing profession in the Saudi listed companies, which would affect the practices of corporate governance and accountability. The issues of most concern to the interviewees were the lack of independence; lack of training; and lack of expertise and specializations.

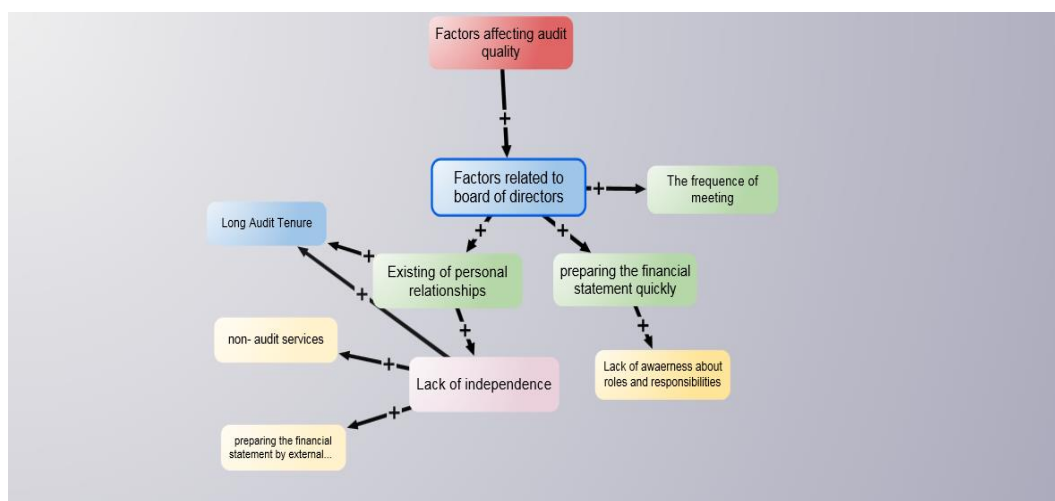
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<sup>20</sup> The “Qawaem” is a program providing one source of financial statements, established by the Ministry of Commerce and Investment (2015) in cooperation with the Saudi Organization for Certified Public Accountants to provide a set of services related to financial statements and information about enterprises. It enables corporations and audit firms to upload and send their financial statements via XBRL language to be used by relevant parties, e.g. governmental sectors, banks etc.

### 6.3.1.2 Factors related to Board of Directors

This section answers the second research question, investigating the impact of the board of directors on external audit quality. Figure 6.3, below, is a part of Figure 6.1, above, and explains the codes and themes related to the board of directors.

Figure 6-3 Coding of the factors related to the board of directors



Source: constructed by researcher

The interviewees highlighted that many factors affected the external audit quality of a company, such as the existence of personal relationships, the speedy preparation of financial statements, and the frequency of board of directors meetings. However, the interviewees placed more emphasis on the existence of personal relationships, and forcing external auditors to prepare the financial statements quickly.

To clarify, the existence of personal relationship between external auditors and the board of directors could impair the independence of the external auditors and affect the quality of the auditing. The majority (60%) of the interviewees also stated that there relationships existed between the board of directors and the external auditor in some listed companies, and that these relationships had been established because of the length of time an audit team spent in such companies, which resulted in loss of independence of the external auditor. An example of this was stated by an external auditor from a big-4 audit firm:

***“It is normal the relationship between board of directors and external auditors establish when we audit a certain company for five years, which would lessen audit quality. To be honest with you, sometimes, the client***

*ask for the same auditing team who audited the company last year. Of course, as a result there will be some tolerance, but usually not reach misleading in the financial statements” (Interviewee 8).*

A partner in an audit firm stated:

*“In some listed companies we had audited, we received gifts from board of director’s members. If the gift is value and will not affect our opinion, we accepted them and we may overlook for something, but does not reach to significant influence” (Interviewee 5).*

However, a minority (30%) of the external auditors indicated:

*“The existing of personal relationships does not necessary leads to lack of independence” (Interviewee 15).*

A Kendall's tau-b correlation was run to determine the relationship between external Audit Quality (AQ) and Board of Directors independence (BODIND) among the 77 participants in the BOD Survey (See Table 6.15). There was a strong, negative association between High Audit Quality and Board of Directors Independence, which was not significant, at  $\tau_b = -.075$ ,  $p = .457$ . Therefore, there was not a significant association between high Audit Quality and Board of Directors Independence. The questionnaire returns from the boards of directors contradicted the opinions of the majority of interviewee regarding the association between audit quality and board independence. Conversely, they were consistent with a minority of the interviewees, who said the personal relationship does not necessarily lead to lack of independence. However, the findings from the interviews confirmed that there was an association between audit quality and the independence of the board of directors (Beasley, 1996; Anderson *et al.*, 2004; Akhidime and 2015).

Table 6:15 Kendall's tau-b correlation representing the associations between audit quality and Board of Directors' independence

Non- Parametric Correlations				
			High audit quality	BOD Independence
Kendall's tau_b	High audit quality	Correlation Coefficient	1.000	-.075
		Sig. (2-tailed)	.	.457
		N	77	77
	BOD Independence	Correlation Coefficient	-.075	1.000
		Sig. (2-tailed)	.457	.
		N	77	77

Some interviewees mentioned that there was a positive relationship between the frequency of the board of directors meetings and audit quality. For example, an external auditor reported:

***“The awareness of board of directors about board meetings in some listed companies has been growing recently. Specially, a qualified and well educated board of director member who knows the importance of board meeting” (Interviewee 6).***

Additionally, he added that the frequency of the board of directors meetings was important during operating times and when the company faced difficulties. The majority of the interviewees stated that the frequency of meeting was not an important factor affecting audit quality, but that the productivity of the board members was important.

***“Board of directors has a key role really in whole governance in the entity and they are the taller top that effect governance and quality audit and quality of information provided to auditors. In my opinion, the size or the number of meeting are not important. The most important things is the productivity of board of directors and their ability to review financial statements and solve any problems raised” (Interviewee 13).***

Participants discussed how the number of meetings depended on the size of the project and the strategic plan of the company. Emphasising the frequency of meetings and the volume of work, an external auditor stated:

***“The integrity of board of directors, the independence of members, and the effectiveness of meetings are more important than the number of meetings and the size of board of directors” (Interviewee 19).***

The respondents indicated that the ideal number of meetings should be four a year, on a quarterly basis, in order to discuss and review the financial statements. They pointed out that the board members should prepare for meetings and that the meetings should be attended by most of the members. Largely, the interviewees believed that many factors affected audit

quality, such as the frequency of meetings, the effectiveness of members, and the volume of projects.

Other findings indicated that being asked to prepare the financial statements quickly influenced audit quality. 55% of the participants agreed, as articulated by one interviewee, that:

***“There are obstacles from the board of directors and auditing committees. For example, when auditing large and well-known companies, the board of directors sometimes ask to sign off the financial statements and the audit report quickly regardless to auditing quality or looking in the defect of internal control. They are supposed to look in the factors affecting financial statements as a whole. However, they are more concerned with preparing a quick auditing report” (Interviewee 16).***

The interviews showed that there was a relationship between audit quality, the size of the board and the effectiveness of board of directors’ meetings. The results are supported by some previous studies, such as (Lipton and Lorsch, 1992; Kamardin and Haron, 2011; Makni *et al.*, 2012; Ejeagbasi *et al.*, 2015).

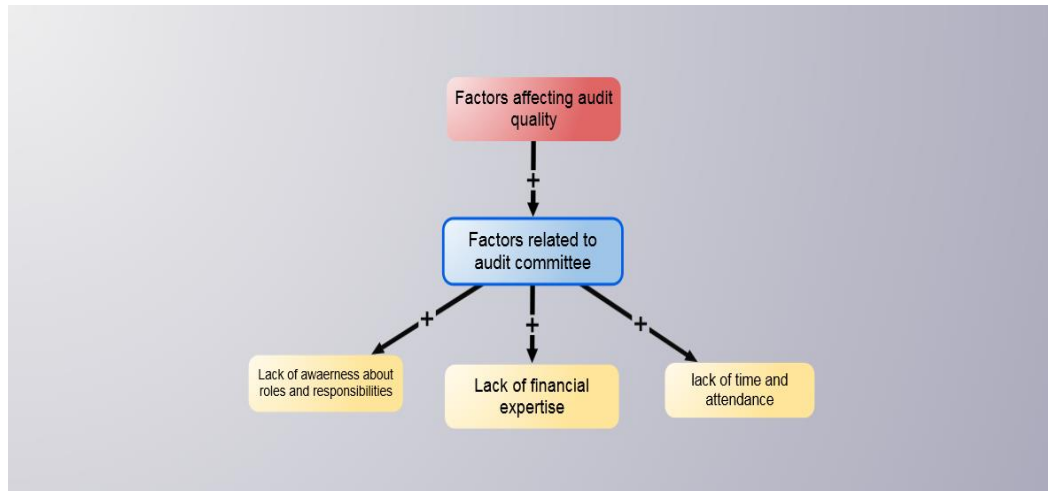
It can be inferred that the external auditors faced some pressure from the boards of directors, which may have affected their opinions in the auditing report, or the quality of their performance in general. Furthermore, the independence of the external auditors and the effectiveness of the boards of directors’ meetings influenced the audit quality process in some of the Saudi listed companies.

### **6.3.1.3 Factors related to the Audit Committee**

Participants answered the third question in this research by giving their perceptions of the impact of the audit committee on audit quality. Figure 6.4, below, is a part of Figure 6.1, and explains the codes and themes related to the audit committee.



Figure 6-4 Coding of the factors related to the audit committee



Source: constructed by researcher

It is so important that the auditing committee have an effective role in a company because it supervises and controls the internal auditing mechanisms. Internal auditing supervises and controls the performance, whether financial or operational, and also determines the risks. Therefore, if the committee is effective, the internal auditing will be effective. As a result, this will also affect the time factor for the external audit, because there is some kind of interaction between the internal and external auditors in many areas. If the external auditor can examine the work done by the internal auditors and rely on their work, this will help the external auditor in his planning, and leave more time for him to access more risky areas. Consequently, auditing quality will increase.

The majority of the interviewees placed emphasis to two broad issues: lack of awareness about their roles and responsibilities, and lack of financial expertise. More specifically, the interviewees highlighted the fact that the lack of financial expertise, consisting of qualifications and experience, was one of the main factors that affected the performance of ACs in SA. Thus, the AC members could not undertake their responsibilities properly. In general, the majority (75%) of respondents also pointed out, as articulated by one interviewee, that:

***“The effectiveness of ACs in Saudi Arabia reduces due to the fact that the AC members do not assign sufficient time to the committee’s affairs”***  
**(Interviewee 18).**

It can be noted from the views given above that the ACs did play a multiple role in the companies, and the necessity for ACs to enhance the quality of financial reporting, external auditing, internal auditing and the overall governance of the company.

It might be worth mentioning here that interviewees claimed that there was a lack of awareness about their roles and responsibility among most audit committee members in SA. Some of the members did not know exactly what the role of audit committee was, and some of them did not attend the audit committee meetings. They were not aware of the importance of attending those meetings.

***“Although the auditing committee is obligatory according to Governance Law in Saudi Arabia, there is absence of some members of the auditing committees in listed companies due to unawareness of the importance of their presence” (Interviewee 5).***

An external auditor added a similar opinion:

***“The concept of audit committee is not acceptable by some AC members and they don’t sense any risks. In addition, no action is taken against those neglecting attendance. Actually, many of them participate in audit committees as a social position, prestige, and experience” (Interviewee 16).***

A typical example of these concerns can be seen in the following statement:

***“Some members of auditing committees work in listed companies to be able to get confidential information to facilitate selling or buying stock as they access information nobody else can reach easily” (Interviewee 7).***

Similarly, another external auditor noted:

***“The auditing committees' attendance is so limited. Actually, they do not feel the importance of their positions in companies, as they are the link point between the external auditor and the board of directors, theoretically, the auditing committees are responsible for nominating the external auditor but we don’t know what the real situation is?” (Interviewee 9).***

A Kendall's tau-b correlation was run to determine the relationship between Audit Quality (AQ) and Audit Committee Meetings (ACMEET) among the 73 participants in the AC Survey (See Table 6.16). There was a weak, negative association between High Audit Quality and Audit Committee meetings, which was not significant, at  $\tau_b = -.071$ ,  $p = .526$ . Therefore, there was not a significant association between high Audit Quality and audit committee meetings. These results contradicted the opinions of the interviewees regarding the association between audit quality and audit committee meetings. However, the interviews were consistent with, for example, (Zgarni and Khamoussi; Menon and Deahl Williams, 1994; Raghunandan *et al.*, 1998; Abbott *et al.*, 2004; Sharma *et al.*, 2009). An active audit committee member, who attend audit committee meetings, has time to review the financial reporting, monitor the internal controls, and identify the risks to their company.

