

**CORPORATE GOVERNANCE AND AUDITOR CHOICE  
AMONG COMPANIES IN GCC COUNTRIES**

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**DOCTOR OF PHILOSOPHY  
UNIVERSITI UTARA MALAYSIA  
June 2013**

**CORPORATE GOVERNANCE AND AUDITOR CHOICE AMONG  
COMPANIES IN GCC COUNTRIES**

**By**

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**Thesis Submitted to  
Othman Yeop Abdullah Graduate School of Business  
Universiti Utara Malaysia  
in Fulfillment of the Requirement for the Degree of Doctor of Philosophy**

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## ABSTRACT

This thesis examines two separate studies—auditor change and auditor selection determinants among public listed companies in the *Gulf Cooperation Council (GCC)* for the period of 2005-2010. The models were developed using the frameworks of the agency theory, the managerial grid theory, the attraction-selection-attrition framework and the information suppression hypothesis to examine the associations of three categories of determinants with the decisions of auditor change and selection. The first category of determinants is the corporate governance mechanisms: board of directors' effectiveness score (board of directors independence, size, financial expertise, meetings, nationality, international experience and CEO duality), audit committee's effectiveness score (audit committee independence, size, financial expertise, meetings, nationality and international experience), government ownership, family ownership, and domestic corporate ownership. The second category of determinant is the audit-specific characteristic: audit fee. The third category of determinants is the firm-specific characteristics: firm size, leverage, firm performance, and management change. For the auditor change model, the results show that the board of directors' effectiveness score, family ownership, firm size, and leverage are significantly associated with the incidence of auditor change. As for the auditor selection model, the results indicate that the family ownership, domestic corporate ownership, audit fees, firm performance, and management change are significantly related to audit quality. This study finds that the economic and the behavioral issues are related to audit demand in *GCC*. Additionally, the study suggests that regulators, especially the *GCC* stock exchanges, should mandate companies to disclose all relevant information related to auditor change in a transparent and timely manner, and increase law enforcement to enhance good corporate governance practices. For companies, this study proposes that they should emphasize more on enhancing the role and the quality of the board of directors and the audit committee members, as they are involved in the both decisions of auditor change and selection.

**Keywords:** corporate governance, auditor choice, *GCC*

## ABSTRAK

Tesis ini mengandungi dua kajian yang berbeza—penentu keputusan pertukaran juruaudit dan pemilihan juruaudit di kalangan syarikat awam tersenarai di negara *Gulf Cooperation Council (GCC)*. Model kajian telah dibangunkan dengan menggunakan kerangka kerja teori agensi, teori gerid pengurusan, kerangka kerja tarikan-pemilihan-pergeseran dan hipotesis kawalan maklumat. Kategori penentu yang pertama ialah mekanisma pentadbiran korporat. Ini termasuk skor keberkesanan lembaga pengarah (kebebasan lembaga pengarah, saiz, kepakaran kewangan, bilangan mesyuarat, kewarganegaraan, pengalaman antarabangsa dan dwi-CEO), pemilikan kerajaan, pemilikan keluarga dan pemilikan korporat domestik. Kategori penentu kedua adalah ciri khusus audit; iaitu yuran audit. Kategori ketiga pembolehubah adalah ciri khusus syarikat; saiz syarikat, keberhutangan, prestasi syarikat dan pertukaran pengurusan. Bagi model pertukaran juruaudit, skor keberkesanan lembaga pengarah, pemilikan keluarga, saiz firma audit dan keberhutangan boleh dikaitkan secara signifikan dan konsisten dengan pertukaran juruaudit. Untuk model pemilihan juruaudit, pemilikan keluarga, pemilikan korporat domestik, yuran audit, prestasi syarikat dan pertukaran pengurusan berkait secara signifikan dengan kualiti audit. Kajian ini mendapati penentu ekonomi dan tingkahlaku berhubungkait dengan permintaan audit di *GCC*. Kajian ini juga mengutarakan bahawa pihak perundangan terutamanya bursa saham di *GCC* perlu menetapkan syarikat mengisytiharkan semua maklumat yang relevan, yang berkaitan dengan pertukaran juruaudit secara telus dan pada masa yang tepat, serta mempertingkatkan lagi pelaksanaan undang-undang bagi memperbaiki lagi amalan pentadbiran korporat. Untuk pihak syarikat, kajian ini mencadangkan bahawa mereka perlu memberi lebih penekanan kepada tindakan meningkatkan peranan dan kualiti mutu lembaga pengarah dan ahli jawatankuasa audit disebabkan oleh penglibatan mereka dalam keputusan menukarkan dan memilih juruaudit.

**Kata Kunci:** pentadbiran korporat, pilihan juruaudit, *GCC*

## ACKNOWLEDGEMENTS

### **In the name of Allah, the Most Gracious and Most Merciful**

Praise to Allah, Lord of the universe for his bounties and bestowed upon us. Peace be upon Prophet Mohammed S.A.W. the sole human inspiration worthy of imitation.

Allah has called Himself Aleem (All-Knowing) and He also called some of His slaves Aleem. So, One Aleem is not like the other. He said, '*We raise to degrees whom We please, but over all those endowed with knowledge is the All-Knowing (Allah)*'

[Soorah Yusuf (12): 76].

After praising Allah for the strength and endurance provided to me to complete this thesis, my excessive gratefulness is to my parents who bless me all the time and work for my best since I was born.

Firstly and foremost, I would to render my utmost appreciation and gratitude to my supervisor, Dr. Shamharir Abidin, for his earnest guidance and advice in construction my thesis process by process as well as his tolerance and persistence in imparting his knowledge to his students. I also would like to express my deep appreciation and gratitude to my co-supervisor, Assoc. Prof. Dr. Nor Aziah Binti Abdul Manaf, for her guidance and advice in crafting this research. Without their understanding, consideration and untiring advice, this thesis would not have been completed successfully.

I wish to express my deep gratitude to my proposal defense reviewers; Dr. Noor Afza Amran and Dr. Mohd‘Atef Md Yusof for their valuable comments and recommendations. I am also highly indebted to Professor Dan A. Simunic and Assoc. Prof. Dr. Wan Nordin Wan Hussin for their advice and comments on my PhD proposal during the Journal of Contemporary Accounting and Economics conference and doctoral consortium in January 2012. My thanks and appreciations also go to the discussants of my paper and PhD proposal; Dr. Effiezal Aswadi Abdul Wahab and Dr. Zunaidah Sulong for their useful comments during the 14th Malaysia Finance Association conference and postgraduate colloquium in June 2012. I would like also to express my deep gratitude to the chairman of the session; Mr. Bader Naser Al-Sabai, the deputy manager of Investment Companies Union (ICU) in Kuwait during the 3rd Professional Conference in Accounting and Auditing in December 2012 in Kuwait.

I also would like to express my grateful appreciation to my UUM lecturers who have imparted me valuable knowledge during the time of my master program at UUM. I must admit the assistance of UUM academic and administrative staff in completing this journey. I also must admit and thank for the continuous supports that I received from my wife, son, brothers, sisters, my entire family, relatives and friends in completing this thesis.

My heartfelt appreciation to all those involved in making this thesis a reality and those who have contributed towards this profound learning experience.

I owe thanks and appreciation to all those people, thank so much.

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## LIST OF ABBREVIATIONS

<b>Abb.</b>	<b>Full List</b>
AAA	- American Accounting Association
AC	- Audit Committee
ADSM	- Abu Dhabi Securities Market
AML	- Anti-Money Laundering
BMA	- Bahrain Monetary Agency
BSAA	- Bahrain Society of Accountants and Auditors
CCG	- Code of Corporate Governance
CTF	- Counter-Terrorist Financing
DFM	- Dubai Financial Market
E&Y	- Ernst & Young
ESCA	- Emirates Securities and Commodities Authority
FTAs	- Free Trade Agreements
GCC	- Gulf Co-operation Council
GCCAAO	- Cooperation Council Accounting and Auditing Organization
GDP	- Gross Domestic Product
GLC	- Government-Linked Companies
IASs	- International Accounting Standards
IFC	- International Financial Corporations
INSEAD	- Institut Européen d'Administration des Affaires (The Business School of the World)
MENA	- Middle East and the North-African
MNCs	- Multinational Corporations
MSM	- Muscat Security Market
OECD	- Organization for Economic Co-operation and Development
OLS	- Ordinary Least Square
PTC	- Permanent Technical Committee
PwC	- PricewaterhouseCoopers
QCB	- Qatar Central Bank
QFMA	- Qatar Financial Markets Authority
ROA	- Return on Assets
RTAs	- Regional Trade Agreements
SAAs	- Saudi Accounting Standards
SAGIA	- General Investment Authority
SOCPA	- Saudi Organization for Certified Public Accountants
SOEs	- State-Owned Enterprises
TNI	- The National Investor
UAEAAA	- UAE Accountants and Auditors Association
UAECB	- UAE Central Bank
WTO	- World Trade Organization

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the Study**

This thesis examines similar determinants influencing two related decisions: auditor change (Model 1) and auditor selection (Model 2) in a unique country setting—the GCC—in two periods, preceding and subsequent to both decisions. Both models are developed using individual and combined economic and behavioral theoretic perspectives. These include the frameworks of agency theory and its related hypotheses; managerial grid theory; attraction-selection-attrition; and information suppression. All of these have been used to explain the association of corporate governance mechanisms (board of directors effectiveness, audit committee effectiveness, government ownership, family ownership, and domestic corporate ownership), an audit-specific characteristic (audit fee), and firm-specific characteristics (firm size, leverage, firm performance, and management change) with the decision of auditor change and selection.

#### **1.1.1 What Would Happen if Auditors were not There?**

In modern companies, ownership is separated from control. In this case, potential conflicts of interest and information asymmetry arise between owners and managers, as well as among different classes of security holders. For that reason, auditors work as

agents for the shareholders and should be independent from management in order to reduce the levels of the potential conflict and information asymmetry. They monitor and testify to the accuracy, credibility, and reliability of the company's financial statements (e.g., Beattie & Fearnley, 1995; Jensen & Meckling, 1976; Watts & Zimmerman, 1981) in a business environment that is characterized by complexity of business structure, globalization activities, and remoteness of finance providers (Armstrong, 1987). Therefore, auditors represent a key role in the economy (e.g., Abidin, Beattie & Goodacre, 2010; Leong, Huang, & Hsu, 2003), as their work has an economic value (Chow, 1982; Sundem *et al.*, 1996).

Wallace (1981) indicates that improving audit quality as part of the company's internal processes could achieve the following benefits: (1) improve operational efficiency and effectiveness, (2) detect any malfeasance and attest to the accountability and stewardship of the company's management (Chandler, Edwards, & Anderson, 2008), and (3) enhance the level of compliance with legal and regulatory constraints. And (4) involve the company in several market activities.