Table 6:16 Kendall's tau-b correlation representing the associations between audit quality and Audit Committee Meetings

Non- Parametric Correlations				
			High Audit Quality	ACMEET
Kendall's tau_b	High Audit Quality	Correlation Coefficient	1.000	-.071
		Sig. (2-tailed)	.	.526
		N	73	73
	ACMEET	Correlation Coefficient	-.071	1.000
		Sig. (2-tailed)	.526	.
		N	73	73

Emphasising the necessity of AC members' knowledge and experience in the field of Accounting and/or Finance, an external auditor said:

***“Availability of a financial expert in listed companies is very important. Most present experts are specialized in Engineering or Computer besides other specializations in Management. There is a few number of those specialized in Finance and/or Accounting. Engineers' thinking method is good, but we have our own language as Accountant not easy for any other else to understand it. Therefore, providing a financial expert specialized in Accounting is very important” (Interviewee 10).***

Most of the interviewees agreed that:

***“Providing a financial expert in the auditing committee is very important and gives strength to the board of directors because of his experience in Accounting and Finance as well as his ability to understand the operating activities in information systems and reports. Moreover, the financial expert must be independent in order to influence in positive way” (Interviewee 4).***

An external auditor illustrated his view:

***“Appointing one financial expert at least affects positively the auditing quality. This expert must master Finance and Accounting. Though, when he is specialized in other field such as Engineering, he usually does not master auditing and accounting matters” (Interviewee 3).***

A Kendall's tau-b correlation was run to determine the relationship between Audit Quality (AQ) and Audit Committee Financial Expertise (FINEXPER) among the 73 participants in the AC Survey (See Table 6.17). There was a weak, negative association between High Audit Quality and Audit Committee Financial Expertise, which was significant, at  $\tau_b = -.241$ ,  $p = .032$ . Therefore, there was a significant association between high Audit Quality and Audit Committee Financial Expertise. There were consistent between the opinions of the interviewees and the questionnaire participants regarding the association

between audit quality and audit committee financial expertise. These results were consistent with the interviewees' opinions, and many studies have confirmed that the audit committee's financial expertise affects audit quality (DeZoort *et al.*, 2002; McDaniel *et al.*, 2002; Kibiya *et al.*, 2016).

To summarise, all the listed companies were mandated to have at least one person on the audit committee who had expertise in Accounting and Finance (SOX, 2002). The Saudi code of Corporate Governance has also mandated that Saudi listed companies must have at least one expert in Accounting and/or Finance. The audit committee needs expertise in order to enhance the efficiency and proficiency of their work (McDaniel *et al.*, 2002; Osasu and Okafor, 2013), to help them to take wise decisions, and solve any financial or non-financial problems that might arise. Furthermore, audit committee members need to oversee the work of the auditors, to understand the audit strategy, to address the major audit risks, and to make sure that external auditors exercise appropriate professional work and are independent from any influence, which could affect their reports. Without proficiency and experience, they will not be able to do their work effectively.

Overall, the interviewees believed that ACs were very important to ensure good governance within companies. However, the current practices of ACs in SA, based on their opinions, was not ideal and companies did not fully benefit from AC at the moment. Some audit committee members were not able to function properly in their work, due to the lack of required knowledge and expertise, or the lack of awareness about their roles. There was a need to strengthen the AC role and responsibilities in terms of their meetings, education, and awareness, in order to function effectively.

Table 6:17 Kendall's tau-b correlation representing the associations between audit quality and financial expertise (AC Survey)

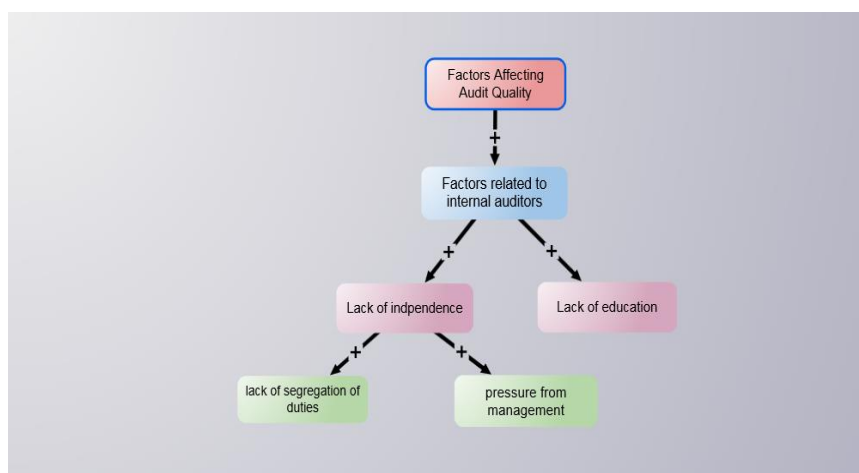
Correlations				
			High Audit Quality	FINEXPER
Kendall's tau_b	High Audit Quality	Correlation Coefficient	1.000	-.241*
		Sig. (2-tailed)	.	.032
		N	73	73
	FINEXPER	Correlation Coefficient	-.241*	1.000
		Sig. (2-tailed)	.032	.
		N	73	73

\*. Correlation is significant at the 0.05 level (2-tailed).

#### 6.3.1.4 Factors related to Internal Auditors

This section answers the fourth research question, exploring the impact of internal auditors on audit quality. Figure 6.5, below, is a part of Figure 6.1, and explains the codes and themes related to internal auditors.

Figure 6-5 Coding of the factors related to the internal auditor



Source: constructed by researcher

The interviewees focused on two factors affecting the external audit quality in Saudi listed companies; namely, lack of independence, and lack of education. Based on interviewee opinions, the most critical factor that affected audit quality between the two factors were the lack of independence and lack of education.

Internal auditors help the company to accomplish its objectives by evaluating, and helping to improve, the governance processes. Therefore, it is important to support internal auditors to help them perform their roles and responsibilities to ensure that an organization's risk management, governance and internal control processes are operating effectively. Respondents in this study emphasised the independence of internal auditors, and their need for education and experience. The lack of independence meant that the auditor could not carry out his role in an unbiased manner. The interviewees highlighted many aspects of the lack of independence, including the pressure from management, and the difficulty of segregating duties.

To protect internal auditors from such threats, they should communicate directly with the audit committee and report any deficiencies in the internal control systems. The majority of the external auditors had the same point of view. An example of one view was:



***“Audit committee can influence the independence of internal auditors, when it does not do its responsibility perfectly such as supervising the internal auditor's work, appointing or dismissing the chief audit executive, assuring the independence of the internal auditor, and providing the sources to internal auditor in order to accomplish his work”***

**(Interviewee 3).**

It can be inferred from this that the role of the audit committee was very important and could affect the independence of internal auditors, and the audit quality as well, because the external auditors relied on the work of internal auditors, so if the internal auditors lost their independence, the external auditors' work would also be affected, and, consequently, the audit quality. An external auditor gave his opinion:

***“There are threats faced internal auditors, the audit committee not having sole responsibility for appointing or dismissing the CAE. The CAEs not reporting functionally to the committee, and audit committee members lacking expertise in Accounting. All these threats affect significantly”***

**(Interviewee 16).**

The interviewees pointed out the difficulty of the segregation of duties as another finding related to internal auditors in this study. The concept of segregation of duties means that management should divide or allocate tasks to more than one person, in order to prevent fraud or error. In some Saudi listed companies, there was no segregation of duty, which may have influenced the independence of internal auditors and affected external audit quality.

***“When we audited some listed companies, we find that there is not segregation of duties due to the small size of internal audit department. However, it is important to take an action and correct this dilemma or otherwise will leads to bankruptcy”*** (Interviewee 7).

The size of the internal audit is very important to prevent such fraud and increase the objectivity of the internal auditors, which leads to strong internal control. Most of the interviewees believed, as articulated by one interviewee, that:

***“If the internal control weak in a company, it is the role of audit committee to support the internal auditor’s position and strengthening internal audit independence. Without taking an action, the company may suffer substantial loss” (Interviewee 16).***

The interviewees stated that there was relationship between the strength of internal control and audit quality. An external auditor illustrated his view with this example:

***“The subjective test depends on the internal control system. If the internal control strong that means external auditor will reduce the amount of audit work to be carried out, whereas if it is poor, external auditor should perform more work and efforts, which will affect audit quality” (Interviewee 6).***

It can be concluded that internal auditors could lose their independence by not applying segregation of duties, which leads to impaired internal control, resulting in affecting the external audit work and, then, the audit quality in general.

The interviewees mentioned that another factor affecting audit quality was lack of education. The education and qualifications of internal auditing staff is important to provide internal auditors with sufficient levels of quality and efficiency to be able to cover the annual plans, so that external auditors can rely on them later. Unfortunately, the interviewees stated that the listed companies in SA could not rely on the internal auditor's work, due to lack of experience and training. An external auditor cited:

***“We do not depend on internal auditor because he is not qualified. In addition, internal auditor does not have profession ethics and most of them have no idea about the internal auditor work” (Interviewee 13).***

A similar opinion was given by another external auditor:

***“Lack of training and education leads that some internal auditors are not aware about the external auditor's tasks and refuse to provide certain information and significant reports. Furthermore, some internal auditors do not understand the tasks and nature of their work. For example, sometimes we ask for some specific data but we find it difficult to convey our message” (Interviewee 2).***

The availability of a qualified, trained team with enough members is important to accomplish a company's work. In addition, when the department is not new, the external auditor's work will be easy, as well as improving quality. Another external auditor stated:

***“Internal audit and audit committees must do their roles in order to facilitate the external auditor's work and strengthens auditing quality through examining audit operations and accessing more risky areas” (Interviewee 8).***

This implies that it was necessary for external auditors to look at the outcomes of the internal auditors and rely on their job in order to save time, cost, and effort. Recently, the efforts of the Institute of Internal Auditors in Saudi have an impact. Generally, the interviewees believed that the greatest factors affecting audit quality were lack of education and the lack of independence of the internal auditors.

As one participant noted:

***“Recently, the role of the Institute of Internal Audit has been affective and we have seen many courses and lectures provided by them to improve internal auditors' work” (Interviewee 17).***

A Kendall's tau-b correlation was run to determine the relationship between Audit Quality (AQ) and Internal Auditors' Competence (IACOMP) among the 109 participants in the IA survey (See Table 6.18). There was a weak, positive association between high Audit Quality and Internal Auditors' Competence, which was significant, at  $\tau_b = .276$ ,  $p = .004$ . Therefore, there was a significant association between high Audit Quality and Internal Auditors' Competence. These results agreed with interviewees' perceptions that the competence of internal auditors affected the quality of financial reporting and the auditing process in general (Kusharyanti, 2003; O'Leary and Stewart, 2007; Novyarni, 2014; Abbott *et al.*, 2016a; Jarrar, 2016). The internal auditors' competence leads to high ethical attitudes and more error knowledge, which makes the financial information given to external auditors clearer and more accurate (Libby and Frederick, 1990; Al-Ajmi, 2009).

In summary, based on the participants' opinions, both the interview and survey participants confirmed that significant numbers of Saudi listed companies suffered from the lack of internal auditor's competence and independence. Consequently, there was a lack of co-operation between the internal and external auditors, which affected the external auditors'

time, money, and efforts. Coordination and cooperation between external and internal auditors enhances corporate governance (Endaya, 2014), creates more trust, and improves the quality of the financial statements (Abdel-khalik *et al.*, 1983; Brody *et al.*, 2012; Novyarni, 2014; Zain *et al.*, 2015). The competence and independence of internal auditors are important to add value to Saudi corporate governance, and to improve the audit quality in Saudi listed companies.

Table 6:18 Kendall's tau-b correlation representing the associations between audit quality and internal auditors' competence

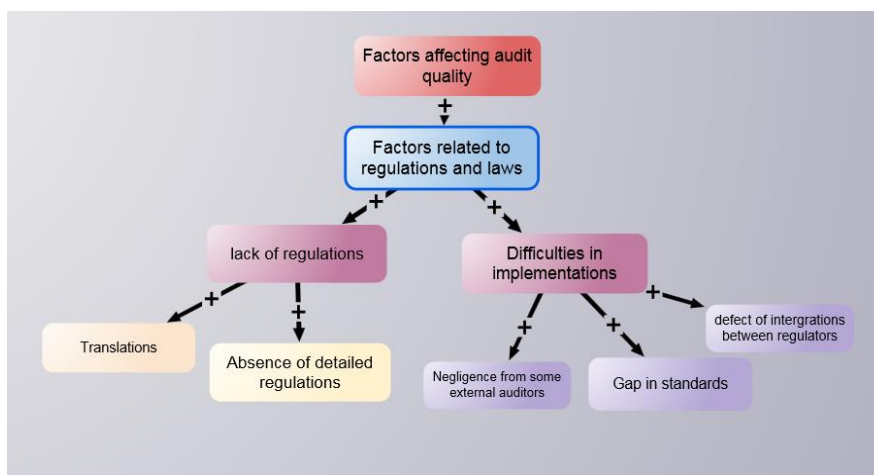
Correlations				
			High Audit Quality	IACOMPETE
Kendall's tau_b	High Audit Quality	Correlation Coefficient	1.000	.276**
		Sig. (2-tailed)	.	.004
		N	109	109
	IACOMPETE	Correlation Coefficient	.276**	1.000
		Sig. (2-tailed)	.004	.
		N	109	109

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### 6.3.1.5 Factors related to regulations and laws

This section covers the impact of regulations on audit quality and what steps are needed to enhance audit quality. Figure 6.6, below, is a part of Figure 6.1, and explains the codes and themes related to regulations and laws.

Figure 6-6 Coding of the factors related to regulations and laws



Source: constructed by researcher

The importance of corporate governance laws comes from its role in preventing any fraud or economic crisis, which could be the result of weak corporate governance, especially in listed companies, which have direct effects on the national economy. One of the challenges in SA was that business had become more complicated and risky. In addition, there was inadequate compliance with corporate governance. According to the perceptions of the interviewees, there were more than one factors, which affected the audit quality in SA. The findings indicated that there were difficulties in the implementation of regulations by the Saudi listed companies, and that there was a lack of regulations. An example of the difficulties faced by the external auditors, prevented them from implementing the corporate governance laws, and was stated by an external auditor:

***“Some laws and regulations are not implemented in some listed company. The problem is clearly shown in the absence of coordination between Saudi Origination of Certified Public Accountant, and Capital Market Authority, which makes a gap leading to enter a grey area. This is a challenge that auditor cannot control” (Interviewee 2).***

Some external auditors in SA could discuss any problems with management for mitigation, note any problems in the audit report, or withdraw from the audit where material. However, it depended on the external auditors themselves. Some of them were so honest that they were not afraid to write notes or to withdraw from the audit. However, some of them faced pressure from management because they paid them, so they found it difficult to withdraw during the audit, or to give the company a disclaimer, or an adverse, or qualified, report.

An example from an external auditor is given below:

***“Governance laws are existent, but the problem is the absence of control in application of these laws. Furthermore, there are gaps in standards used by some auditors in their own interest” (Interviewee 12).***

It can be inferred that the reasons for the difficulties that prevented the implementation of some regulations were the defects in the integration between regulators and the gap in standards, and negligence by some external auditors. An interviewee pointed out that:

***“There are some gaps and weaknesses in the law, which can be utilized by auditors when performing auditing. We find that in calculating Zakat, when they try to reduce income legally in order not to calculate Zakat properly” (Interviewee 15).***

Another important finding was the absence of detailed regulations. It was the largest problem that SA faced with regard to corporate governance. For example, there were only one or two articles in each law. Corporate governance in SA has been adopted from other countries, so this raised the issue of translation into Arabic, which has led to losing the meaning or causing a kind of ambiguity, leading to misunderstanding of the original laws.

***“In my opinion, the reasons for weakness of audit quality include lack of detailed regulations and laws and the translation of the laws. In addition, some companies do not implement the corporate governance roles effectively” (Interviewee 8).***

However, the General Secretary of Saudi Organization for Certified Public Accountants stated that:

***“In the old companies' law, the audit report standards was only one page. On the other hand, the new companies' law increased it to four or five pages, which means more disclosure and details” (Interviewee 20).***

An external auditor gave a similar opinion:

***“The new companies' law solved many problems, bridging many gaps. However, the regulations need clarification and more explanation. In addition, there is no coordination between Zakat Agency, Ministry of Commerce, and SOCPA” (Interviewee 16).***

The General Secretary of Saudi Organization for Certified Public Accountants added:

***“The change to international auditing standards shall increase auditing quality all over Saudi Arabia. Most countries apply international standers, so there won't be difference among the companies in Saudi Arabia and abroad. In addition, the international standards of auditing are comprehensive while there are many weaknesses in the standards used currently due to translation or inability to apply. Therefore, I think it shall make a radical change in increasing performance quality of accounting profession” (Interviewee 20).***

The interviewees believed that the new company laws would make changes and help to enhance audit quality. Moreover, there were some new regulations that punished auditors, and board of directors members, which would reduce manipulation of the financial statements. An external auditor stated:

***“There is some development on the levels of state, private sector, and professionals. There is a trend to companies' governance and care to develop them. I think that company's law made a difference especially that there are punishments and fines against auditors and members of board of directors for the first time in the history of Saudi Arabia” (Interviewee 17).***

To summarise, although the laws and regulations were coping with market demand, the interviewees suggested that there was a need for significant change in the regulations and laws in SA. Part of the problems in audit quality returned to the lack of regulations, such as the absence of detailed regulations and the translation of other regulations or laws. Additionally, participants mentioned some factors influencing the external auditors' work, such as the difficulty of implementing the regulations, and the defects in the integrations between regulators. Overall, all of these factors influenced the quality of auditing in the Saudi listed companies.



## **6.4 Summary**

The aim of the interviews was to compare and contrast with the questionnaire survey findings, thus gaining a deeper insight into the factors affecting the audit quality in SA. The findings about the auditing professional practice in SA at the time of the research were obtained from the interview respondents and questionnaire participants, and had been discussed in this chapter.

The findings of the interviews focused on the same factors discussed in the questionnaires. The interviewees concluded that there were some factors, which impaired the auditing process in Saudi listed companies. Furthermore, the audit professionals faced a variety of barriers, which prevented them from doing their work properly. There was consensus between the interviewees that corporate governance and audit quality, in general, has had limited success in reaching its objectives. However, the questionnaire participants were not consistent with the interviewees in some areas, such as boards of directors' independence, audit committee meetings, and audit committees' financial expertise. Finally, some respondents gave some suggestions about how to improve and enhance auditing practice in SA listed companies.



## **Chapter 7: CONCLUSION AND RECOMMENDATIONS**

### **7.1 INTRODUCTION**

This study has investigated selected corporate governance characteristics and their effects on external audit quality in SA listed companies. As mentioned in Chapters One and Four, in order to achieve the research objectives, a mixed- methods approach was employed to investigate the relationship between audit quality and corporate governance. Specifically, the study employed quantitative and qualitative data (questionnaires and semi-structured interviews) to: (i) investigate the factors affecting external audit quality in the Saudi business context, and, (ii) suggest improvements to external audit quality in SA.

Ordinal Logistic regression was used to identify the association between variables by testing the researcher hypotheses. Semi-structured interviews were used to attain a deeper understanding of the phenomena, by investigating the perceptions of external auditors and regulators about the factors affecting audit quality. A questionnaire survey was implemented to investigate the perceptions of boards of directors, audit committees, and internal auditors of the factors affecting audit quality in Saudi listed companies.

Comprehensive reviews of previous studies have discussed the relationship between particular corporate governance characteristics and external audit quality. To gain more understanding of the audit practice issues, an overview of the legal structure, economic condition, audit practice and the corporate governance mechanisms of SA have been discussed. This thesis used agency theory as the main theory relevant to the research questions, which helped to provide a deeper understanding of corporate governance and audit quality by interpreting the findings. Furthermore, resources dependence theory was used to help to interpret the findings. The findings obtained provide insights to audit quality practice and corporate governance in SA. Detailed findings of questionnaire surveys have been presented in Chapter five, while Chapter six presented the findings of the integration between the questionnaires and the interviews.

This chapter seeks to presents a summary of the questionnaires' and interviews' findings. It also presents a summary of the integration between quantitative and qualitative data. It highlights the practical and theoretical implications of the findings for audit quality and

corporate governance in SA. Finally, it presents recommendations, the limitations of the research, and suggestions for future studies.

This chapter is organised as follows: Section 7.2 provides an overview of the findings and presents how integration between the questionnaires and interviews was attained. Section 7.3 discusses the theoretical and practical implications. Section 7.4 explicitly discusses the recommendations of the study, while 7.5 addresses the limitations of the study. The last section, 7.6, presents suggestions for future research.

## **7.2 REVIEW OF THE FINDINGS**

### **7.2.1 Integration between Quantitative and Qualitative Findings**

The objectives of this section is to summarise the findings obtained from the quantitative and qualitative data (see Chapters Five and Six). The results of this section are categorised into three main subsections. The first subsection shows the main findings obtained from the board of directors survey. The second subsection presents the findings from the audit committee survey and the third subsection presents the findings related to the internal auditors' survey.

#### **7.2.1.1 Board of Directors Survey**

The first research question of this study was answered by integrating the perceptions of interviewees and the findings of the hypotheses following:

**Does the board of directors have a relationship with audit quality in listed companies in Saudi Arabia?**

**H<sub>1</sub>:** *There is a negative association between external audit quality and the size of the board of directors.*

The questionnaires used a five- level Likert scale, and the findings showed that there was a non-significant association between board of director size and audit quality. The findings revealed that first hypothesis was not supported. Based on interviewees' opinions, a small board has the ability to increase the monitoring on CEOs and to make useful decisions. Conversely, a large board might be subject to inefficiencies which impact negatively on their monitoring performance.

**H2:** *There is a positive relationship between external audit quality and board of directors' independence.*

The questionnaires used a 5 Likert scale, and the findings showed that there was a significant association between board of director independence and audit quality. While the interviewees highlighted that, many factors affected the audit quality of a company, such as the existence of personal relationships leads to frauds, the speedy preparation of financial statements, and the frequency of board of directors meetings.

The association between audit quality and board of director independence reflected a majority of the interviewees, while a minority felt that the personal relationship between the board of directors and external auditors did not lead to lack of independence. According to some of the Saudi firms' participants, the reason behind the lack of independence was the existence of a personal relationship, caused by the length of audit rotation. Interestingly, the interviews presented additional factors that affected audit quality. For instance, a positive relationship was seen between the frequency of the board of directors' meetings and audit quality. According to the interviewees, the effectiveness of meetings was more important than the number of meetings. Moreover, the ability of the board of directors to review financial statements and solve problems were raised as issues.

Another finding showed that some board of directors' members in the Saudi listed firms forced external auditors to prepare the financial statements quickly, which was seen to lead to impairment of the independence of external auditors and weakened the audit quality. In fact, forcing the external auditors to prepare the financial statement quickly may be seen as evidence of the lack of awareness and lack of responsibility regarding the regulations and the roles of board of directors' members. The boards of directors of Saudi listed firms, were seen as one of the reasons for impairment of the external auditors' independence and reduction in audit quality.

#### **7.2.1.2 Audit Committee Survey**

The second research question was answered by integrating the perceptions of the interviewees and the findings of the hypotheses below:

**Does the audit committee have a relationship with audit quality in listed companies in Saudi Arabia?**

**H3:** *There is a positive relationship between external audit quality and audit committee financial expertise.*

The questionnaires used a 5 Likert scale, and the findings showed that there was a significant association between audit quality and audit committee's financial expertise. The prediction made regarding whether the audit committee's financial expertise would affect audit quality was found to be accurate. According to the Saudi Corporate Governance Code, an audit committee should have at least one financial expert who has knowledge and expertise of accounting and finance matters in order to understand the financial statements and to interact with the external auditor (CODE, 2006). Moreover, the findings from the interviews showed that lack of financial expertise in the Saudi listed firms was seen as one of the major factors affecting audit quality, with the lack of expertise being caused by a lack of awareness about their roles and responsibility.

The other hypothesis tested to answer the sub-research question was:

**H4:** *There is a positive relationship between external audit quality and the frequency of audit committee meetings.*

The questionnaires used a 5 Likert scale, and the findings revealed that the third hypothesis was supported, confirming that there was a significant association between the frequency of audit committee meetings and audit quality. Furthermore, the results of interviewes shows that there is lack of attendance of meetings. Based on interviewee opinions, a possible explanation for the lack of attendance of meetings is that the members did not assign sufficient time for the committee meetings. Additionally, some members had joined the audit committee board to get access to confidential information that nobody else could easily acquire, such as the buying and selling of stocks. Another possible explanation is that the members were not aware of the importance of attending meetings to alleviate any risks. An active audit committee member attends audit committee meetings, has time to review the financial reporting, monitors the internal controls, and identifies the risks to their company.

#### **7.2.1.3 Internal auditor Survey**

The third research question was answered by integrating the perceptions of the interviewees and the findings of the hypothesis below:

**Does the internal auditor have a relationship with audit quality in listed companies in Saudi Arabia?**

**H5:** *There is a positive relationship between external audit quality and the competence of internal audit members.*

The questionnaires used a 5 Likert scale, and the findings showed an association between audit quality and internal auditor's competence. Competence helps internal auditors to do their work effectively, and evaluate and improve the governance process. The questionnaire results were supported by the interview findings, which showed that the competence of internal auditors affected audit quality. An internal auditor should have sufficient knowledge to be able to cover the annual plans and to prepare the financial statements of the company. However, the interviewees stated that most external auditors in the listed companies in SA did not rely on the internal auditor's work, because of the internal auditors' incompetence. This could result in wasting the external auditors' time, and additional cost and effort. To clarify, this meant that external auditors lost the opportunity to examine the audit operations, and missed access to more risky areas during the audit process because they wasted time on checking the internal auditors' work.