Hence, the greater the quality of the audit, the greater the probability that the auditor detects and reports accounting irregularities, and the greater the audit's value to the contracting parties (e.g., DeAngelo, 1981a; Healy & Lys, 1985) by increasing their confidence in making decisions (Arens & Loebbecke, 2000; Becker, DeFond, Jiambalvo, & Subramanyam, 1998; Simunic & Stein, 1987).



Further, in the marketplace, there are several types and levels of auditors categorized based on brand name reputation (Big 4; first-tier international firms, second-tier international firms, and local firms) (DeFond, 1992), price (e.g., Collier & Gregory, 1996; Moizer, 1997; Woo & Koh, 2001), services (Danos & Eichenseher, 1982), industry specialization (Abbott & Parker, 2000; Simunic & Stein, 1987), and size (Craswell, Francis, & Taylor, 1995; DeAngelo, 1981; DeFond, 1992; Palmrose, 1988; Simunic & Stein, 1987). In this regard, all auditors demonstrate significant differences in level of services provided (Ashton, 1990; Joyce, 1976; Stanny, Anderson, & Nowak, 2000), and these services are unobservable tasks which, in turn, are difficult to evaluate objectively (DeAngelo, 1981). These issues create competition among auditors (e.g., Clatworthy, Mellett, & Peel, 2000; Sands & McPhail, 2003; Schwartz & Menon, 1985), which may threaten auditor independence (Sori, 2009).

### **1.1.2 Issues Associated with the International Audit Market**

Globally, the number of audit failures is increasing, and the environment is increasingly litigious (Marxen, 1990). The recent large-scale auditing scandals of Enron, Tyco, and WorldCom, et al. have decreased the confidence of financial information users and created an environment of mistrust and suspicion of audit firms such as Andersen, the auditor for Enron (Adams & Allred, 2002). While some companies removed Andersen as their auditor soon after disclosure of the scandal, other companies did not do so until forced to by the cancellation of Andersen's practice license. Bewley, Chung & McCracken (2008) make the argument that the latter companies did so because they were more concerned about their reputation than with audit quality.

### **1.1.3 Issues Associated with Underlying Theories and Studies**

The most prominent and widely-used audit theory is agency theory (Jensen & Meckling, 1976; Fama & Jensen, 1983) and its relevant hypotheses suggested by Dopuch (1984) and Wallace (1987, 1980). Carey, Simnett and Tanewski (2000) indicate that agency theory has provided a resilient and popular framework for explaining the demand for external auditing, and suggests a monitoring role for external auditors. Specifically, Wallace (1987, 1980) proposes three hypotheses for explaining the role of the audit in free and regulated markets: the monitoring hypothesis, the signaling hypothesis, and the insurance hypothesis. Consistent with the context of agency theory, Dopuch (1984) proposes that the substitution hypothesis could substitute for the demand for an external auditor, or complement its use.

However, to date, no single theory explains why companies switch from one auditor to another (DeAngelo, 1982; Grayson, 1999; Lindahl, 1996; Knapp & Elikai, 1988; Schwartz & Menon, 1985). No broad theory also exists to explain how firms choose a new auditor, or weigh the cost tradeoffs in switching auditors (Blouin, Grein, & Rountree, 2005). Moreover, Clarkson and Simunic (1994) report that the existing theory does not provide sufficient insight to identify either the complete set of endogenous variables that are jointly and simultaneously determined with audit quality, or the exogenous variables which underlie them. It is difficult to categorize the potential determinants influencing auditor choice<sup>1</sup> based on the underlying theories because of:

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<sup>1</sup> This study uses the term “auditor choice” as terminology for both processes involving auditor change, which include auditor change and auditor selection. When the term “auditor change” is used alone, it

the incompleteness of the underlying theories related to auditor choice; the overlapping of the theories with each other; (Wallace, 1984) and the ignorance of behavioral issues related to auditor choice (Beattie & Fearnley, 1998). Consistent with this, Meyer (2006) indicates that theories based on Western countries may be unsuitable for, and irrelevant to, other countries.

In particular, the extant research on auditor choice is methodologically described to have one or more of the following characteristics:

- (a) No differentiation between resignation and dismissals. For example, DeFond, Ettredge and Smith (1997); Dunn, Hillier and Marshall (1999); Krishnan and Krishnan (1997); and Raghunandan and Rama (1999) document empirically that resignation auditees are significantly different in their characteristics than switchers. Additionally, Hermanson, Plunkett and Turner (1994) have indicated that some of the extant research has not distinguished the differences in the auditor change process, the auditor retention process, and the auditor selection process;
- (b) Differences in audit and business environments among sampled countries/cities, sampled sectors, and sampled audit firms (Ball & Shivakumar, 2005; Chaney, Jeter, & Shivakumar, 2004);
- (c) Methodological weaknesses such as insufficient sample size (Butterworth & Houghton, 1995; Nichlos & Smith, 1983; Woo & Koh, 2001);
- (d) Specific situations such as merger/acquisition (Addams & Allred, 2005); and

---

(*Continued*) refers to the first process of auditor change, and the term “auditor selection” refers to the second process, through which a new auditor is selected.

(e) Methodology used to examine how auditor choice varies among studies (Sands & McPhail, 2003).

Research also acknowledges that important variables are omitted from the models of auditor choice studies developed to date (e.g., Beattie & Fearnley, 1998; Eichenseher & Shields, 1989; Johnson & Lys, 1990). For instance, Williams (1988) has reported that auditor choice-related studies suffer from certain methodological weaknesses, such as the influence of economic and industrial conditions over the extended periods examined, the population definition, and the oversimplification of the definition of qualified audit opinions. Furthermore, DeFond (1992) has reported that, methodologically, studies investigating the association between agency conflicts and audit quality measured at a point in time and they may have one or more of the following features:

- (a) Weak theoretical constructs (audit quality as a function of audit firm size);
- (b) Weak empirical tests (Eichenseher & Shields, 1989); and
- (c) Typical statistical analysis (Kirkos, Spathis, & Manolopoulos, 2008).

As an illustration, Fried and Schiff (1981) have indicated that there is a lack of statistically meaningful results in previous studies' attempts to identify specific accounting characteristics within particular audit firms as a general motivation for switching.

In this regard, Haskins and Williams (1990) have reported that previous studies on auditor choice individually have assessed auditor-change factors and they focus on auditor changes only between non-Big 8 and Big 8 firms. Therefore, restricted operationalization for independent variables (extensive use of binary indicator

variables), and the use of various subsets of possible auditor-change factors, have precluded the development of a generalized auditor-change model, and has made it difficult to evaluate the relative importance of auditor-change factors reported by different studies. The use of methodologies providing only individual assessments of the independent variables (i.e., a “main effects” approach) has precluded potentially important insights regarding the contingent nature of a variety of auditor-change factors.

The process of auditor selection varies among stakeholders and organizations (Abdel-Khalik, 1993; Hermanson *et al.*, 1994; Knechel, 2001). Importantly, no single factor or array of organizational or environmental factors form the optimal determinants of auditor choice (Ginsberg & Venkatraman, 1985). It is difficult to infer from the body of the previous studies conducted on auditor choice what the more important sources of change and/or new auditor selection are (Anderson, Stokes, & Zimmer, 1993; Lindahl, 1996). As a result, empirical evidence in auditor choice has been both limited and inconclusive (Cassell *et al.*, 2012; Lin & Liu, 2009; Robinson & Owens-Jackson, 2009; Velury *et al.*, 2003; Wang *et al.*, 2008).

#### **1.1.4 Issues Associated with the Measurement of Audit Quality**

Among earlier and recent research on auditing, no consensus has been reached regarding the existence of a single proxy for audit quality; that available proxies have more than one measurement is more important. DeAngelo (1981) has stated that audit quality is an unobservable task and, therefore, is difficult to be evaluated objectively. In this regard, economists argue that when it is difficult to measure quality of services in quality-

differentiated markets, market participants have incentives to devise arrangements (surrogates for quality) that minimize such measurement costs for buyers (Barzel, 1982). Empirically, several audit quality surrogates have been used in early and recent extant research on auditor choice. Unfortunately, mixed and inconclusive results have been reported by these studies (Al-Ajimi, 2009). Haskins and Williams (1990) have suggested that the conflicting findings among previous studies on auditor choice could be attributed to the extensive restricted operationalization of audit quality as a binary indicator. Therefore, in the social science research, there has been a strong support for the use of multiple indicators of theoretical constructs. Nunnally and Bernstein (1994, p.86) argue that “because constructs concern domains of observables, a better measure of any construct is obtained by combining the results from a number of measures than by taking any one of them individually....Similarly, combining several observables provides greater construct validity and scientific generalizability in the domain as a whole relative to a single measure.”

In support of this, Agrawal and Knoeber (1996) have argued that misleading results occur when showing the effect of one single indicator and not considering multiple indicators of theoretical constructs. In the same vein, O’Sullivan, Percy and Stewart (2008) have stated that investigating the overall mechanisms gives a stronger effect of measurement than just examining them individually. One of the more rigorous studies using a complex measurement of audit quality is that conducted by DeFond (1992) in the U.S. This study uses a combination of four audit quality surrogates that have a recurring presence in the literature: brand-name auditor, auditor size, industry specialist, and auditor independence.

DeFond (1992) reports that a combination of measurements can be used to capture the same underlying construct—the auditor’s ability to alleviate agency conflicts. Consequently, the combination of these four measurements may provide more information than if they are used individually. He also indicates that testing hypotheses using each of the auditor characteristics would be considered a noisy measure of audit quality. Therefore, combining the four measurements may increase the power of the tests and would, in turn, reduce noise in the independent variable.

### **1.1.5 Why Does Demand for Audit Quality in the GCC Matter?**

As world economic powers, the six oil-based members of the GCC—Saudi Arabia, Bahrain, Kuwait, Qatar, Oman, and United Arab Emirates—share a large number of economic, cultural, and political similarities, which far outweigh any differences (Al-Hussaini, Al-Shammari, & Al-Sultan, 2008; Aljifri & Moustafa, 2007; Al-Muharrami, Matthews, & Khabari, 2006; Chahine & Tohme, 2009). The audit markets of the GCC have suffered from a paucity of research in the past decades. This situation exists particularly because of the restrictions imposed on foreign stock ownership, the lack of common accounting and auditing regulations, and the uncertainty of economic and political conditions. Recently, however, GCC countries have adopted and developed large-scale economic and market policies and strategies that convert them to market-oriented economies. These include high oil prices, low interest rates, 100% foreign ownership, strong international oil demand, a stable geo-political environment, acceleration of reform measures, increase in privatization programs, lifting of investment restrictions, strong GCC corporate sector, low aggressive tax regimes,

improvement of accounting and auditing regulations, and the establishment and enacting of corporate governance codes (Al-Shammari *et al.*, 2008; Bley & Chen, 2006; Hussain, Islam, Gunasekaran& Maskooki, 2002; Omran, Bolbol& Fatheldin, 2008).

Increased pressure for change has resulted from globalization, liberalization, and the inter-connectedness of markets. Regional and international investors, including the growing presence of international firms in the region, and larger number of western expatriates in senior management level positions, who themselves are subject to global corporate standards, are also driving change. A desire to diversify the economy away from oil and towards more sustainable business models for future generations has driven the boom in the GCC. For this reason, the ultimate way to achieve sustainability, prosperity, and job creation in the long term is to ensure that firms are able to provide investors with a good return now and in the future. An effective internal governance framework goes a long way in steering firms towards those objectives, while at the same time, ensuring corporate resilience in times of uncertainty (Hawkamah Newsletter, 2008).

More recently, regulatory authorities across the region have taken steps designed to improve corporate governance practices. These efforts have been triggered by three factors: the downward correction in regional stock markets in 2005 (and the subsequent efforts by regulatory authorities to raise standards and protect shareholders, especially given the widespread public participation in equity markets); the increased desire of GCC corporations to be acquisitive internationally (and thus to conform to international



standards); and the efforts to attract foreign direct investments to the region (AL Majlis, The GCC Board Directors Institute, 2009).

Increasing openness and integration of the GCC countries with the global economy has also, in turn, created push-and-pull factors that are contributing to changing the institutional framework environment. These factors include Anti-Money Laundering and Counter-Terrorist Financing (AML/CTF); Basel Banking Supervision core principles; and International obligations and agreements resulting from entry into the World Trade Organization (WTO), Regional Trade Agreements (RTAs), and Free Trade Agreements (FTAs).

Moreover, international institutions such as the IMF, World Bank, WTO, and the BIS have played a role in providing technical assistance to the GCC and building knowledge and capacity (Arnett & Danos, 1979; Al-Basteki, 2000; Harabi, 2007; Hawkamah & IFC, 2008; Saidi & Kumar, 2007; Shuaib, 1999). By the time the recent economic and regulatory developments began, the GCC region was found to be a profitable business environment for local, regional, and foreign investors (Al-Hussaini & Al-Sultan, 2008; Al-Shammari, Brown, & Tarca, 2008; Bley & Chen, 2006; Gulf Base, 2009; Kamal, 2007). These changes have resulted in higher demand for audit services, followed by a surge of attention paid to the demand for audit services by both regulatory authorities and academics.

### **1.1.6 Concerns Associated with the Demand for Audit Quality in the GCC**

Although demand for audit services in GCC region is increasing, some concerns about the audit function still exist. Six audit failures have occurred (one in Kuwait, two in Oman, and three in Bahrain) and few qualified audit reports have been received in the entire history of the GCC. In particular, the Big 4 audit firms have been involved in two cases (Al-Shammri *et al.*, 2008; Asiri, 2009). Al-Shammari *et al.* (2008) argue that the low number of reported audit failures in the GCC does not reflect a good audit function. Rather, Al-Gahtani (2006) argues that the accounting and auditing professions are still under development in terms of presence and enforcement. The audit function, at this point, is concerned only with issues related to recording financial transactions, keeping source documents, preparing financial statements, and auditing financial statements by licensed auditors.

Further, GCC governments have intervened heavily in linking legal origins and financial arrangements. GCC countries are still suffering from a lack of equity among investors and a dominance of three groups of shareholders: government and its agencies; family; and institutions. This dominance is a result of the weakness of investor protection, and the absence of well-developed markets for corporate control (Chahine & Tohme, 2009; Harabi, 2007; Hawkamah & IFC, 2008; Omran *et al.*, 2008; Saidi & Kumar, 2007). In addition, Arab companies suffer from the cultural heritage that has been brought into from the history. These inheritances do not encourage the implementation of sound management practices (Ali, 1995). Mona (1986) reports that managers in GCC countries

live and work within a social structure in which family and friendships dominate attitudes.

The current corporate governance frameworks of GCC countries do not meet the threshold sought by international investors (AL Majlis, The GCC Board Directors Institute, 2009). Corporate governance reform is often investor-driven in more developed markets, but in the GCC, the burden of corporate governance improvements falls on the regulators. Much of this stems from a combination of facts such as the ownership structures of GCC companies, the ready availability of liquidity and financing from regional banks, and the relatively underdeveloped capital markets. Arab firms still tend to have concentrated ownership, so generational ties and family involvement often affect governance relations and agreements. International investors, who take corporate governance very seriously, are often absent from GCC markets (INSEAD, The Business School for the World, 2010). In this case, these concerns have negatively influenced the structure of the audit service market in the GCC, and agency problems are more likely to arise between majority and minority shareholders.

### **1.1.7 How is This Study Different?**

Previous studies on auditor choice have been conducted primarily in countries with Anglo-Saxon legislation, such as the U.S and U.K, and they are heavily based on agency theory (e.g., Abbott & Parker, 2000; Beasley & Petroni, 2001; DeFond, 1992; Fargher, Taylor, & Simon, 2001; Hudaib & Cooke, 2005; Krishnan *et al.*, 1996). Furthermore, they have resulted in contradictory and inconclusive results. Thus, the findings of the

previous studies might not be applicable in the context of the GCC, which is a dissimilar setting in terms of audit market, institutional framework, level of regulatory enforcement, and culture.

DeFond and Francis (2005) call for research on auditor choice outside the U.S. Aguilera (2005) and Pugliese *et al.* (2009) emphasize the development of a broader view of corporate governance that accounts for the different national institutions in which corporate governance practices are embedded. In light of these deficiencies, auditor choice issues seem to require further empirical investigation. Haniffa and Hudaib (2007) report that a paucity of research exists concerning audit function in the GCC. Little is known, and many questions remain unanswered, about audit markets in the GCC. Yet, to the best of the researcher's knowledge, no empirical evidence exists that allows conclusive determinations to be made regarding how companies incorporating in the GCC countries choose to re-appoint the incumbent auditor or appoint a new auditor.

Specifically, several distinctive issues that have been ignored by the extant research on the demand for audit quality have been addressed by this study.

#### **1.1.7.1 Audit Quality Score**

DeFond (1992) documents that prior research has yielded little empirical evidence supporting an agency theory motivation for auditor choice. One problem associated with this situation is that prior research usually characterized the audit firm's effectiveness in alleviating the agency problem based on its size (Big 8/6/4 vs. non-Big 8/6/4). However,

auditor size may not be the only characteristic used by client firms in making this evaluation. This study follows DeFond (1992) in measuring audit quality as a composite measure. Given the advantages of using this measurement, as indicated earlier in section 1.1.4, DeFond (1992) finds that using the complicated composite measure gives identical results as that of the brand-name auditor. That is why DeFond (1992) is the one and only study that applies the comprehensive, complicated, and composite measure of audit quality. Given the differences in the audit market, institutional factors, and culture between the U.S and the GCC, this study expects different results by using the composite measure of audit quality in DeFond's (1992) study in a manner that the four audit quality surrogates (size, brand name, independence, and expertise) are not the characteristics upon which audit firms are evaluated in determining their effectiveness in reducing net agency conflicts in the GCC context. In this case, the interrelationship of factors might also differ.

#### **1.1.7.2 Contextually-Cultural Determinants in the GCC—Nationality and International Experience—Managerial Grid Theory, and Attraction-Selection-Attrition Framework**

Beattie and Fearnley (1988) indicate that the theory of auditor change is based heavily on economic theory (agency theory), ignoring the behavioral issues of audit clients that undoubtedly have a significant impact on business ethics. Therefore, economic theory can provide only a partial explanation, and is not sufficient to explain audit change behavior. For Arab firms, the agency theory perspective alone may not fully account for the diversity in management characteristics, because it suffers the limitation of social context in which firm activities are embedded. Eisenhardt (1989) and Oliver (1997) also

argue that agency theory presents a partial view of the world. One promising approach to developing such a theory is to consider the behavioral issues related to audit service. Thus, this study has introduced two contextually-cultural determinants—nationality and international experience—that have not been previously linked with auditor choice. Culture factors, such as nationality and international experience, may influence perceptions and meanings of auditing concepts such as independent, accountability, and trust. They are also found to influence management behavior, and auditing can play an important role in resolving agency conflicts by acting as a monitoring device (Craswell *et al.*, 1995; Francis & Wilson, 1988; Haniffa & Cooke, 2002; Neu, 1992; Palmrose, 1984). For this reason, nationality captures the impact of just one country/culture to which the person has been exposed, while international experience captures the impact of all countries/cultures to which the person has been exposed (Nielsen & Nielsen, 2010).

By linking nationality and international experience with auditor choice, this study is unlike two prior studies, which linked, empirically, client culture with auditor choice. Ahmed *et al.* (2006) examines the relationship between the ethnic groups (Chinese, Bumiputra, and foreign ownership) and audit quality in the Malaysian context. They refer to the issue of ethnicity and not nationality because the Chinese examined in this study may have a Malaysian nationality, but their ethnic group is Chinese. In addition, Woodworth and Said (1996) have examined the relationship between internal auditors and auditees and focused on the reactions of auditees with different cultural orientations—nationalities—to a set of audit encounters in Saudi Arabia. Their study compared the internal auditors' nationalities with the nationalities of their employers.

Unlike these studies, this study narrows the concept of “culture” from its broad meaning of social, political, and other factors, to the concept of “nationality” based on Hami, Graig and Clarke’s (1993) suggestion and “international experience.” In GCC countries, any person who does not hold a GCC nationality is considered a foreigner, regardless of his ethnic group. This includes other Arab nationalities working in the GCC<sup>2</sup>.

This study also introduces two behavioral theories that have not been previously used in the auditing discipline. Managerial grid theory and Attraction-selection-attrition framework have been applied to explain the associations of board of directors nationality, audit committee nationality, and international experience with the demand for audit quality. These theories complement each other. According to the conjectures of managerial grid theory and attraction-selection-attrition framework, people will be attracted not only to jobs, but also to organizations of a particular sort, in which directors may show concern for people of a similar type. Klein, Waxin and Radnell (2009) find that the Arab world is a collectivist society, as compared to individualist culture, and is manifested in a close, long-term commitment to the member “group,” that being a family, extended family, or extended relationships. In addition, Mona (1986) reports that the “Arab manager lives and works within a social structure where family and friendship dominate attitudes.” In particular, Haniffa and Hudaib (2006) find that GCC countries’ societal structure increases nepotism and cronyism, and results in limited professionalism in most significant institutions, including the auditing profession. GCC countries’ nationals, generally, are influenced by tribal and sectarian affiliation. They are

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<sup>2</sup> For more details, see GCC nationalities’ laws at [www.GGC-Legal.org](http://www.GGC-Legal.org).

concerned only about their image, etiquette, and ceremonies required to meet certain expectations at work.

Al Bahar, Peterson and Taylor (1996) argue that the diversity of managers' nationalities can cause a significant variation in companies that is influenced by the unique Arabic culture and management style. In other words, Arabic culture can be mediated by variables such as nationality of management. Laurent (1993) has determined that nationality has a significant influence on shaping managerial assumptions more than any other national culture characteristics. Cultural factors may influence perceptions and meanings of auditing concepts such as independence, accountability, and trust. All studies on culture show that learning about the culture of the auditee will offer guidance to the auditor. "With an understanding of how the client manages, the auditor can determine which audit tests to perform, which areas to ignore, and which areas to explore" (Haniffa & Cooke, 2002; Neu, 1992).