Another finding derived from the interviews only suggested that there was an association between audit quality and internal auditors' independence. In the Saudi listed firms, a possible explanation for the lack of internal auditors' independence came from the pressure from management and the difficulty of segregating duties. For instance, internal auditors in some Saudi listed firms found it difficult to communicate directly with the audit committee and report any deficiencies in the internal control systems. Moreover, another factor affecting their independence was the difficulty caused by the segregation of duties. Some Saudi listed firms had small internal audit departments, which led to assigning the work to one person, which led to fraud and errors.

### **7.2.2 Additional Interviews Findings**

The fourth question was:

#### **What major steps can be undertaken to enhance audit quality in Saudi Arabia?**

Two findings were derived from the interviews to answer the fourth question. The first finding presented the association between audit quality and the lack of regulation, such as absence of detailed regulations or translations of regulations. According to interviewee, the absence of detailed regulations affected audit quality in Saudi listed firms because of the

issue of translation into Arabic, and the availability of one or two articles only for each law. The possible explanation for this issue is that the Saudi Corporate Governance, Auditing, and Accounting Standards have been adopted from the UK or the USA, and regulators have altered these standards in relation to Saudi Islamic *Shari'ah* law, which has caused ambiguity, and has led to misunderstanding of the original laws. In order to overcome the problem of lack of regulations, the regulator suggested that one solution to solve the audit quality issue would be to adopt the international financial reporting standards by 2017 (IFRS).

Another finding related to the external auditor showed that some external auditors did not play a significant role in validating company financial statements. The findings focus on the lack of independence, lack of training, and lack of expertise and specialization. The lack of independence came as the result of the pressure applied by the board of director on the external auditor to prepare the financial statements himself, the provision of non-audit services by the external auditors, signing off more than one financial statement for the same company, or the existing relationship between the board of directors and external auditors. Generally, potential explanations for the lack of independence are the inability of management to understand its roles and responsibilities, exploiting the legal loopholes, or the poor efficiency and competence of external auditors in some Saudi listed firms.

The Mann-Whitney test showed there were significant differences in the external auditors' independence between the BOD and AC groups. The results indicated that the board of directors and the audit committee agreed that the external auditor was independent and not exposed to any influence by management, and that there was no personal relationship between the board of directors and external auditors.

The results of the interviews shows that external auditor is not perceived to be independent, which contradicted the results of the questionnaires.

A reasonable explanation for the differences in the findings between the questionnaires and interviews is that the boards of directors and audit committee members tried to hide the lack of external auditors' independence from some of the Saudi listed firms in order to avoid taking any responsibility, even though the regulators were aware of this issue. Regulators had tried to solve it by imposing punishments and fines, updating company laws and the corporate governance codes, and by enforcing periodic inspections and quality control programmes on the audit firms.



The last interview findings presented that one of the problems in the Saudi listed firms was external auditors' lack of training and lack of expertise and specialization. The results showed that some of the violations of regulations were due to the lack of training and experience. For instance, the training and experience were not limited to just certifications, but extended to the ability of external auditor to be independent and to express his opinion about the financial statements without being influenced.

A Kendall's tau-b correlation test for the boards of directors' and internal auditors' surveys showed a significant relationship between audit quality and external auditors' competence. To overcome these issues and enhance audit quality in SA, the regulators stated "Saudi Ministry of Commerce and Investment published the Qawaem program that aims to convert paper financial statements into an electronic form to ensure the credibility and transparency of the financial statements for the beneficiaries" (MCI, 2017)<sup>21</sup>. This program was still in its early stages, but it could help to reduce the number of misleading financial statements. To clarify, this program enables external auditors to submit their financial statements electronically, in order to support the credibility and transparency of the financial statements for the beneficiaries and to keep the work to a minimum, with the preparation of only one financial statement.

### **7.3 IMPLICATIONS OF THE STUDY**

This study has numerous theoretical and practical implications, which add to the corporate governance and audit quality literature, as well as to the Saudi market and regulators. This section presents the implications of the study. Specifically, Subsection 7.3.1 presents the Theoretical Implications, while Subsection 7.3.2 sheds light on the Practical Implications.

#### **7.3.1 Theoretical Impactions**

Using agency theory and the resource-dependence theory, previous studies have found a strong association between corporate governance and external audit quality (Al-ghamdi, 2012; Trotman, 2013; Albassam, 2014). The two theories were used in the current study to explain the corporate governance mechanism and audit quality. However, the development

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<sup>21</sup> Ministry of Commerce and Investment, Qawaem program, 2017, <https://qawaem.mci.gov.sa/Portal/ar/download.html>

of corporate governance is a complicated area that is associated with other factors, such as culture, religion, and regulations (Mallin, 2007).

This study contributes to corporate governance and audit practice by joining the two theories together for the purpose of analysis. This combination has added to the literature by interpreting the findings through the use of both agency theory and resources dependence theory in one study. Agency theory is one of the main theories used in corporate governance and audit quality practices, which provides a good justification for its use.

Both theories (Agency and Resource-Dependence theory) emphasise the association between audit quality practices and corporate governance characteristics. Agency theory recommends that the issue related to the separation of ownership and management might lead the actors to act in their best of interest (Jensen and Meckling, 1976). While, Resource-Dependence theory suggests that directors of organizations bring resources and opportunities, such as skills and information, to the benefit of the company. The combination of both theories is important because agency theory interprets the relationship between the owner and the agents and resource-dependence theory mitigates the agency problem, which is a result of different interests, by using and controlling the resources, such as the appointment of an external auditor, bringing skills and experience to the organization, or reducing costs.

In this study, agency theory focused on the relationship between the owner and the board of directors, the audit committee, external auditors, and internal auditors. The first relationship in this study was the relationship that occurs when the principal (owner) appoints an agent (external auditor), and delegates some authority to them, placing trust in them to act in the principle of best interest. However, the actions of the external auditors could lead to further concern about trust and threaten the notion of their independence and objectivity. The findings revealed that some external auditors in this study were seen to be suffering from lack of competence or independence. Under agency theory, boards of directors are responsible for checking the external auditors' qualifications and independence. However, the boards of directors did not have the expertise or the skills to check whether the external auditors had met their requirements and responsibilities. It is vital that a board of directors ensures that the external auditor is independent because, from the perspective of the shareholders, external auditors are seen as an important factor in delivering high audit quality.

Another agency relationship in this study occurred when the principal (owner) appointed an agent (the board of directors, audit committee, or internal auditors) to act in the best interests of owner. A problem arises when agents (the board of directors, audit committee, or internal auditors) do not act in the best interests of the owner. The role of a board of directors in a company is to represent their shareholders and to protect them under agency theory, by providing adequate monitoring and control procedures. The role of the audit committee is to enhance the quality and credibility of the financial statements, and to assist the board of directors, while the roles of internal auditors are to provide independent assurance that an organisation's risk management, governance and internal control processes are operating effectively. In this study, the conflict of interest, which happened between the agents (board of directors, audit committee, and internal auditors), and the owners were the results of agency problems.

To mitigate the agency problems, which had happened as a result of different interests, owners had sought to resolve the concerns by putting in place some mechanisms, such as audit services, regulations, remuneration packages and incentives, which would align the interest of the agents. The importance of the application of resource-dependence theory in this study was that it explained the actions the board of directors took to solve the agency problem, by providing the external resources, such as raw materials, information, experience, workers, and even funding, that were required to improve a firm's performance. For instance, the external auditors had been engaged by boards of directors as a resolution mechanism to reinforce trust, promote stability, and reduce the conflict between shareholders and directors.

This theory also supports the appointment of a board of directors and external auditors in other companies to gather information and network in various ways. Furthermore, this theory also supports the inclusion of skills and experience, or any other resources, brought by internal auditors, the audit committee, the board of directors, or external auditors to enhance the performance of the company. In general, this study offers theoretical validity by suggesting that agency theory may be more applicable than resource-dependence theory in describing the practices of corporate governance and external audit in developing countries such as SA. In terms of resources, skills, and information, resource-dependence theory is a complementary theory to agency theory regarding the competence and skills of the board of directors, external auditors, internal auditors, and audit committee members.

### **7.3.2 Practical Implications**

The findings could be useful to external auditors, internal auditors, boards of directors, audit committee members, and regulators to increase and enhance the external audit quality in the Saudi listed firms, and to enhance the corporate governance mechanisms.

For instance, these findings have implications for regulators such as the Saudi Ministry of Commerce, the Saudi Capital Market Authority, and the Saudi organization of Certified Public Accountants, who are attempting to increase external audit quality. Specifically, regulators may satisfy shareholders and the users of the financial statements by increasing the monitoring of the work of external auditors and other governance bodies. Moreover, they may enforce penalties and fees on those who violate the laws, and regulators may emphasize more the need to comply with regulations and laws by listed firms, by increasing their knowledge and awareness of the rights of shareholders. Furthermore, these findings may help the Saudi Capital Market Authority to protect financial statements, and the external auditor reports, by adapting International Accounting and Auditing Standards. The findings revealed that there was a relationship between the boards of directors' members and external auditors, which impaired the audit quality. This may be due to the length of audit tenure in audited firms. Furthermore, it is vital to take action to improve the competence of external auditors, and internal auditors by providing further training. The findings showed that external auditors prepare the financial statements themselves and then audit them; thus, these findings also have implications for the development of Saudi Certified Public Accountants, by improving the independence and the competence of the external auditors. In addition, the Saudi Certified Public Accountant body should monitor the work of external auditors by periodic inspections and quality control programmes. It should take strong measures against external auditors who violate the auditing standards, through suspension, withdrawal or cancellation of their professional licences.

Generally, this research determined the most corporate governance factors affecting external audit quality, and could be helpful to enhancing the code of corporate governance practices.

## **7.4 RECOMMENDATIONS FOR THE IMPROVEMENT OF CORPORATE GOVERNANCE MECHANISMS AND EXTERNAL AUDIT PRACTICE IN SAUDI ARABIA**

The previous findings concluded that corporate governance and audit practice in Saudi Arabian listed firms had encountered some difficulties. This section provides some

suggestions and recommendations for enhancing the corporate governance issues and external audit practice in SA.

#### **7.4.1 Recommendations for Regulators**

Firstly, in order to enhance the corporate governance mechanisms in SA, regulators should establish an independent organization to oversee corporate governance practices. This organization should spread awareness of corporate governance, assist the listed firms to apply and implement the code, and oversee and monitor the corporate governance practices. Moreover, regulators should make contact with international corporate governance boards such as the Boards of Directors Institute in USA or the Institute of Directors in UK to enhance their practices and get the benefit of their experience. In addition, they should provide Saudi employees with international training, in order to exchange experience and enrich their knowledge. It is strongly recommended that this organization be independent and separate from the Saudi Capital Market Authority.

Secondly, in 2017, the Capital Market Authority Board approved new corporate governance regulations. The new regulations provide shareholders and board members with improved rights, and more transparency regarding their respective roles and responsibilities. However, regulators should ensure that listed firms implement these regulations by reviewing, inspecting, and controlling the work of listed firms.

Thirdly, it is important to enhance corporate governance practices by providing further education and training in the form of conferences, workshops and seminars for board of directors' members, audit committee members, internal auditors, and external auditors,. The corporate governance module should be taught in Saudi public and private universities to generate future auditors that are aware of corporate governance practice to protect the interests of shareholders. This could be done through conducting periodic risk assessments, ensuring good corporate governance by developing efficient crisis-management plans to be used in the event of allegations of fraud, and helping to foster a good relationship with regulators by evaluating the organization of a company for compliance with regulations.

Fourthly, the Saudi Ministry of Commerce and Investment released new company laws in 2016 that replaced the old Companies Law. The new company law might help to solve the problem of undetailed regulations, by providing more clarification and explanation of such matters as general provisions, boards of directors, audit committees, and to specify the types

of violations, and other filings. Obviously, the new law will bring some challenges. Conversely, the punishment for violations imposed on boards of directors and external auditors might decrease the amount of encroachment and manipulation. Regulators should monitor and pay attention to implementation of the regulations. The companies or new investors should bear the new companies' regulations in mind as part of their strategic planning. On the other hand, monitoring bodies, such as the Saudi Origination of Certified Public Accountants, the Capital Market Authority and the Saudi Ministry of Commerce and Investment should coordinate with each other to overcome the difficulties in implementing the regulations, the low levels of enforcement of the regulations, and to fill in the gaps in the legislation. A good example is the coordination between the Saudi Ministry Of Commerce and Investment and the Saudi Origination of Certified Public Accountants by the establishment of the Qawaem program, which is intended to minimize the manipulation of the financial statements, supply the required information with high accuracy and in a timely manner for beneficiaries, and to provide important economic information to assist planners.