Woodworth and Said (1996) observe that, within the auditing function, the significance of the cultural dimension of nationality lies in the behavior of auditees, their reaction to workplace requirements, and their relationship to the auditor. The existence of several types of nationalities in the market will lead to significant differences in agency costs and hiring distinctive levels of quality auditors because the variation in the management styles causes differences in the business practices of risk, monitoring and investment (Eichenseher, 1995; Muzaffar, 1989).



In this regard, the more directors of Gulf nationality on the board and audit committees, the greater the family and friendship relationships, which will increase the nepotism and cronyism that are influenced by tribal and sectarian affiliation. As a result, the effectiveness of the monitoring and advice functions would be reduced. The role played by auditing in resolving agency conflicts by acting as a monitoring device will be diluted, resulting in a high frequency of auditor changes and less demand for higher audit quality.

In opposition, managerial grid theory postulates that managers have a high concern for production. According to Al Bahar *et al.* (1996), companies concerned about production are less likely to be influenced by Arabic culture and are more likely to adopt a strong, western-orientated approach. Consistent with this result, Hope, Kang, Thomas and Yoo (2008) empirically report that multinational companies are less likely to be influenced by home country cultural norms than are local firms. Ali and Azim (1996) find that, in GCC private companies, the priority in business is given to foreigners more than to locals. For instance, employers in the private sector depend heavily on foreigners who, in many cases, assume important positions and begin making vital decisions immediately. Foreigners, because of their backgrounds, are suggested to be more sensitive than nationals to the host country's organizational and work problems. That is, the nationals often are not aware of existing problems and tend to take things for granted.

A manager of foreign nationality is considered a source of knowledge about doing business in foreign countries. Managers born in a foreign country are expected to

possess valuable knowledge about economic and market factors and institutions. Further, they are aware of culture, behavior, and norms of foreign countries, characteristics which may be invaluable in making strategic decisions (Nielsen & Nielsen, 2010, 2009). Luo (2005) suggests that foreign natives can effectively process information regarding their origin country and find appropriate solutions for improving information processing. Besides the advantage of individual level knowledge, heterogeneity of managers' nationalities is invaluable for making strategic decisions. For instance, heterogeneous backgrounds of the managers lead to different perspectives on, and interpretations of, a particular situation. In this regard, it reduces individual bias and group think and increases the quality of team decisions. Keck (1997) indicates that the composition of management should reflect the company's complexity. Hence, heterogeneous backgrounds of management is expected to lead to a better understanding and interpreting the complexity of the firm's internationalization. In support of this reasoning, a practitioner-oriented study conducted by the U.S. Conference Board found that the more multinational the management, the more successful global companies are (Berman, 1997). The existence of foreigners in the Arab firms creates a logically management styles through which the diversity is accepted and there is a tolerance and flexibility for the uncertainty (Ali, 1990).

Due to the increase in market globalization and the ensuing pressures on management to internationalize their firms, companies put a premium on decision-makers with international experiences (Nielsen & Nielsen, 2009). Managers' international experience is an important resource for increasing the company's competitive advantage (Daily *et al.*, 2000; Gunz & Jalland, 1996; Roth, 1995). Athanassiou and Nigh (2002) argue that a

manager's international experience can facilitate network contacts and access to sources of information. Therefore, the higher the proportion of foreign and/or gulf nationals with international experience, the greater the effectiveness of the board of directors and audit committee in terms of monitoring and providing advice.

Under this circumstance, auditing will play an important role in resolving agency conflicts as a monitoring device that, consequently, will lead to a low frequency of auditor changes and a higher demand for audit services. Furthermore, effective board and audit committee members, by hiring a quality auditor, impart to the market additional information about the company and their own behavior. To be precise, theoretical and empirical evidence does not exist that associates board of directors and audit committee nationalities and international experiences with auditor choice, nor has it used managerial grid theory and attraction-selection-attrition framework to explain such an association.

### **1.1.7.3 Combined Scores of Board of Directors and Audit Committee Effectiveness Using a Combined-Theoretic Perspective of Economic and Behavioral Theories**

Several prior studies on auditor choice have empirically linked auditor choice with board of directors and audit committee characteristics in an individual investigation (Abbott & Parker, 2000; Archambeault & DeZoort, 2001; Beasley & Petroni, 2001; Carcello & Neal, 2003; Chen & Zhou, 2007; Nazri, Smith & Ismail, 2012a,b; Lee, Mande & Ortman, 2004; Luypaert & Caneghem, 2012; Robinson & Owens-Jackson, 2009).

These studies have resulted, to some extent, in conflicting and inconclusive results. The previous studies provided mixed results because they considered governance mechanisms in isolation from each other, and how each mechanism addresses agency problems, thereby ignoring the idea that the effectiveness of a single mechanism depends on the other mechanisms. A very recent study conducted by Cassell, Giroux, Myers and Omer (2012) has investigated the influence of the corporate governance index (independence, meetings, and financial expertise of board and audit committee members) on auditor switch from a Big 4 to a non-Big 4. They conclude that board of directors effectiveness is related to auditor-client realignments. Therefore, the optimal combination of corporate governance mechanisms is considered better in reducing agency cost and protecting the interest of all shareholders, because effectiveness of corporate governance is achieved via different channels, and a particular mechanism's effectiveness depends on the effectiveness of others (Cai, Liu, & Qian, 2009).

In addition, Ward *et al.* (2009) have argued that it is best to look at corporate mechanisms as a bundle of mechanisms to protect shareholder interests and not in isolation from each other, because these governance mechanisms act in a complementary or substitutable fashion. Agrawal and Knoeber (1996) have also argued that the results of the effect of single mechanisms might be misleading, by showing that the effect of some single mechanisms on firm performance disappeared in the combined model. The measurement effect is stronger when investigating the overall corporate governance mechanisms than examining them individually (O'Sullivan *et al.*, 2008).

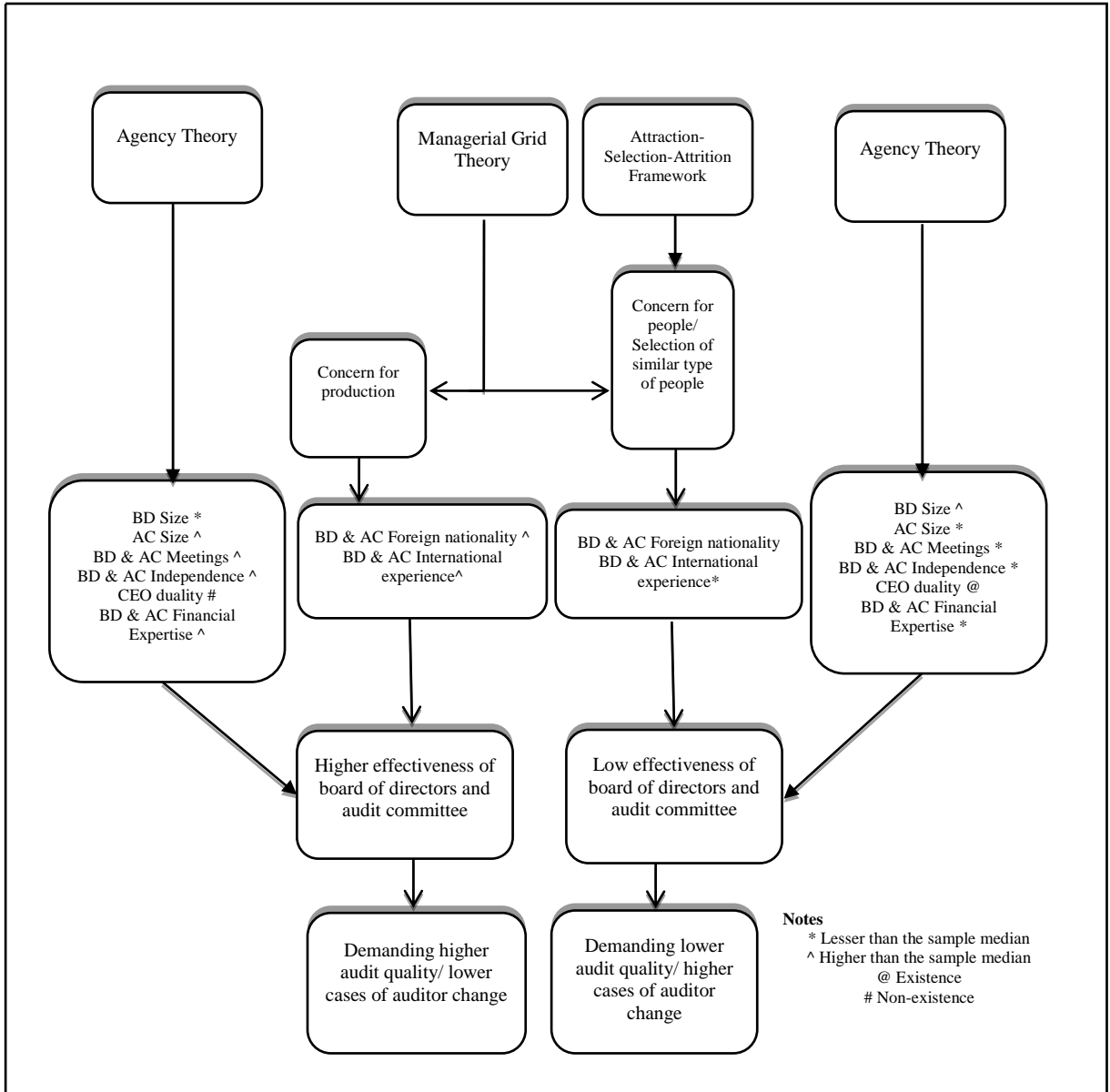


Figure 1.1  
 Board and Audit Committee Scores Using a Combined-Theoretic Perspective of Economic and Behavioral Theories

The present study examines board of directors characteristics (independence, size, meetings, CEO duality, financial expertise, nationality, and international experience) and audit committee characteristics (independence, size, meetings, financial expertise, nationality, and international experience) as a whole in order to capture the aggregate effect of those characteristics of auditor choice. This is consistent with the idea that

integration of board of directors and audit committee characteristics reduces agency conflicts by enhancing the effectiveness of monitoring and providing advice, using a combined theoretic perspective of agency theory, managerial grid theory, and attraction-selection-attrition framework. This combination reveals the differing influences of various categories of board and audit committee characteristics among GCC firms. Different board of directors and audit committee characteristics may be explained by different agency conflict variables. If this is the case, it is in line with client firms perceiving that specific board of directors and audit committee characteristics provide information about the board's and audit committee's ability to alleviate specific types of agency conflicts, as depicted in Figure 1.1.