#### **7.4.2 Recommendations for Boards of Directors**

Firstly, according to the corporate governance code, boards of directors should achieve the objectives of the company by overseeing the day-to-day business operations, monitoring and controlling functions, and assessing the overall direction and strategy of the business. To this aim, the Saudi Capital Market Authority Board should ensure that the code of corporate governance is implemented, and they should minimise any manipulation by board members, such as the existence of a relationship between the board and the external auditor that leads to manipulations, lack of attendance of board meetings, or demands for the speedy preparation of financial statements.

Secondly, boards of directors in Saudi listed firms need to be trained, by creating an Institute of directors, akin to the one in the UK, to increase their awareness of, and responsibility towards, board roles, and to enhance their management and leadership skills.

#### **7.4.3 Recommendations for Audit Committee**

Firstly, the Saudi Capital Market Authority Board should define the roles and responsibilities of audit committee members, such as duty of care, duty of loyalty and the duty to act. For instance, regulators might get benefit from using the UK's audit committee code due to the detailed description of the roles and responsibilities of the audit members.

Secondly, they should increase expertise, by ensuring that members have knowledge of Accounting and Finance in order to facilitate the understanding of financial statements. Thirdly, shortfalls in the attendance of meetings could be solved by determining the number of meetings to be held a year, and ensuring that the external auditor and, as well as other board members, attend the meetings.

#### **7.4.4 Recommendations for External Auditors**

Further to the discussion in Chapter six, the external auditor should be qualified and audit the financial statements in accordance with auditing standards, in order to prevent and remove any material misstatements. Failure to do this results in weakness of audit practice. According to the findings, the personal relationship between the board of directors and external auditors had grown because of the length of audit tenure, which had caused lack of independence. As a result, regulators have imposed a new regulation that states that an auditor can audit a company for a maximum of 5 years. As stated by the interviewees, the problem in Saudi listed firms was sometimes related to a lack of regulations or standards, and the lack of monitoring and control of the implementation of the regulations and standards by the regulators bodies. In 2016, the Saudi Organization of Certified Public Accountants created a team to control and inspect the work of external auditors in listed companies; however, this team suffered from lack of independence, because the team consisted of members of the board of directors from the same listed firms that were under inspection. To solve this issue, regulators should create a professional independent team, derived from an independent organization, with experience and competences in Accounting and Auditing, to periodically investigate and inspect the external auditors' work. Furthermore, the new company law in Saudi should make changes which would enhance audit quality. Moreover, the new regulations should impose punishments and fines on fraudulent auditors, which may help to reduce the manipulation of financial statements.

Another recommendation is that Saudi certified public accountants should enhance the external auditors' training by updating the materials, reducing the cost of courses, and bringing in professional trainers who have knowledge and practical experience of Accounting and Auditing.

External auditors obtain their qualifications in SA through a degree in Accounting, professional exam and experience in audit firms. Therefore, Saudi universities should start

to fill the gap between education and the practice in accounting in general, and specifically in Auditing, which may increase students' awareness and the knowledge of accounting and auditing practice. Moreover, sending students to get some training in audit firms before graduation would boost their experience and knowledge and allow them to see current audit practice.

To solve the issue of preparing the financial statements by external auditors in some listed companies or of them preparing more than one financial statements for each listed firm, the Saudi Ministry of Commerce and Investments created the "Qawaem" program that allows external auditors or listed companies to upload only one financial statement in an electronic form, which prevents the duplication of financial statements and supports the credibility and transparency of the financial statements for the beneficiaries and reduces fraud and scandals. However, the uploading of financial statements is still not mandatory for all listed companies. The Ministry has given a six months extension for listed companies to upload their financial statements, which may aggravate the problems by providing opportunity for manipulation. This program may become an effective way to reduce the preparation of more than one financial statement for each listed firm if they make it mandatory for all listed companies without giving any extension.

With regards to complicated audit questions that may be faced by external auditors during the audit process, the Saudi certified public accounting body should create a consultation committee that could give answers and recommend solutions and clarifications, which may help to increase the audit quality in Saudi listed firms.

#### **7.4.5 Recommendations for Internal Auditors**

The most important recommendation is to educate the internal auditors in Saudi listed firms, to ensure that they are qualified, have the ability to prepare the financial statements, and to produce the best advice and judgements for boards and management. Furthermore, the audit committee should play their role effectively and alert internal auditors to any deficiencies in the internal control systems, risk management, and governance, and have unrestricted access to all parts and resources of the organization.

### **7.5 LIMITATIONS OF THE STUDY**

Although the findings of any research are valuable, they regularly suffer from numerous limitations. There are three main areas covered in this discussion of the limitations this



study: (i) the general framework of the research; (ii) the qualitative research approach, and (iii) the quantitative research approach.

#### **7.5.1 The limitations related to general framework of the research**

The first limitation was that the findings of the study were based on Saudi listed firms and audit firms. The influence of *Shari'ah* law, audit requirements, corporate governance, and cultural environment are specific to SA and, therefore, it is difficult to generalise the findings of this study to other markets. All these factors may limit the study's application to other countries.

The second limitation was the size of the sample. This study focused only on non-financial listed companies. The banking and insurance sectors were excluded, due to different board regulations, rules and instructions. Consequently, the size of the sample was reduced from 173-listed firm to 126 firms.

The third limitation was that for some listed firms it was difficult for the researcher to enter and distribute questionnaires in the main company locations, due to some restrictions preventing women from accessing male departments in the company. However, the researcher did not experience this issue with the audit firms. This issue limited the numbers of questionnaires distributed, although substitute strategies were undertaken by sending the questionnaires through an email, and by leaving copies of the questionnaire in firms' receptions and collecting them later.

The fourth limitation was the use of a mixed-methods approach. It contained a number of challenges in terms of the effort, time, and skills that were needed to design and interpret the findings (Creswell and Clark, 2011). However, the researcher solved this limitation by taking some further training and boosting her knowledge of the mixed methods approach.

The last limitation, related to the general framework of the research, was that the new company law, the updating of the corporate governance code and the adoption of IFRS and ISA were in their early phases, so findings may not properly reflect their influence on the status quo.

### **7.5.2 The limitations related to the qualitative research approach**

The first limitation was that the interviews did not reflect the perceptions of external auditors and regulators of the entire population of SA. There were some external auditors who refused to be interviewed, due to busy schedules, or lack of awareness and knowledge about corporate governance and audit practice in SA. Moreover, the interviews focused only on external auditors and regulators, due to busy schedules and the unavailability of board of directors and committee members in the companies. Furthermore, the internal auditors were not interviewed, because of their lack of knowledge about some details of external auditors' work.

The second limitation is the area of audit practice and corporate governance is very sensitive, especially after the manipulations and scandals that had been discovered in Saudi listed firms. Therefore, some of the participants were worried about having their voices recorded or to taking part in an interview. Moreover, they were afraid to say something that may threat their job security or expose them to legal liability. As a result, the study included only 20 interview participants. Further insights could potentially have been gathered if more participants had been interviewed.

The final limitation related to the qualitative method is the problem of subjectivity. The researcher in this study faced this when collecting and analysing the data (Collis and Hussey, 2009). The study may have been influenced by using this approach; however, some of the limitations were minimised by using a mixed methods research design.

### **7.5.3 The limitations related to the quantitative research approach**

The first limitation of the quantitative research design used in this study was that researcher designed the questionnaires to be precise, short, and as easy as possible to answer; however, some respondents did not provide clear answers and sometimes they selected answers randomly, in order to finish quickly. The researcher overcame these limitations by excluding a total of 10 of the completed questionnaires because they had some response statements missing.

A second limitation related to the quantitative approach is that the questionnaire focused only on boards of directors, audit committees, and internal auditors. However, the questionnaires should have been distributed more widely were among stakeholders, shareholders, and regulatory bodies in the Saudi Ministry of Commerce and Investment or

the Saudi Capital Market Authority. This was mainly due to accessibility constraints and the limited time available for the study.

The final limitation related to the quantitative approach was that some explanatory and control variables affecting audit quality were not included in the regression models. However, as the aim of this study was not to examine causality, but, rather the association between audit quality and certain corporate governance mechanisms, the effect of this limitation on the findings may be considered to be of insignificant consequence.

## **7.6 SUGGESTIONS FOR FUTURE RESEARCH**

The current study makes significant contributions by investigating the effects of boards of directors, audit committees, and internal auditors on external audit in listed firms in the Saudi context. However, there are some areas that have not been covered by this study. Consequently, the research study as a whole could be extended in several possible ways.

Firstly, the current study could be extended to include Saudi firms not listed in the Tadawul, such as family businesses or small companies. It would also be interesting to compare the effect of some corporate governance characteristics on audit quality with those of other listed firms, since these have similar institutional and legal settings.

Secondly, possible future research could extend to investigate corporate governance and external audit quality in listed companies in SA to gain a better understanding of manipulation and the role of monitoring mechanisms using different audit quality measurement such as earning management. It is vital to study also the same factors affecting audit quality that were examined in this study before, and after, the changes brought in by the new regulations, such as company law, corporate governance code, and the adoption of IFRS and ISA. Corporate governance in Saudi was still in its early stages at the time of the current study, so it is suggested to extend it in the coming years, mainly when all listed companies are fully compliant with the new regulations.

Thirdly, another study could focus on other aspects of governance mechanisms. This study examined the effect of board of directors, audit committee, and internal auditors on audit quality. A future study could study the effect of ownership structure, board of directors' characteristics, audit committees' characteristics, and internal auditors' characteristics on audit quality, such as the formation and quality of the audit, remuneration committees, board

of director formation and effectiveness, and other internal audit functions, by using secondary data, questionnaires, and interviews.

Fourthly, another study could investigate other factors effecting audit quality, such as culture, religion, and regulations.

Future research could focus on the limitations of the current study, such as the size of the sample. A separate study could use questionnaires, annual reports, and interviews to study the effects of other corporate governance mechanisms, such as ownership structures, remuneration committees, audit fees, other internal audit functions, other board of directors' characteristics, and other audit committee characteristics.

Finally, to provide more evidence of the effects of corporate governance mechanisms on external audit quality, future research could investigate this topic in other countries that have similar characteristics to SA, such as the UAE, Qatar, Oman, Kuwait, Bahrain, and other Arab countries.



# Appendices

# Appendix A Interview of External Auditors

University of Southampton  
Accounting Department  
Southampton, UK



## **Interviews for External Auditors:**

- 1- In your opinion, what are the barriers to implementation of external audit procedure in Saudi Arabia?
- 2- Do auditors commit to the requirements of audit quality endorsed by the American Society of Accountants, and the International Federation of Accountants in Saudi Arabia?
- 3- Does the audit size affect the quality of audit in Saudi Arabia listed companies? How?
- 4- Is the training and the professional certificates affect the performance of the external auditor and the quality of external audit? How?
- 5- Is auditor independence affect the quality of the audit in Saudi Arabia? How so?
- 6- Does the length of auditor's tenure for the same client affect auditors' performance? How?
- 7- From your point of view, do the audit procedures is applied effectively in Saudi listed companies in Saudi Arabia?

### **Board of Directors:**

- 8- What is the effect of the Board of Directors on the quality of audits? In terms of the size of the board, meetings, and independence?

### **Audit Committee:**

- 9- What is the effect of the audit committee on the quality of audit? In the term of the size of the audit committee, independence, and existing of financial expertise (at least one).

**Internal audit:**

10- What is the effect of the internal audit on the quality of audit? In the term of the size of the internal audit department, the interaction between external and internal auditors, and internal auditors' experiences?

**Regulators:**

11- Do the laws and regulations related to auditing in Saudi Arabia accord with recent developments in the auditing field?

12- Does the new adoption of international standards (IFRS) affect the quality of external audits positively or negatively? How?

13- How Islamic law (*Shari'ah*) affect the laws and regulations of auditing in Saudi Arabia?

14- Does the Saudi Organization for Certified Public Accountants monitor the works of auditors?

15- Does the Saudi Organization for Certified Public Accountants establish training programs for external auditors?