#### **1.1.7.4 Dominant Groups of Shareholders in the GCC**

Company ownership structure has been suggested as a relevant determinant in explaining variation in the demand for audit quality (Chan, Lin, & Zhang 2007; DeFond 1992; Fama 1980; Francis & Wilson 1988; Jensen & Meckling 1976; Watts & Zimmerman 1986). Further, prior studies (Archambeault & DeZoort, 2001; Beasley & Petroni, 2001; Chow, 1982; DeFond, 1992; Eichenseher & Shields, 1989; Francis & Wilson, 1988; Gul, Tsui & Bartov, 2000; Lee *et al.*, 2004; Palmrose, 1984b) have typically examined the relationship between managerial ownership (as a proxy for a firm's ownership structure) and audit quality in most western companies that are characterized as having diffused ownership. However, the use of managerial ownership as a proxy for the firm's ownership structure does not fit the GCC context due to differences in the level of ownership concentration and the associated type of agency

problems. Unlike the situation in western economies, GCC ownership structure is characterized by the control of three groups of shareholders: government, family, and domestic corporations (Al-Shammari *et al.*, 2009; Chahine & Tohme, 2009; Omran *et al.*, 2008; Chahine, 2007).

The dominance of these types of owners in the region raises at least three concerns. First, the ownership structure of these business groups may have adverse effects on their management and performance that, in turn, influences corporate governance practices, since managers do not have the autonomy, flexibility, and objectivity for monitoring processes and following company objectives. For instance, Amran (2011) and Amran and Ahmad (2009) find that family and non-family businesses have different corporate governance practices. The weakness of investor protection, and the absence of well-developed markets for corporate control, have led investors in Arab countries to rely on a governance structure that is dominated by highly concentrated ownership (La Porta, Lopez-de-Silanes, Shleifer & Vishny, 1997, 1998, 1999, 2000). Omran *et al.* (2008) indicate that this environment exists in Arab countries. Second, the market position of some of these large groups may be self-sustaining and reinforced by acting as barriers to entry for small competitors. Not only do these groups have economies of scale in some sectors, but they often also have acquired competitive advantages in access to finance, distribution, and their relation with the public administration. Third, large business groups often have close relations with the political sphere, and have the political power to influence policy decision-making on business regulation and reform priorities (Chahine & Tohme, 2009; Harabi, 2007; Hawkamah & IFC, 2008; Saidi & Kumar, 2007). Therefore, the existence of different levels of these three dominant groups of

owners may lead to variations in the demand for audit quality. In particular, no prior empirical study examines whether the existence of these dominant groups of shareholders, as a specific contextual classification of ownership in the GCC, relates to a firm's auditor choice.

Therefore, the current study is conducted to provide theoretical and empirical evidence on the determinants influencing companies when making decisions of auditor change and selection in two time periods: prior and subsequent to the auditor change and selection. Two theoretical frameworks have been developed by this study. The first is referred to as the auditor change framework (Model 1); the second is referred to as the auditor selection framework (Model 2) that is adopted and extended from the previous study of DeFond (1992). The determinants influencing the decisions of auditor change and new auditor selection are similar variables.

## **1.2 Problem Statement**

Although demand for audit service in the GCC has increased recently due to the incremental economic boom and new regulatory and institutional reforms, concerns still exist regarding how companies in the GCC change their incumbent auditors and select new ones. In a broad sense, these concerns are expected to influence the audit market structure for audit service demand.

Using a combined score of audit quality (brand name, size, independence, and specialty) will provide sufficient empirical evidence supporting an agency theory motivation for



auditor change. In addition, this score is also expected to be different in the setting of the GCC due to distinctive institutional factors, audit markets, and culture. The culture of audit clients is demonstrated to influence the auditor choice decision. Using the frameworks of the managerial grid theory and attraction-selection-attrition, the effectiveness of the monitoring function and of providing advice to the board of directors and audit committee is increased by the inclusion of foreign nationals and local citizens with a wide range of international experiences. This, consequently, may lead to a low frequency of auditor change and a higher demand for audit quality. Further, board of directors characteristics (independence, size, meetings, financial expertise, CEO duality, nationality, and international experience) and audit committee characteristics (independence, size, meetings, financial expertise, nationality, and international experience) are better to be examined as a whole in order to capture the aggregate effect of these characteristics on the decision of auditor choice. These characteristics act in a complementary or substitutable fashion in making decisions; therefore, it might be misleading to show the effect of single characteristics on the decision of auditor choice.

This is also consistent with the integration of board of directors and audit committee characteristics improving board of directors and audit committee effectiveness, as perceived by client firms, to reduce agency conflicts by enhancing the effectiveness of monitoring and providing advice. Different board of directors and audit committee characteristics may be explained by different agency conflict variables. If this is the case, it is consistent with client firms perceiving that specific board of directors and audit committee characteristics provide information on the board's and audit committee's ability to alleviate specific types of agency conflicts.

Agency theory suggests that a firm's ownership structure affects its demand for external auditing. In the GCC setting, three controlling groups of shareholders dominate the marketplace: government and its agencies, family, and domestic corporations. The presence of such classification of owners may restructure the GCC audit market and the demand for audit service. In particular, the degree of ownership of each type of the dominant groups leads to a variation in the demand for audit quality because of the variations in the level of agency conflicts and information asymmetry.

### **1.3 Research Objectives and Questions**

The primary objectives of this study are: (1) to examine the association of corporate governance mechanisms, the audit-specific characteristic, and firm-specific characteristics with the decision of auditor change. Given that auditor change has occurred, the second objective of this study is (2) to determine the association of corporate governance mechanisms, the audit-specific characteristic, and firm-specific characteristics with the decision of auditor selection in the five member states of the GCC: Saudi Arabia, Oman, Bahrain, Qatar, and UAE. The main research questions are:

- (1) Are corporate governance mechanisms, the audit-specific characteristic, and firm-specific characteristics associated with the decision of auditor change in GCC countries?
- (2) Are corporate governance mechanisms, the audit-specific characteristic, and firm-specific characteristics associated with the decision of auditor selection in GCC countries?

Specifically, the theoretical frameworks (Model 1 and Model 2) of this study address specific research objectives and research questions as follows:

<b>Variables</b>	<b>Theoretical Framework</b>	<b>Research Objectives</b>	<b>Research Questions</b>
Board of Directors Effectiveness	Agency theory and its related hypotheses, managerial grid theory and attraction-selection-attrition framework	To identify the association of board of directors effectiveness (i.e., independence, size, financial expertise, meetings, duality, heterogeneous nationalities, and international experience) with auditor change and selection decisions.	Is board of directors effectiveness (i.e., independence, size, financial expertise, meetings, duality, heterogeneous nationalities, and international experience) associated with auditor change and selection decisions?
Audit Committee Effectiveness	Agency theory and its related hypotheses, managerial grid theory and attraction-selection-attrition framework	To identify the association of the audit committee effectiveness (i.e., independence, size, financial expertise, meetings, heterogeneous nationalities, and international experience) with auditor change and selection decisions.	Is audit committee effectiveness (i.e., independence, size, financial expertise, meetings, heterogeneous nationalities, and international experience) associated with auditor change and selection decisions?
Ownership Structure	Agency theory and its related hypotheses	To investigate the association of different types of ownership structures (government and its agencies, family and domestic corporations) with auditor change and selection decisions.	Are different types of ownership structures (government and its agencies, family, and domestic corporations) associated with auditor change and selection decisions?
Audit-Specific Characteristic	Agency theory and its related hypotheses	To examine the association of audit fees with auditor change and selection decisions.	Are audit fees associated with auditor change and new auditor selection decisions?
Firm-Specific Characteristics	Agency theory and its related hypotheses, information suppression theory	To explore the association of firm-specific characteristics (firm size, leverage, firm performance, and management change) with auditor change and new auditor selection decisions.	Are firm-specific characteristics (firm size, leverage, firm performance, and management change) associated with auditor change and selection decisions?

## **1.4 Research Motivation and Significance**

### **1.4.1 Research Motivation**

Almost all previous studies have been carried out in Anglo-Saxon countries such as the U.S., U.K., and like markets that are grounded in agency theory (e.g., Cassell *et al.*, 2012; Hope *et al.*, 2008; Hudaib & Cooke, 2005; Knechel, Niemi & Sundgren, 2008; Lee *et al.*, 2004; Robinson & Owens-Jackson, 2009; 2008). The extensive devotion to those countries is most likely because they have comparable audit environments and advanced capital markets. These studies have resulted in inconsistent and lacking findings on auditor choice (e.g., Cassell *et al.*, 2012; Lin & Liu, 2009; Robinson & Owens-Jackson, 2009).

Adding to this complication, it is difficult to conclude from the prior studies conducted on auditor choice the more imperative causes of change and/or new auditor selection (Anderson *et al.*, 1993; Lindahl, 1996). Notably, there is no sole factor or single group of organizational or environmental factors comprising the optimum determinants of auditor choice (Ginsberg & Venkatraman, 1985). Wallace (1984) indicates that a struggle persists to categorize the potential variables influencing auditor choice based on the underlying theories. This is the case because of: (1) the incompleteness of the underlying theories related to the auditor choice, (2) the overlapping of the theories with each other, and (3) ignorance of the behavioral issues related to the decisions of auditor choice.

Therefore, a variety of factors motivate extending the previous research on auditor choice in the GCC, including: the conflicting and inconclusive results evidenced by the prior studies on auditor choice; the paucity of auditor-choice research in the GCC; the ambiguity of the low-reported numbers of auditor scandals and qualified audit reports in the GCC; the recent incremental developments in the GCC audit markets; and the difference between countries of the GCC in terms of audit markets, institutional factors, and culture.

In particular, little is known, and many questions remain unanswered, about audit markets in the region of the GCC. In addition, this study strives to answer the calls made by DeFond and Francis (2005), Healy and Palepu (2001) and Meyer (2006) demanding that management research pay more attention to specific cultures, legal frameworks, geographies, and industry structures. “Management theories” based on western firms may be unsuitable and irrelevant to other countries; consequently, previous studies’ findings might not be applicable in the context of the GCC. Eisenhardt (1989) and Oliver (1997) report that agency theory explains only part of the world. Likewise, Haniffa and Hudaib (2007) report that little is known about the audit function in the GCC countries. Aguilera (2005) and Pugliese *et al.* (2009) emphasize the development of a broader view of corporate governance that accounts for the different national institutions in which corporate governance practices are embedded.

In light of these deficiencies, auditor choice issues seem to require further empirical investigation. Yet, to the best of the researcher’s knowledge, no empirical evidence exists that allows conclusive determinations to be made of how companies incorporating

in the five member states of the GCC choose to re-appoint the incumbent auditor or appoint a new auditor. In particular, what differentiates GCC markets from the rest of the world may, in turn, lead to different underlying correlations and analysis of this issue and provide one more piece of evidence in the debate.

#### **1.4.2 Research Significance**

The significance of this study stems from several achievements. This study contributes to the corporate governance and auditing literature by providing an initial empirical link between corporate governance mechanisms (board of directors effectiveness, audit committee effectiveness, and ownership structure), the audit-specific characteristic, and firm-specific characteristics with the auditor change and selection decisions in several ways:

1. This study adds to the recent literature by investigating and associating board of directors and audit committee effectiveness with the decisions of auditor change and selection. To the best of the researcher's awareness, no empirical evidence is available that has linked board of directors characteristics and audit committee characteristics as a whole to capture the strength of their effect on auditor change and selection decisions. Yet if these characteristics act in a complementary or substitutable fashion in making decisions, board of directors and audit committee characteristics should be examined as a bundle and not isolated from each other (e.g., Cai *et al.*, 2009; Davis & Useem, 2002; O'Sullivan *et al.*, 2008; Ward *et al.*, 2009).

2. Beattie and Fearnley (1988) argue that the theory of auditor choice is based heavily on economic theory (agency theory), ignoring the behavioral issues of audit clients that undoubtedly have a significant impact on business ethics. In this regard, economic theory can provide only a partial explanation and is not sufficient to explain audit change behavior. Therefore, this study introduces two contextually-cultural variables that have not been previously tested within the auditor choice context: board of directors and audit committee nationalities and international experience. In GCC countries, the issues of nationality and international experience have been found to substantially influence the businesses environment (e.g., Chahine, 2007; Chahine & Tohme, 2009; Haniffa & Hudaib, 2006).
  
3. This study uses the theoretical frameworks of the managerial grid theory and attraction-selection-attrition—for the first time in the auditing discipline—to explain the association of board and audit committee nationalities and international experience with the decisions of auditor change and selection. The effectiveness of monitoring and providing advice is increased by the inclusion of foreign nationals and local citizens with a wide range of international experiences on the board and audit committee. As a result, low cases of auditor change will be reported and there will be a demand for higher audit quality.
  
4. Collectively, contributions 1, 2, and 3 refer to the combination of the economic and behavioral-theoretic perspectives. When combined, board and audit

committee size, meetings, independence, financial expertise, and CEO duality are linked with the decisions of auditor change and selection using the agency theory perspective. The complementary functions of managerial grid theory and attraction-selection-attrition framework have been used to explain the association of board and audit committee nationalities and international experience with the decisions of auditor change and selection.

5. This study introduces a different classification of ownership structure that fits the setting of GCC countries. Previous studies conducted in the developed and high-developing countries have used managerial ownership as a proxy for company ownership (e.g., Woo & Koh, 2001; Lennox, 2000; DeFond, 1992). This category of ownership may be inapplicable in the setting of the GCC because ownership structure in GCC countries is controlled by three groups of shareholders: government, family, and domestic corporations (Chahine, 2007; Chahine & Tohme, 2009; Omran *et al.*, 2008).
  
6. As a methodological contribution, the auditor change framework (Model 1) seeks additional evidence on agency conflicts over periods before and after the event year of auditor change. As managers may change their auditors in reaction to changes in agency conflicts, those changes in agency conflicts should be measured over some period prior to the change. Likewise, as managers may change their auditors in anticipation of changes in agency conflicts, those anticipated changes should be measured subsequent to the change (DeFond,



1992). This method resolves, to some extent, previous studies yielding little empirical evidence supporting an agency theory motivation for auditor change by measuring the audit firm–agency conflict variables at a static point in time.

7. As a methodological contribution, the present study addresses audit fees, which have not been examined empirically with the framework of auditor selection based on DeFond's (1992) study (Model 2). Based on the suggestions of agency theory, different levels of audit fees may lead to a variation in the demand for audit quality (Fama & Jensen, 1983; Jensen & Meckling, 1976; Wallace, 1980, 1987). Woo and Koh (2001) document that audit fee has been suggested as a relevant determinant in explaining variation in the demand for audit quality.
  
8. This study also introduces two firm-specific characteristics (firm performance and management change) that have not been empirically linked with the auditor selection framework based on DeFond's (1992) study (Model 2). According to agency theory conjectures, variation in firm performance and management change may lead to variation in the demand for audit quality (Fama & Jensen, 1983; Jensen & Meckling, 1976; Wallace, 1980, 1987). Empirically, several studies have found that these variables may influence the quality of new auditor selection (e.g., Abbott & Parker, 2000; Beasley & Petroni, 2001; Che Ahmad, Houghton, & Yusof, 2006; Robinson & Owens-Jackson, 2009; Woo & Koh, 2001).

## **1.5 Scope of the Study**

This study focuses on examining the associations of corporate governance mechanisms (board of directors effectiveness, audit committee effectiveness, government ownership, family ownership and domestic corporate ownership), audit fee, firm size, firm leverage, firm performance and management change with decisions of auditor change and selection in two time periods; preceding and subsequent to both decisions. The sample of the study for the auditor change decision were 172 and 172 companies for pre-auditor and post-auditor changes, respectively. While the sample of the study for the auditor selection decision for pre-auditor and post-auditor selections were 104 and 108, respectively. Companies included in this study are publicly listed companies that their secondary data are available on Bahrain Stock Exchange (BB), Saudi Stock Exchange (Tadawul), Oman Stock Exchange (MSM), Qatar Stock Exchange (DSM), Abu Dubai Stock Exchange (ADX), and Dubai Stock Exchange (DIFX) from 2005 to 2010. The data about auditor changes, corporate governance mechanisms, audit-specific characteristics, and management changes are hand-collected from the companies' annual reports, companies' official websites, Argaam official website, and Gulfbase official website. Data of firm size, firm performance, and leverage are extracted from DataStream financial database by referring to the Datastream Manual. Any missing financial data from the database are hand-collected from the respective annual reports.

## **1.6 Organization of the Study**

The remainder of the thesis is organized as follows: Chapter 2 discusses the background of GCC countries, GCC audit markets, and the institutional factors associated with the demand for audit quality. Chapter 3 provides an overview of the demand for audit quality. It reviews the audit quality surrogates and the theories related to the demand for audit quality. Further, it discusses recent issues related to auditor choice, and synthesizes survey-based studies and content information studies on auditor choice. Chapter 4 reviews the secondary data studies on auditor change and new auditor selection. It synthesizes the extant literature on auditor choice and identifies gaps in theory and research contribution from the perspective of GCC region. Chapter 5 outlines the theoretical frameworks, hypotheses, and research methodology used in the study. Chapter 6 presents and discusses the empirical findings of the auditor change framework (Model 1). Chapter 7 displays and discusses the empirical findings of the auditor selection framework (Model 2). Chapter 8 exhibits the sensitivity analysis and additional empirical tests. Chapter 9 summarizes and provides a conclusion for the overall results, shows limitations of the study, and displays potential issues and recommendations for future studies.

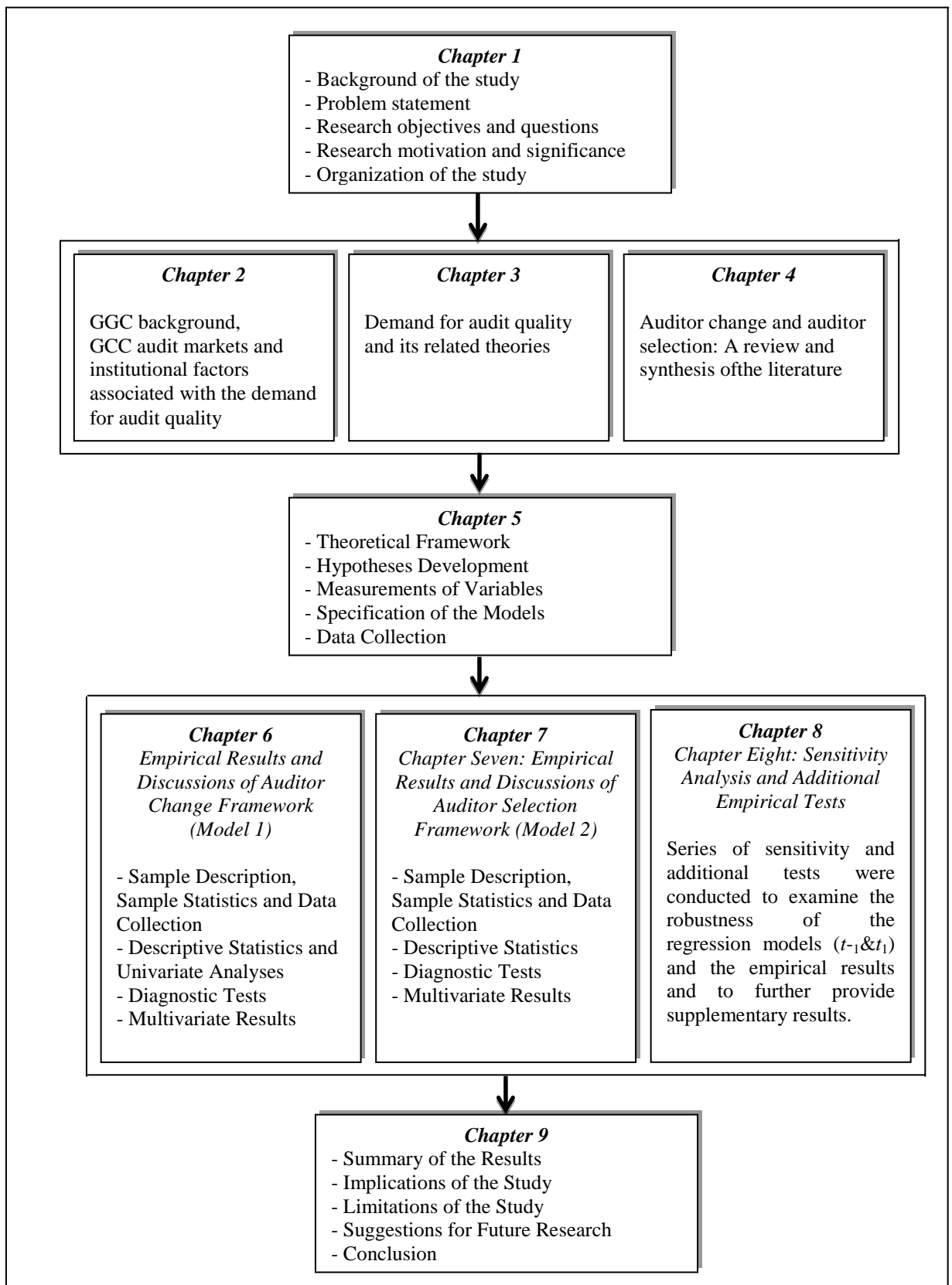


Figure 1.2  
Outline of the Thesis

## CHAPTER TWO

### GCC BACKGROUND, GCC AUDIT MARKETS, AND INSTITUTIONAL FACTORS ASSOCIATED WITH THE DEMAND FOR AUDIT QUALITY

#### 2.1 Introduction

Gulf Co-operation Council (GCC) represents the six oil-based Arab members of Saudi Arabia, Bahrain, Kuwait, Qatar, Oman, and United Arab Emirates. There are a paucity of research exists about GCC markets. Reasons for the lack of concern about these markets stem from the restrictions imposed into the foreign stock ownership, the lack of common accounting and auditing regulations, and the uncertainty of economic and political conditions. In the meantime, the GCC have approved and developed a large scale of economic and market strategies and policies that transit them to market-orientated economies. (Al-Shammari *et al.*, 2008; Bley & Chen, 2006; Hussain *et al.*, 2002).