*\*Note: Additional follow-up questions were asked, as appropriate, with each participant.*



## أسئلة المقابلة الشخصية للمراجعين الخارجيين

### أسئلة المراجع الخارجي

في نظرك ما هي العوامل التي تؤثر على جودة المراجعة في الشركات المساهمة في المملكة العربية السعودية؟  
هل يلتزم المراجع الخارجي بمتطلبات جودة المراجعة التي أقرتها الجمعية الأمريكية للمحاسبين والاتحاد الدولي للمحاسبين؟

تتأثر جودة المراجعة ايجابا عند التعامل مع مكاتب المراجعة الكبرى-مكاتب المراجعة الصغرى؟ برأيك لماذا؟  
ما مدى تأثير التدريب والشهادات المهنية على أداء المراجع الخارجي؟ وكيف يؤثر ذلك على جودة المراجعة الخارجية في مكتبكم؟

كيف تؤثر استقلالية المراجع الخارجي على جودة المراجعة الخارجية في الشركات السعودية المساهمة؟  
ما مدى التزام الشركات المساهمة السعودية في تغيير المراجع الخارجي باستمرار؟ وكيف يؤثر ذلك مستوى جودة المراجعة الخارجية؟

فهل عملية المراجعة يتم تطبيقها بشكل فعال في الشركات السعودية المدرجة في هيئة سوق المال ( تداول)؟ لماذا؟

### مجلس ادارة الشركة

برأيكم كيف يؤثر مجلس إدارة الشركة على عملية المراجعة الخارجية؟ هل تأثير من ناحية عدد أعضاء مجلس الإدارة – الاجتماعات – الاستقلالية؟ وضح ذلك؟

### لجان المراجعة (لجنة التدقيق الداخلي)

برأيكم كيف تؤثر لجنة التدقيق الداخلي على عملية المراجعة الخارجية؟ هل هناك هل تأثير من ناحية عدد أعضاء لجنة المراجعة – الاستقلالية – وجود خبير مالي في الشركة محل المراجعة؟

### التدقيق الداخلي

برأيكم كيف تؤثر لجنة التدقيق الداخلي على عملية المراجعة الخارجية؟ هل هناك هل تأثير من ناحية عدد أعضاء قسم المراجعة الداخلية -تعاون ما بين المدقق الداخلي والمدقق الخارجي -خبرة المراجعين الداخليين؟

### القوانين والتشريعات

هل القوانين واللوائح ذات الصلة بالمراجعة الخارجية في المملكة العربية السعودية تتفق مع التطورات الأخيرة في مهنة المراجعة؟

برأيك هل تبنى قوانين المراجعة الدولية سوف يحدث تغيير في جودة المراجعة الخارجية في الشركات المساهمة؟

- كيف تؤثر الشريعة الإسلامية على القوانين والتشريعات في المراجعة الخارجية؟
- كيف تقوم هيئة المحاسبين القانونيين برقابة الجودة على أعمال مراجعي الحسابات في الشركات السعودية المساهمة؟
- ما مدى التزام هيئة المحاسبين القانونيين بإنشاء برامج تدريبية للمراجعين الخارجيين؟

### **Interview Questions for (SOCPA)**

- 1- Do the laws and regulations related to auditing in Saudi Arabia accord with recent developments in the auditing field?
- 2- Does the new adoption of international standards (IFRS) affect the quality of external audits positively or negatively? How?
- 3- How does Islamic law (Shariyah) affect the laws and regulations of auditing in Saudi Arabia?
- 4- Does the Saudi Organization for Certified Public Accountants monitor the works of auditors?
- 5- Does the Saudi Organization for Certified Public Accountants establish training programs for external auditors?
- 6- From your point of view, is the auditing process applied effectively in Saudi listed firms? What is the best practice for the application of external auditing?

*\*Note: Additional follow-up questions were asked, as appropriate, with each participant.*

### أسئلة المقابلات الشخصية لهيئة المحاسبين القانونيين

#### القوانين والتشريعات

- هل قوانين المحاسبة والمراجعة الدولية في المملكة العربية السعودية تتفق مع التطورات الأخيرة في

المراجعة؟

- ما هو تأثير قوانين المحاسبة والمراجعة الدولية على جودة المراجعة الخارجية في السعودية؟

- برأيك هل تبنى قوانين المراجعة الدولية سرعته تغيير في جودة المراجعة الخارجية في الشركات المساهمة؟

- كيف تؤثر الشريعة الإسلامية على القوانين والتشريعات في المراجعة الخارجية؟

- كيف تقوم هيئة المحاسبين القانونيين برقابة الجودة على أعمال مراجعي الحسابات في الشركات السعودية

المساهمة؟ وما هي اللجان التي تتبثق من الهيئة من أجل تحقيق رقابة فعالة؟

- ما مدى التزام هيئة المحاسبين القانونيين بإنشاء برامج تدريبية للمراجعين الخارجيين؟ وهل يؤثر ذلك على مستوى جودة

المراجعة الخارجية في الشركات السعودية؟

- من وجهة نظرك هل عملية المراجعة يتم تطبيقها بشكل فعال في الشركات السعودية المدرجة؟ وماهي الألية المتلى

لتطبيق المراجعة الخارجية؟

## Appendix B Questionnaire for Board of Directors



University of Southampton

Accounting Department

Southampton, UK

Dear Respondent:

I am a full time PhD student in the Accounting Department of the University of Southampton, United Kingdom. My research is in the interesting and topical area of: “**Factors Affecting External Audit Quality: The Case of Listed Companies in Saudi Arabia**”. I appreciate that although you are an extremely busy person, I ask for your contribution and cooperation by devoting a few moments of your time to completing the enclosed questionnaire. This has been designed specifically so that it can be completed with minimum time and effort. I would be extremely grateful if you would, by completing this questionnaire, contribute towards the successful results of my research, which will hopefully lead to improvements Saudi corporate governance and auditing

May I take this opportunity to thank you in advance and assure you that the details provided in the completed questionnaire will be treated with the utmost confidentiality. The findings of the study will be presented in aggregate form and individual companies or persons will not, under any circumstances, be identifiable.

Please accept, in advance, my best regards and appreciation for your cooperation.

Yours faithfully.

**Rasha Fallatah**

Tel: 0096655xxxxx

## **1. General and Background Information**

### **1- Gender**

☐ Male ☐ Female

### **2- Educational qualification**

☐ Bachelor ☐ Master ☐ Doctorate ☐ Other

### **3- Experience in this job**

☐ less than 5 years ☐ from 5-10 years ☐ from 10 to 15 years  
☐ from 15 to 20 years ☐ more than 20 years

### **4- Audit size**

☐ Big Four ☐ Non-Big Four

### **5- The small board size effects audit quality.**

☐ Yes ☐ No

### **6- The external auditors are rotated off the audit of client every 5 years**

☐ Yes ☐ No

**Factors affecting audit quality related to board of directors:**

Please determine the effect of the following factors on the external audit quality by indicating which one most closely agrees with your view in response to each statement.

Statements		Options				
		Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
<b>Independence of board of director member</b>						
7	Board members do not provide consultation to their company.					
8	Board members are not affiliated with a company that is an adviser or consultant to the company or senior management.					
9	The roles of the chief executive officer and the manager are separated.					
10	The members of the Board of Directors are independent.					
<b>BOD Meetings</b>						
11	The board members attend at least 75 % of meetings, on average.					
12	The firm holds four or more regular board meetings per year.					
13	The board members devote sufficient time to prepare for meetings.					

**Other Factors affecting audit quality:**

- a. Please determine the effect of the following factors on the external audit quality by indicating your level of agreement with the following statements:

Statements		Options				
		Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
<b>External auditor independence</b>						
14	The AC reviews and monitors the independence and effectiveness of the external auditing process.					
15	The external auditor is not exposed to any effects by management when conducting the audit.					
16	External auditors are appointed and/or removed upon the recommendation of the AC.					
17	The Audit Committee resolves any dispute between the external auditor and board of directors.					
18	The AC enhances the independence of the external auditors of the company.					
19	There are no personal relationships or prior knowledge between the client and audit team members.					
<b>Audit quality</b>						
20	The external auditor engaged by your company in recent audit assignments achieved high audit quality.					




<b>External auditors competence</b>						
21	The external auditor with professional experience is able to plan, audit and evaluate the ability of the entity to continue its activity.					
22	Audit team members have high ethical standards.					
23	The majority of audit team members have professional qualification.					
24	The audit team members have experience in the industry of the client.					

## استبانة رسالة دكتوراه

سعادة السيد أو السيدة / ..... الموقر

السلام عليكم ورحمة الله وبركاته ،،

أفيدكم بأنني أحد طلاب برنامج الدكتوراه بقسم المحاسبة بجامعة ساوثمبتون ، وبصدد إجراء دراسة علمية بعنوان : " العوامل التي تؤثر على جودة المراجعة الخارجي في الشركات السعودية المدرجة " استكمالاً لمتطلبات الحصول على درجة الدكتوراه في قسم المحاسبة ، بكلية إدارة الأعمال بجامعة ساوثمبتون في المملكة المتحدة . آمل من سعادتك التكرم بالمشاركة في الإجابة عن الاستبانة المرفقة بكل وضوح ودقة من واقع المهنة التي تعملون بها، علماً بأن إجاباتكم سوف تعامل بسرية تامة ولن تستخدم إلا لأغراض هذه الدراسة ، كما أرجو إعادة هذه الاستبانة بعد اكتمال الإجابات الى الباحث .

يمكن التواصل مع الباحث على الجوال  (0096655xxxxxxx)

مع الشكر سلفاً على ما تقدمونه من معلومات وجهد صادق سيسهم في إثراء البحث ،،

الباحثة  
رشا عبد الرحمن فلاته

أولاً: البيانات الشخصية:

أرجو التكرم بوضع علامة (√) في الخانة المناسبة لبياناتك الشخصية :

1. الجنس:

☐ ذكر ☐ أنثى

2. الدرجة العلمية:

☐ بكالوريوس ☐ ماجستير

☐ دكتوراه ☐ أخرى

3. مدة الخبرة العملية:

☐ أقل من 5 سنوات. ☐ من 5 إلى أقل من 10 سنوات.

☐ من 10 إلى أقل من 15 سنة. ☐ من 15 سنة الى 20 سنة.

☐ أكثر من 20 سنة.

4. حجم مكتب المراجعة

☐ مكاتب مراجعة كبرى ☐ مكاتب محلية

5. مجالس الإدارة الصغيرة تؤثر على جودة المراجعة الخارجية.

☐ نعم ☐ لا

6. يتم تغيير أعضاء فريق المراجعة للعميل كل خمس سنوات

☐ نعم ☐ لا

## محاوّر الاستبانة: القسم الثاني

المحور الأول: العوامل المؤثرة على جودة المراجعة الخارجية.

✓ ارجو تحديد مدى تأثير العوامل التالية على جودة المراجعة الخارجية، وذلك بوضع علامة (✓) في الخانة التي ترونها مناسبة .

خيارات الإجابة					العوامل	م
موافق بشدة	أوافق	محايد	لا أوافق	لا أوافق إطلاقا		
استقلالية أعضاء مجلس الإدارة						
					لا يقدم أعضاء مجلس الإدارة أي استشارات للمنشأة	7.
					أعضاء مجلس الإدارة لا ينتسبون لأي شركة تقدم استشارات للمنشأة أو الإدارة.	8.
					سياسة المنشأة تفصل بين وظيفتي إدارة الشركة ورئاسة مجلس الإدارة.	9.
					أعضاء مجلس إدارة المنشأة محل المراجعة مستقلين	10.
اجتماعات مجلس إدارة الشركة						
					يحضر عضو مجلس الإدارة على الأقل 75% من اجتماعات اللجنة.	11.
					يعقد مجلس إدارة الشركة أربعة اجتماعات على الأقل في السنة.	12.
					يكرس عضو مجلس الإدارة الوقت الكافي للقيام بالتحضير للاجتماعات.	13.
استقلالية المراجع الخارجي						
					لجنة المراجعة تراجع وتراقب استقلال وفعالية عملية التدقيق الخارجي.	14.
					لا يتعرض المدقق الخارجي لأي تأثيرات من الإدارة العليا عند القيام بتنفيذ الأعمال.	15.
					يتم تعيين واعفاء المدققين الخارجيين بناء على توصيات لجنة المراجعة.	16.
					تقوم لجنة المراجعة بفصل أي نزاع بين المدقق الخارجي والإدارة العليا.	17.
					تساهم لجنة المراجعة في تحسين استقلالية المدققين الخارجيين.	18.

م	العوامل	خيارات الإجابة			
		موافق بشدة	أوافق	محايد	لا أوافق إطلاقاً
19.	هناك علاقات شخصية أو معرفة سابقة بين العميل و من ينوب عنه و أعضاء مكتب المراجعة.				
جودة المراجعة					
20.	المدقق الخارجي المتعين من قبل المنشأة يقدم جودة عالية في التدقيق.				
كفاءة المدقق الخارجي					
21.	المدقق الخارجي الحاصل على شهادات مهنية يستطيع ان يخطط لعملية المراجعة و يقيم قدرة المنشأة على إكمال نشاطها				
22.	أعضاء فريق التدقيق الخارجي لديهم مبادئ أخلاقيات المهنة عالية.				
23.	معظم أعضاء فريق التدقيق الخارجي لديهم شهادات مهنية				
24.	أعضاء فريق التدقيق الخارجي لديهم خبرة في المنشأة محل المراجعة.				