These most important policies and strategies include permitting a 100% foreign ownership, accelerating reforms in all aspects of life, increasing privatization programs, strengthen GCC corporate sector and improving the accounting and auditing regulations. Immediately after these developments, GCC region is found to be a profitable business environment for local, regional, and foreign investors (Al-Hussaini & Al-Sultan, 2008; Al-Shammari *et al.*, 2008; Bley and Chen, 2006; Gulf Base, 2009; Kamal, 2007).

The aforementioned recent strategies and policies implemented in the GCC have led to a new regulated financial, accounting, auditing regulations, and corporate governance codes. External audit laws have been enacted in all GCC member states to regulate the auditing profession (Al-Basteki, 2000; Arnett & Danos, 1979; Shuaib, 1999). Further, corporate governance in the GCC differs widely and are at different stages (Harabi, 2007; Hawkamah and IFC, 2008; Saidi & Kumar, 2007). Nevertheless, the contribution of these developments to the accounting and auditing profession is still low. According to Al-Gahtani (2006), accounting and auditing profession in the GCC is mainly concerns about issues relate to recording financial transactions, keeping source documents, preparing financial statements, and auditing financial statements by licensed auditors. Therefore, it is the purpose of this chapter to review GCC country-background, GCC audit markets, and the institutional factors associated with the demand for audit quality.

The remainder of the chapter is organized as follows. Section 2.2 describes GCC country-background. Section 2.3 highlights the audit markets and auditing regulations in the GCC. Section 2.4 discusses the corporate governance in the GCC. Section 2.5 discusses auditor choice within GCC codes of corporate governance. Section 2.6 reviews auditor role within GCC codes of corporate governance. Section 2.7 highlights financial scandals and status of qualified audit reports in the GCC. And, summary and conclusion are provided in Section 2.8.

## **2.2 GCC Country—Background**

Gulf Co-operation Council (GCC) is the six oil-based Arab states of Saudi Arabia, Bahrain, Kuwait, Qatar, United Arab Emirates, and Oman. The six member states of the GCC formed in 1981 to group an economic cooperation and development in the region as a regional trade hub (Abdul-Gader, 1997; Sturm, Strasky, Adolf & Peschel, 2008). The similarities found among GCC countries in terms of economic, social, culture, and politics are viewed greater than any differences to be recognized. These economies are characterized by large oil producing sectors, dependency on oil exports, stable currencies, and stable price levels. Similarities also extend to geography, longstanding cultural and political ties, a common language, high living standards, and coordinated policies. These similarities by far outweigh any differences. Under certain circumstances, the six Arab countries are considered as one homogeneous block. Creane *et al.* (2004) report that GCC countries generally have a moderate to high level of financial development. They score highest on regulation and supervision, as well as on financial openness when compared to the remaining countries of the Middle East and the North-African (MENA) region.

The six Arab countries together hold 36.7% of the world's total crude oil reserves (489.4 billion barrels) that make them the richest Arab countries. Indeed, the GCC is the leading player in the world in general and OPEC in particular in producing and exporting the largest volumes of petroleum. Around 63% of the governments' revenues are accounted from oil and gas sectors. The six countries together have achieved a strong rapidly economic growth with a combined gross domestic Product (GDP) increasing to

the highest ever rate of 33.9% in 2008 to US\$1075.98 billion compared to a growth rate of 10% to US\$803.75 billion in 2007(Al-Hussaini & Al-Sultan, 2008; Al-Shammari *et al.*, 2008; Bley & Chen, 2006; Gulf Base, 2009; Kamal, 2007).

Studies about GCC countries' markets have been ignored for decades in the past particularly because of the restrictions imposed into the foreign stock ownership, the lack of common accounting and auditing regulations, and uncertainty of economic and political conditions (Al-Shammari *et al.*, 2008; Bley & Chen, 2006; Hussain *et al.*, 2002). In the recent time, GCC countries have implemented a large scale of strategies and policies that take them up further to the market-orientation economy. Specifically, local, regional, and foreign investors have found the gulf region as a profitable business environment for their projects due to the following implemented strategies and policies: (a) High oil prices; (b) low interest rates; (c) a 100% foreign ownership; (d) a strong international oil demand; (e) a good conditioned geo-political environment; (f) acceleration of reform measures; (g) strong increase in privatization programs since 1995; (h) growth of assets of central banks; (i) the lifting of investment restrictions since 1990s; (j) the strength of GCC corporate sector;(k) low aggressive taxing regimes and (m) the improve of accounting and auditing regulations (Al-Hussaini & Al-Sultan, 2008; Al-Shammari *et al.*, 2008; Bley & Chen, 2006; Gulf Base, 2009; Kamal, 2007).

In addition, the six member states in the GCC are members of the World Trade Organization (WTO). As well as this, they are currently negotiating with several countries and regions, including with the EU, which might further contribute to the integration of the GCC in the world economy (Al-Hussaini & Al-Sultan, 2008; Gulf



Base, 2009; Kamal, 2007). Moreover, customs duties on imported goods from abroad are 5% that has been lowered in 2001 in a way towards implementation of a customs union among the six Arab states that has been regulated in 2003. Therefore, No tariffs are imposed on products imported within the GCC and they will be treated as one nation (Al-Hussaini and Al-Sultan, 2008; Al-Shammari *et al.*, 2008; Bley & Chen, 2006; Gulf Base, 2009; Kamal, 2007).

Consequently, GCC announces USD1.6tn investments in their projects' worth in 2008. Specifically, increases in the market capitalization for all GCC states reached US\$120 billion in 2002 to US\$1000 billion in 2006 to record a significant expansion in the capital markets with increases ranging from 60% to 500%. In the same line, the volume of shares traded raised between six to ten times. In 2008, Kuwait and Oman experienced the highest increase in the value traded in which Kuwait has recorded an increase by 114% forming 14% of the value traded in 2008. Notably, a large number of MNCs has been participating in GCC economy. For instance, Saudi Arabia Monetary Agency (SAMA) licensed a number of GCC/foreign banks to operate their presence in Saudi Arabia with 100% foreign equity such as Deutsche Bank and Bank Paribas. Unfortunately, there is no exact data available about the number of MNCs investing in the GCC (Al-Hussaini & Al-Sultan, 2008; Kamal, 2007).

### **2.3 Audit Markets and Auditing Regulations in the GCC**

Accounting and auditing profession in the GCC is mainly concerns about issues relate to recording financial transactions, keeping source documents, preparing financial

statements, and auditing financial statements by licensed auditors (Al-Gahtani, 2006). It is worth to highlight that, in 1982, GCC countries have taken a further effort to establish a Commercial Cooperative Committee that unification and harmonization the accounting and auditing regulations and practices in the region are its main objectives. This committee consists of the Ministry of Commerce or Finance of the six states of the GCC. Up to date, the Committee has placed into practice several regulations. These include: auditors of GCC citizenship are allowed to register and practice profession in any member state of their choice since 1987, citizens of GCC member states are permitted to invest in stocks listed on any stock exchange and in any joint stock company in GCC countries since 1988, joint stock companies of any GCC member states are allowed to enlist on any GCC stock exchange of their choice since 1989, GCC citizens are allowed to establish joint stock companies in any country of the GCC since 1994, and a unified company law is issued to be as a guidance for the member states since 1998 (Bley & Chen, 2006; Hussaini & Al-Sultan, 2008).

In addition, the supreme council in the GCC approved the establishment of Cooperation Council Accounting and Auditing Organization (GCCAAO) in December 1998 in its summit meeting held in United Arab Emirates. It is stated in the regulation that GCCAAO works under the supervision of commerce cooperation committee “Ministries of Commerce in Member Countries” as an independent entity with a separate budget and it enjoys the privileges and immunities as the ones adopted by GCC countries. In 2001, Riyadh has been chosen as the residence of GCCAAO. Representatives of member countries in the general assembly were elected as members of the board for the first session (4 years). Three members were represented by each member state in the GCC

besides the representative of the Secretariat General. Thus, the total number of the members in GCCAAO is nineteen. In the front, the establishment of GCCAAO is considered a further inauguration to promote the accounting and auditing profession and establish coordination and integration among the six members of the GCC.

In spite of the fact that GCCAAO has influenced a little in the accounting practices among GCC countries, it has been successfully achieving the following issues related to accounting and auditing regulations and profession in the GCC: (1) approving conceptual framework of financial accounting (objectives and concepts); (2) reviewing, developing, and preparing accounting standards; (3) reviewing, developing, and preparing auditing standards; (4) reviewing, developing, and preparing codes of ethics and professional conduct; (5) proposing unified regulations for practicing the profession in GCC countries; (6) conducting general rules for fellowship examination; (7) conducting general rules for continuous professional education; (8) reviewing audit quality; (9) conducting GCCAAO membership criteria; (10) establishing a center for studies and information; and (11) issuing a period newsletter (Gulf Cooperation Council Accounting and Auditing Organization [GCCAAO], 2009a, 2009b).

Specifically, the proposed unified regulations for practicing the profession in the GCC in 2004 was a result of study conducted by GCCAAO that compared the regulations adopted in GCC countries for practicing the profession with the 1997 unified guidance regulations issued by GCC Secretariat General. It has been concluded that differences exist in the regulations of practicing the profession among the GCC. Therefore, it is recommended that differences exist among the GCC should be matched and

consequently a unified regulation for practicing the profession should be issued and adopted by GCC countries to go in the same line with economic development attended to be achieved by GCC countries (GCCAAO, 2009a).

It is worth to highlight that the unified regulation for practicing the profession in the GCC stated in Chapter (2), Article (4) that goes as in order for a candidate to be registered as a certified Public Accountant , the following conditions should be provided: (1) a citizen of the GCC; (2) of full legal capacity; (3) of good conduct; not convicted of doctrinal punishment or of an offense involving moral turpitude or breach of trust, unless rehabilitated; not subjected to a disciplinary decision discharging him from governmental service, unless three years have lapsed since the taking of such disciplinary decision; (4) a holder of a Bachelor's degree in Accountancy or any other equivalent Certificate as may be deemed acceptable by the competent authorities in charge of equivalency of degrees; (5) able to pass the exam determined by GCCAAO; (6) fully dedicated to practice the profession. However, a Certified Public Accountant may practice other types of activities provided that such activities are not incompatible with the code of ethics of this profession according to the conditions laid down by the executive by – laws; and (7) has a practical experience in the field of accounting for at least 3 year after obtaining the qualification of bachelor degree as referred to in clause (4). Moreover, it is regulated in chapter (5), Article (16) that a Certified Public Accountant's office name shall carry the personal name of the Certified Public Accountant himself/herself or the name of one and/or two of the Certified Public Accountants and a statement that refers to a partnership in case of a partnership company.