مع خالص شكري وتقديري لاستجاباتكم الكريمة,,, الباحثة

## Appendix C      Questionnaire for Audit Committees



University of Southampton  
Accounting Department  
Southampton, UK

Dear participant:

I am a full time PhD student in the Accounting Department of the University of Southampton, United Kingdom. My research is in the interesting and topical area of: “**Factors Affecting External Audit Quality: The Case of Listed Companies in Saudi Arabia**”. I appreciate that although you are an extremely busy person, I ask for your contribution and cooperation by devoting a few moments of your time to completing the enclosed questionnaire. This has been designed specifically so that it can be completed with minimum time and effort. I would be extremely grateful if you would, by completing this questionnaire, contribute towards the successful results of my research, which will hopefully lead to improvements Saudi corporate governance and auditing

May I take this opportunity to thank you in advance and assure you that the details provided in the completed questionnaire will be treated with the utmost confidentiality. The findings of the study will be presented in aggregate form and individual companies or persons will not, under any circumstances, be identifiable.

Please accept, in advance, my best regards and appreciation for your cooperation.

Yours faithfully.

**Rasha Fallatah**

Tel: 0096655xxxxxx

## **1. General and Background Information**

### **1- Educational qualifications**

☐ Bachelor      ☐ Master      ☐ Doctorate      ☐ Other

### **2- Experience in this job**

☐ Less than 5 years      ☐ from 5-10 years      ☐ from 10 to 15 years

☐ From 15 to 20 years      ☐ more than 20 years

### **3- Major**

☐ Accounting      ☐ Finance      ☐ Economics

☐ Marketing      ☐ Management      ☐ Others

### **4- Do you have any professional certificates (CPA, ACCA, CA, CMA, etc.).**

☐ Yes      ☐ No

### **5- Do you have any experience in Finance or Accounting?**

☐ Yes      ☐ No

### **6- Audit size**

☐ Big Four      ☐ Non-Big Four

### **7- The external auditors are rotated off the audit of client every 5 years**

☐ Yes      ☐ No

## Factors affecting audit quality related to audit committee

Please determine the effect of the following factors on the external audit quality by indicating your level of agreement with the following statements:

Statements		Options				
		Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
<b>AC Financial Expertise</b>						
8	The AC members have sufficient knowledge of the entity's business.					
9	The AC members have sufficient knowledge of accounting and/or auditing practices.					
10	The AC members have sufficient experience in accounting and/or auditing.					
<b>AC Meetings</b>						
11	The chairperson finalizes the agendas of the AC meetings.					
12	The frequency of the AC meetings is sufficient to carry out its responsibilities.					
13	The AC meets with the external auditors, without the presence of the management, to discuss any issues, problems or reservations arising from the audit.					



## Other factors affecting audit quality

Please determine the effect of the following factors on the external audit quality by indicating your level of agreement with the following statements:

Statements		Options				
		Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
<b>External auditors competence</b>						
14	The external auditor with professional experience is able to plan, audit and evaluate the ability of the entity to continue its activity.					
15	Audit team members have high ethical standards.					
16	The majority of audit team members have professional qualification					
17	The audit team members have experience in the industry of the client.					
<b>Audit Quality</b>						
18	The external auditor engaged by your company in recent audit assignments achieved high audit quality.					
<b>Independent of external auditors</b>						
19	The AC reviews and monitors the independence and effectiveness of the external auditing process.					
20	The external auditor is not exposed to any effects by management when conducting the audit.					
21	External auditors are appointed and/or removed upon the recommendation of the AC.					
22	The Audit Committee resolves any dispute between the external auditor and board of directors.					


23	The AC enhances the independence of the external auditors of the company.					
24	There are no personal relationships or prior knowledge between the client and audit team members.					

## استبانة رسالة دكتوراه

سعادة السيد أو السيدة / .....الموكر

السلام عليكم ورحمة الله وبركاته ،،

أفيدكم بأنني أحد طلاب برنامج الدكتوراه بقسم المحاسبة بجامعة ساوثمبتون ، وبصدد إجراء دراسة علمية بعنوان : " العوامل التي تؤثر على جودة المراجعة الخارجية في الشركات السعودية المدرجة " استكمالاً لمتطلبات الحصول على درجة الدكتوراه في قسم المحاسبة ، بكلية إدارة الأعمال بجامعة ساوثمبتون في المملكة المتحدة . أمل من سعادتكم التكرم بالمشاركة في الإجابة عن الاستبانة المرفقة بكل وضوح ودقة من واقع المهنة التي تعملون بها، علماً بأن إجاباتكم سوف تعامل بسرية تامة ولن تستخدم إلا لأغراض هذه الدراسة ، كما أرجو إعادة هذه الاستبانة بعد اكتمال الإجابات الى الباحث .

يمكن التواصل مع الباحث على الجوال  (00966655xxxxxxx)

مع الشكر سلفاً على ما تقدمونه من معلومات وجهد صادق سيسهم في إثراء البحث ،،

الباحثة  
رشا عبد الرحمن فلاته

أولاً : البيانات الشخصية :

أرجو التكرم بوضع علامة (√) في الخانة المناسبة لبياناتك الشخصية :

1. الدرجة العلمية :

- ☐ بكالوريوس ☐ ماجستير .  
☐ دكتوراه ☐ أخرى

2. مدة الخبرة العملية :

- ☐ أقل من 5 سنوات . ☐ من 5 إلى أقل من 10 سنوات .  
☐ من 10 إلى أقل من 15 سنة . ☐ من 15 سنة الى 20 سنة .  
☐ أكثر من 20 سنة .

3. التخصص

- ☐ محاسبة ☐ مالية  
☐ اقتصاد ☐ تسويق  
☐ إدارة ☐ أخرى

4. هل لديك أي من الشهادات المهنية التالية : ACCA,CPA,CMA,CFA, CA, etc

- ☐ نعم ☐ لا

5. هل لديك أي خبرة عملية في المراجعة – المالية – المحاسبة؟

- ☐ نعم ☐ لا

6. حجم مكتب المراجعة

- ☐ مكاتب محلية ☐ مكاتب المراجعة الكبرى

7. يتم تغيير أعضاء فريق المراجعة للعمل كل خمس سنوات

- ☐ نعم ☐ لا

ثانياً: محاور الاستبانة

✓ ارجو تحديد مدى تأثير لجنة المراجعة على جودة المراجعة , وذلك بوضع علامة (√) في الخانة التي ترونها مناسبة .

م	العوامل	خيارات الإجابة			
		أوافق بدرجة عالية	أوافق	محايد	لا أوافق إطلاقاً
الخبرات المالية لدى أعضاء لجنة المراجعة					
8.	أعضاء لجنة المراجعة لديهم معرفة كافية عن نشاط واعمال المنشأة.				
9.	أعضاء لجنة المراجعة لديهم معرفة كافية عن الممارسات المحاسبية و/ أو المراجعة.				
10.	أعضاء لجنة المراجعة لديهم خبرة كافية عن المحاسبة و/ أو المراجعة.				
اجتماعات لجنة المراجعة					
11.	يقوم رئيس لجنة المراجعة بمراجعة أجندة اجتماعات اللجنة.				
12.	عدد اجتماعات لجنة المراجعة كافي لأداء مهامها.				
13.	تجتمع لجنة المراجعة مع المدققين الخارجيين بدون حضور الإدارة لمناقشة أي قضايا أو مشاكل متعلقة بعملية مراجعة الحسابات.				
كفاءة المدقق الخارجي					
14.	المدقق الخارجي الحاصل على شهادات مهنية يستطيع ان يخطط لعملية المراجعة و يقيم قدرة المنشأة على إكمال نشاطها				
15.	أعضاء فريق التدقيق الخارجي لديهم مبادئ أخلاقيات المهنة عالية.				
16.	معظم أعضاء فريق التدقيق الخارجي لديهم شهادات مهنية				
17.	أعضاء فريق التدقيق الخارجي لديهم خبرة في المنشأة محل المراجعة.				
جودة المراجعة					
18.	المدقق الخارجي المتعين من قبل المنشأة يقدم جودة عالية في التدقيق.				

م	العوامل	خيارات الإجابة			
		أوافق بدرجة عالية	أوافق	محايد	لا أوافق إطلاقاً
<b>استقلالية المراجع الخارجي</b>					
19.	لجنة المراجعة تراجع وتراقب استقلال وفعالية عملية التدقيق الخارجي.				
20.	لا يتعرض المدقق الخارجي لأي تأثيرات من الإدارة العليا عند القيام بتنفيذ الأعمال.				
21.	يتم تعيين واعفاء المدققين الخارجيين بناء على توصيات لجنة المراجعة.				
22.	تقوم لجنة المراجعة بفصل أي نزاع بين المدقق الخارجي والإدارة العليا.				
23.	تساهم لجنة المراجعة في تحسين استقلالية المدققين الخارجيين.				
24.	هناك علاقات شخصية أو معرفة سابقة بين العميل و من ينوب عنه و أعضاء مكتب المراجعة.				

مع خالص شكري وتقديري لاستجاباتكم الكريمة,,, الباحثة

## Appendix D      Questionnaire for Internal Auditors



University of Southampton  
Accounting Department  
Southampton, UK

Dear participant:

I am a full time PhD student in the Accounting Department of the University of Southampton, United Kingdom. My research is in the interesting and topical area of: “**Factors Affecting External Audit Quality: The Case of Listed Companies in Saudi Arabia**”. I appreciate that although you are an extremely busy person, I ask for your contribution and cooperation by devoting a few moments of your time to completing the enclosed questionnaire. This has been designed specifically so that it can be completed with minimum time and effort. I would be extremely grateful if you would, by completing this questionnaire, contribute towards the successful results of my research, which will hopefully lead to improvements Saudi corporate governance and auditing

May I take this opportunity to thank you in advance and assure you that the details provided in the completed questionnaire will be treated with the utmost confidentiality. The findings of the study will be presented in aggregate form and individual companies or persons will not, under any circumstances, be identifiable.

Please accept, in advance, my best regards and appreciation for your cooperation.

Yours faithfully.

**Rasha Fallatah**

Tel: 0096655xxxxxx

## **1. General and Background Information**

### **1- Gender**

☐ Male

☐ Female

### **Educational qualifications**

☐ Bachelor

☐ Master

☐ Doctorate

☐ Other

### **3- Experience in this job**

☐ Less than 5 years

☐ from 5-10 years

☐ from 10 to 15 years

☐ From 15 to 20 years

☐ more than 20 years

### **Audit Size**

☐ Big Four

☐ Non- Big Four

**The external auditors are rotated off the audit of clients every 5 years**

☐ Yes

☐ No



# 1. Competence of Internal Auditors:

Please determine the effect of the internal auditor's effectiveness on the external audit quality, by marking (✓) in the box that you deem appropriate.

Statements		Options				
		Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
<b>Internal auditors competence</b>						
6	Members of the internal audit team should have appropriate levels of professional experience, skill and competence.					
7	Competence of the members of the internal audit is represented by academic certificates.					
8	The internal auditor has a CIA.					
9	The internal auditor has obtained the membership of the Institute of Internal Auditor (IIA).					
10	The number of members of the internal audit team have certificates					
11	The availability of an effective system of continuous education and training for internal auditors.					

## 2. Factors affect the external audit quality

Please determine the effect of the following factors on the external audit quality by indicating your level of agreement with the following statements:


Statements		Options				
		Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
<b>Size of internal auditors department</b>						
12	The size of the internal audit department.					
13	The age of the internal audit department.					
14	The number of people in internal auditors department who help to investigate the deficiencies of internal control system.					
<b>External auditors competence</b>						
15	The external auditor with professional experience is able to plan, audit and evaluate the ability of the entity to continue its activity.					
16	Audit team members have high ethical standards.					
17	The majority of audit team members have professional qualification					
18	The audit team members have experience in the industry of the client.					
<b>Audit Quality</b>						
19	The external auditor engaged by your company in recent audit assignments achieved high audit quality.					

## استبانة رسالة دكتوراه

سعادة السيد أو السيدة / .....الموقر

السلام عليكم ورحمة الله وبركاته،،

أفيدكم بأنني أحد طلاب برنامج الدكتوراه بقسم المحاسبة بجامعة ساوثمبتون ، وبصدد إجراء دراسة علمية بعنوان : " العوامل التي تؤثر على جودة المراجعة الخارجية في الشركات السعودية المدرجة " استكمالاً لمتطلبات الحصول على درجة الدكتوراه في قسم المحاسبة ، بكلية إدارة الأعمال بجامعة ساوثمبتون في المملكة المتحدة . أمل من سعادتكم التكرم بالمشاركة في الإجابة عن الاستبانة المرفقة بكل وضوح ودقة من واقع المهنة التي تعملون بها، علماً بأن إجاباتكم سوف تعامل بسرية تامة ولن تستخدم إلا لأغراض هذه الدراسة ، كما أرجو إعادة هذه الاستبانة بعد اكتمال الإجابات الى الباحث .

يمكن التواصل مع الباحث على الجوال  (0096655xxxxxxx)

مع الشكر سلفاً على ما تقدمونه من معلومات وجهد صادق سيسهم في إثراء البحث ،،

الباحثة

رشا عبد الرحمن فلاته

أولاً : البيانات الشخصية :

أرجو التكرم بوضع علامة (√) في الخانة المناسبة لبياناتك الشخصية :

1. الجنس :

☐ ذكر . ☐ أنثى .

2. الدرجة العلمية :

☐ بكالوريوس ☐ ماجستير  
☐ دكتوراه ☐ أخرى

3. مدة الخبرة العملية :

☐ أقل من 5 سنوات . ☐ من 5 إلى أقل من 10 سنوات .  
☐ من 10 إلى أقل 15 سنة . ☐ من 15 سنة الى 20 سنة .  
☐ أكثر من 20 سنة

4. حجم مكتب المراجعة

☐ مكاتب مراجعة كبرى ☐ مكاتب محلية

5. يتم تغيير أعضاء فريق التدقيق الخارجي للعميل كل خمس سنوات

☐ نعم ☐ لا

القسم الثاني: محاور الاستبانة

المحور الأول: كفاءة المدقق الداخلي

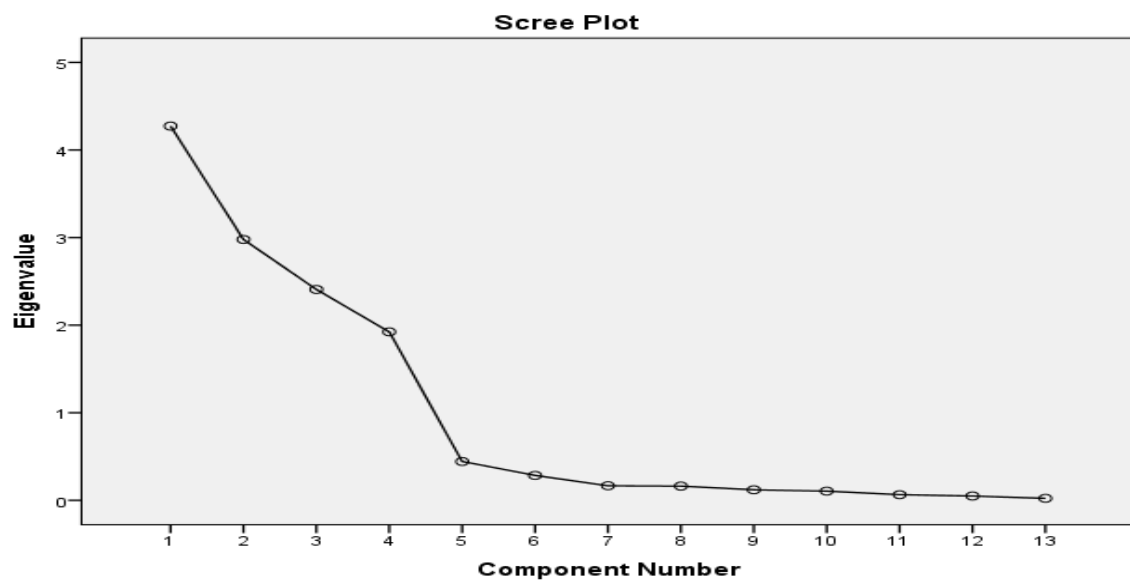
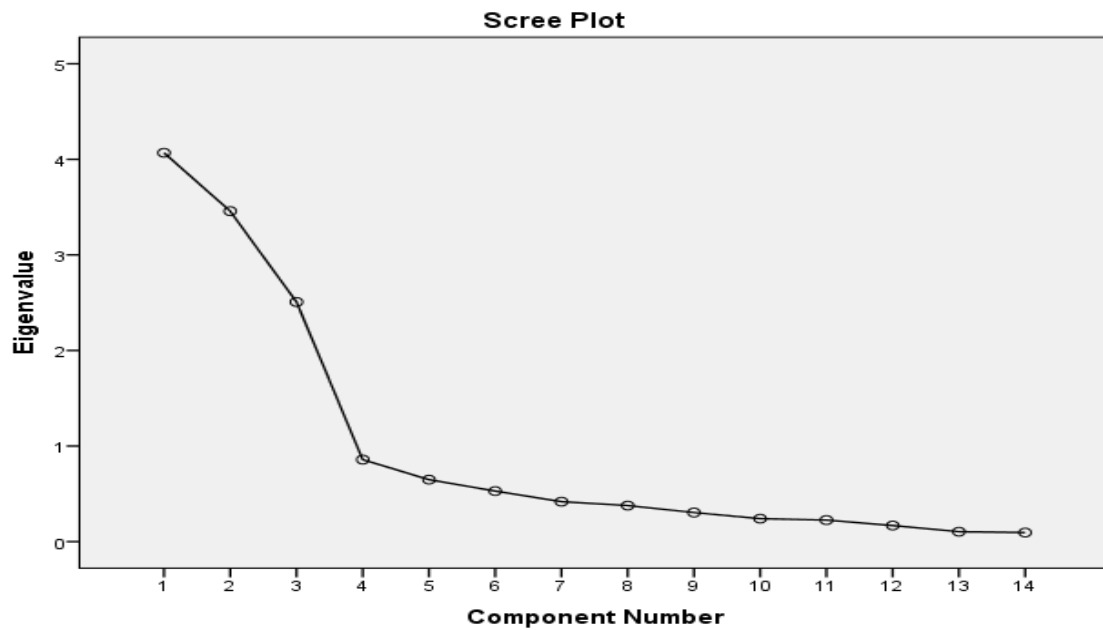
✓ ارجو تحديد مدى تأثير كفاءة المدقق الداخلي على جودة المراجعة الخارجية , وذلك بوضع علامة ( √ ) في الخانة التي ترونها مناسبة .

م	العوامل	خيارات الإجابة			
		يؤثر بدرجة عالية	يؤثر	محايد	لا يؤثر إطلاقاً
كفاءة المدقق الداخلي					
6.	توافر مستوى ملائم من الخبرة المهنية والمهارة والكفاءة لدى أعضاء فريق التدقيق الداخلي.				
7.	الكفاءة العلمية لأعضاء التدقيق الداخلي متمثلة بالشهادات الأكاديمية.				
8.	المدقق الداخلي حاصل على CIA.				
9.	المدقق الداخلي حاصل على عضوية معهد المحاسبين الداخليين (IIA).				
10.	المدقق الداخلي حاصل على بعض الشهادات المهنية مثل CPA-ACCA.				
11.	توافر نظام فعال للتعليم والتدريب المستمر للمراجعين الداخليين.				

المحور الثاني: العوامل التي قد تؤثر على جودة المراجعة الخارجية  
 ارجو تحديد مدى تأثير العوامل التالية على جودة المراجعة الخارجية , وذلك بوضع علامة (✓) في الخانة التي ترونها مناسبة .

م	العوامل	خيارات الإجابة			
		لا يؤثر إطلاقاً	لا يؤثر	محايد	يؤثر بدرجة عالية
12.	حجم قسم المراجعة الداخلية.				
13.	قدامة قسم المراجعة الداخلية				
14.	عدد الأعضاء التدقيق الداخلي القادرين على التحقق من أي ضعف في نظام الرقابة الداخلية.				
كفاءة المدقق الخارجي					
15.	المدقق الخارجي الحاصل على شهادات مهنية يستطيع ان يخطط لعملية المراجعة و يقيم قدرة المنشأة على إكمال نشاطها				
16.	أعضاء فريق التدقيق الخارجي لديهم مبادئ أخلاقيات المهنة عالية.				
17.	معظم أعضاء فريق التدقيق الخارجي لديهم شهادات مهنية				
18.	أعضاء فريق التدقيق الخارجي لديهم خبرة في المنشأة محل المراجعة.				
جودة المراجعة					
19.	المدقق الخارجي المتعين من قبل المنشأة يقدم جودة عالية في التدقيق.				

## Appendix E    Scree plots for Principal components (BOD- AC- IA)



## Appendix F      Test of normality for all questionnaires

Questions (Board of Directors Survey)	Kolmogorov-Smirnov	Shapiro-Wilk
<b>Test of Normality for first group of questions</b>		
1-Board members do not provide consultation to their company	0.001	0.018
2- Board members are not affiliated with a company that is an adviser or consultant to the company or senior management.	0.023	0.105
3- The roles of the chief executive officer and the manager are separated.	0.002	0.022
4- The members of the Board of Directors are independent.	0.000	0.004
<b>Test of Normality for second group of questions</b>		
1- The AC reviews and monitors the independence and effectiveness of the external auditing process.	0.004	0.010
2- The external auditor is not exposed to any effects by management when conducting the audit	0.000	0.002
3- External auditors are appointed and/or removed upon the recommendation of the AC.	0.002	0.026
4- The Audit Committee resolve any dispute between the external auditor and board of directors.	0.131	0.198
5- The AC enhances the independence of the external auditors of the company.	0.200	0.379
6- There are no personal relationships or prior knowledge between the client and audit team members.	0.000	0.000
<b>Test of Normality for third group of questions</b>		
1- The external auditor engaged by your company in recent audit assignments achieved high audit quality.	0.000	0.000
2- The external auditor with professional experience is able to plan, audit and evaluate the ability of the entity to continue its activity.	0.026	0.006
3- Audit team members have high ethical standards.	0.000	0.000
4- The majority of audit team members have professional qualification.	0.000	0.002
5- The audit team members have experience in the industry of the client.	0.089	0.055



Questions (Audit Committee Survey)	Kolmogorov-Smirnov	Shapiro-Wilk
<b>Test of Normality for third group of question</b>		
1- The AC members have sufficient knowledge of the entity's business.	0.004	0.010
2- The AC members have sufficient knowledge of accounting and/or auditing practices.	0.009	0.002
3- The AC members have sufficient experience in accounting and/or auditing.	0.002	0.026
<b>Test of Normality for third group of questions</b>		
1- The external auditor with professional experience is able to plan, audit and evaluate the ability of the entity to continue its activity.	0.004	0.010
2- Audit team members have high ethical standards.	0.000	0.000
3- The majority of audit team members have professional qualification	0.002	0.000
4- The audit team members have experience in the industry of the client.	0.000	0.000
<b>Test of Normality for third group of questions</b>		
1- The chairperson finalizes the agendas of the AC meetings.	0.008	0.007
2- The frequency of the AC meetings is sufficient to carry out its responsibilities.	0.000	
3- The AC meets with the external auditors, without the presence of the management, to discuss any issues, problems or reservations arising from the audit.	0.000	0.001
<b>Test of Normality for fourth group of questions</b>		
1- The AC reviews and monitors the independence and effectiveness of the external auditing process.	0.000	0.000
2- The external auditor is not exposed to any effects by management when conducting the audit.	0.011	0.007
3- External auditors are appointed and/or removed upon the recommendation of the AC.	0.000	0.000
4- The Audit Committee resolves any dispute between the external auditor and board of directors.	0.000	0.002
5- The AC enhances the independence of the external auditors of the company.	0.000	0.000
6- There are no personal relationships or prior knowledge between the client and audit team members.	0.000	0.005

Questions (internal auditors Survey)	Kolmogorov-Smirnov	Shapiro-Wilk
<b>Test of Normality for first group of questions</b>		
1-Members of the internal audit team should have appropriate levels of professional experience, skill and competence.	0.000	0.000
2-Competence of the members of the internal audit is represented by academic certificates.	0.011	0.007
3-The internal auditor has a CIA.	0.000	0.000
4-The internal auditor has obtained the membership of the Institute of Internal Auditor (IIA).	0.000	0.002
5-The number of members of the internal audit team have certificates	0.030	0.000
6-The availability of an effective system of continuous education and training for internal auditors.	0.000	0.005
7-Members of the internal audit team should have appropriate levels of professional experience, skill and competence.	0.000	0.000
<b>Test of Normality for first group of questions</b>		
1The external auditor with professional experience is able to plan, audit and evaluate the ability of the entity to continue its activity.	0.000	0.000
2-Audit team members have high ethical standards.	0.011	0.017
3-The majority of audit team members have professional qualification	0.000	0.000
4-The audit team members have experience in the industry of the client.	0.009	0.002
5-The external auditor with professional experience is able to plan, audit and evaluate the ability of the entity to continue its activity.	0.000	0.000
6-Audit team members have high ethical standards.	0.000	0.005



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