Further, it is stated in Article (21) that a Certified Public Accountant shall not be entitled to audit the accounts of enterprises or companies in which he has a direct or indirect interest, as specified in the executive by - laws. Further, Article (22) states that a Certified Public Accountant shall not be entitled to audit the accounts of joint stock companies, banks and public corporations unless he has a minimum of five years of professional practice from the date of obtaining the license. As well as this, in Chapter (9), termed audit firms, it is stated in Article (45) that licensed Certified Public Accountants in the GCC are allowed to form a partnership company with licensed foreign natural or legal audit firm registering in their countries for at least ten continued years as following: (1) the foreign audit firm's representative shall be a partner in the new formed audit firm in the GCC for at least five years; and (2) he\she will be subject to all the conditions of registered CPA mentioned above in Chapter (2), Article (4) except the condition stated in (1) relates to the citizenship of the GCC and he\she shall be given a visa of residence , as specified in the executive by-laws. In addition, in Article (49), it is stated that the number of GCC citizens working in foreign audit firms should at least be 20% in the type of sole foreign Proprietorship, and 30% in the type of foreign partnership or Corporation Company (GCCAAO, 2009b).

In every member of GCC, the reports of corporate financing made by the listed companies are governed by the company law as well as by the securities market law. The aims of the laws are to regulate how the companies are incorporated, the structure of the corporate governance, shareholders' rights and duties, approach of raising capital, how the corporate are dissolved and liquidated. The laws also govern and regulate accounts, audit, supervision as well as the inspection of the companies. Securities

market laws enacted by all the member states of GCC have founded an independent government entity known as a stock exchange. The purposes of the laws are to give protection to investors, to develop a system to monitor the issuance of securities, to state out the roles and rights of the directors, and to stimulate and widen the capital market. In the GCC member states, the enacted law for the securities authorities has a duplicated provision as stated in the company laws of the individual member state. All listed companies as a requirement, are to abide by the rules and regulations of accounting as enacted by the Ministry of Commerce, and to fulfill the required disclosure as stated in the securities laws. In that case, the board of directors for individual company listed should make annual financial statements audited available to the stock exchange within the time frame at the end of financial year (Al-Shammari *et al.*, 2008).

The financial reporting is being regulated in the member states of GCC by the government, and the government is also in control of the accounting and auditing profession. The bodies for the profession, especially accounting are located in Bahrain, Kuwait, the UAE and Saudi Arabia. These bodies have associations such as the Bahrain Society of Accountants and Auditors (BSAA), the Kuwait Accounting and Auditing Association (KAAA) and the UAE Accountants and Auditors Association (UAEAAA). The associations, however, lack power of regulation to issue license to the accountants and auditors. Besides, they never regulated the behavior of members, and the audit firms are not encouraged or monitored by them for the compliance with the laid down regulations (Al-Basteki, 2000; Joshi & Al-Basteki, 1999; Shuaib, 1999, 1998). On the other hand, the Saudi Ministry of Commerce has empowered the Saudi Organization for Certified Public Accountants (SOCPA) for the issuance of accounting and auditing

standards. The organization, (SOCPA) which was founded in 1992 also possesses the power for the certification of public accountants (SOCPA, 2004).

Two member states which have attempted to set standards for the local accounting out of the GCC include Kuwait and Saudi Arabia. In the case of Kuwait, the Permanent Technical Committee (PTC) under the country's Ministry of Commerce in 1986 came up with the issuance of three standards of accounting to be applicable by all the listed companies with effect from 1 January 1987. The standards issued have to do with investment, and property accounting, and finally, the nature of financial statements (Shuaib, 1998). However, the issued standards were not without criticism. For example, its criticisms are attributed to its being insufficient, and ambiguous. overall weakness by numerous parties including accountants, auditors, academics, investors, creditors and other users of financial information (Al-Mudhaf, 1990; Shuaib, 1998). In the case of Saudi Arabia, 16 Saudi Accounting Standards (SAAs) have been issued by the SOCPA to be applicable by all the listed companies with the exception of investment companies, banking and financial institutions which have been in compliance with IASs (SOCPA, 2004b). Lack of sufficient development of local accounting standards in the individual member country of GCC may be due to inadequate skills and resources, and the complexity involved in proving to the foreign investors that the local accounting standards is credible to have confidence in (Hassan, 1998; Khoury, 1996).

There has been a rapidly increasing growth of GCC countries coupled with the greater openness of capital market *alongside* the pressures mounted for the adoption of IASs by multinational corporations. This was due to the high anticipation of getting higher

demands of shareholders, getting investors from both local and foreign in order to obtain comprehensive information and be able to compare financial reporting at a greater level (Al-Basteki, 2000; Azzam, 1998; Hassan, 1998; Hussain *et al.*, 2002; Naser & Nuseibeh, 2003; Shuaib, 1999).

The significant role of accounting in national economic affairs has been recognized by the GCC countries and this has made the GCC policy makers to take part in the regulation of financial reporting (GCCAAO, 2003a). The first attempt made to harmonize regional financial reporting follow from the Commercial Cooperative Committee formed in 1982. The basic aim of the committee was to bring about uniformity in the regulations biding accounting, auditing and their practices in those countries. Ministers of Commerce of the country member of GCC or minister of finance of the member of GCC constitutes the committee. Many steps have been taken by the committee to unify the regulations of financial reporting. Such steps include: (1) Accounting professionals have been allowed for registration and practice in any country they so desired with effect from 1987. (2) Permission has been given to GCC nationals to engage in investment in the stocks on any of the stock exchange list and in any of the joint stock company existing in the country member of GCC with effect from 1988. (3) Permission has been given to the Joint stock companies to list on any other GCC stock exchange with effect from 1989. (4) Permission has been given to GCC nationals to engage in the establishment of joint stock companies in any nation they prefer with effect from 1994. And (5) As a guideline for the member countries, Unified company law has been released with effect from 1998 (GCCAAO, 2003a).



The committee has faced criticism in spite of these developments for failing to realize its fundamental goal of unifying accounting and auditing standards. Committee was alleged to have failed due to non-representation of professional in the committee (Al-Ruhaily, 1997). As a result, the Secretariat General of the GCC has stressed the important role to be played by professionals in unifying the regulations and practices bidding accounting and auditing in those countries. Consequently, in December, 1998, the Gulf Co-Operation Council Accounting and Auditing Organization (GCCAAO) were founded with the commencement of operations in May 2001 (GCCAAO, 2003a). The basic aims of the organization were to promote the accounting and auditing profession; to coordinate and integrate member states through the harmonization of laws and regulations generally bidding the financial reporting and in particular, the standard of accounting and auditing. The GCCAAO came up with the initial draft of its accounting and auditing conceptual framework in June 2003 (GCCAAO, 2003b). The proposition of the conceptual framework is that IASs released by the IASB ought to be the fundamental in setting accounting standards which will be appropriate to the business environment of GCC and capable of promoting unification of accounting in those countries (GCCAAO, 2003b).

The determination of financial reporting quality is not solely by accounting standards quality like IASs, but to effectively enforce them also play significant role (Ball, Robin, & Wu, 2003; Francis, Khurana, & Pereira, 2003; Saudagaran, 2004). An important system put in place for the enforcement of compliance of listed companies with IASs and with other necessary regulations of accounting is the audit independent (Glaum & Street, 2003). In each individual member country, the company law and external auditor

law has emphasized the responsibility of the auditor in making attempt to ensure that necessary regulations are complied with. This reflects how important is the external auditor in making sure those requirements for financial reporting is met. There are common provisions in the company laws in member countries of GCC which have to do with the external auditor's role. It is the responsibility of the external auditor to make report of non-compliance with the standards of accounting as well as other regulations to the appropriate ministry of commerce. In the audited company, the external auditor should stay clear of being either a board member or founder and they are not permitted to hold either a management or administrative post. Opinion of the external auditor is needed concerning, one, is the company able to keep proper accounts or not?; two, is the necessary information considered important for their duties performance provided?; three, is the balance sheet, the profit and loss statement actually reflect the state of affair of the company?; four, their compliance with what the provisions of the company law require of them, and, lastly, the reflection of honesty and clarity in the company's financial position (Al-Shammri *et al.*, 2008).

In all GCC member states, external audit laws have been made since 1962 for the purpose of regulating the auditing profession. The qualifications of the auditor have been contended to determine how effective the audit function will be (Al-Basteki, 2000; Arnett & Danos, 1979; Shuaib, 1999). The Ministry of Commerce in the individual member state of GCC has disciplinary committee with which an external auditor could be referred to in a case where the auditor is found to be going against the regulation concerning the financial reporting. The auditor could also be subjected to disciplinary committee if found violating the norms bidding the profession, or in a case they are found

to have acted negligently or dishonorably. To that extent, decision is going to be made by the disciplinary committee following the discussion of the accusation with the auditor. In a case where it has been reasonably proved beyond any doubt that the auditor had gone against the regulation, a disciplinary order is then issued by the disciplinary committee. As common to all member state of GCC, penalties for such offence could either be to caution or give warning to the offender. It may also involve suspension for a maximum of three-year period or may attract total withdrawal from the Auditors' Register in custody of the Ministry of Commerce. Besides, provisions are made in the company law to prosecute auditors for failing to report the act of non-compliance with the requirements of the law or regulation (Al-Shammari *et al.*, 2008). Table 2.1 summarizes external auditor legal requirements.

With regard to foreign ownership, GCC have different levels of restrictions imposed into foreign ownership. Specifically, Bahrain has issued Amiri Decree No. 10/1999 indicating that GCC citizens are allowed to own a 100% of the Bahraini listed companies' shares and non-GCC citizens are permitted to own up to 49% of the Bahraini listed companies except for both Bahrain Flour Mills Company and Delmon Poultry Company whose shares are not allowed to be owned by foreign. In either event, there are only ten companies (mostly financial institutions) that are allowed for foreigners to own up to 100% of their shares. Regarding foreign ownership, ownership for foreigners can increase up to 100% ownership of new industrial entities and establishment of representative offices or branches of foreign companies without local partners (Bahrain Chamber of Commerce and Industry, 2009).

Table 2.1  
*External Auditor Legal Requirements*

<b>Country</b>	<b>Auditors Regulations</b>	<b>Auditors are Licensed</b>	<b>Professional Training Requirements</b>	<b>Work Experience Required for Auditors</b>	<b>Penalties may Apply Where External Auditors Breach a Regulation</b>	<b>Number of External Auditors Required by Law to Audit a Listed Company's Accounts</b>	<b>Cases of Violations Reported</b>
Bahrain	External Auditing Law No. 26 of 1996	Yes	No	Yes	Yes	One	3 Cases
Oman	Professional Accounting and Auditing Law No. 77 of 1986 replaced by Law No. 58 of 1996.	Yes	Yes	Yes	Yes	One	2 Cases
Saudi Arabia	Chartered Accountants Law M/43 of 1974, amended by Law No. 12 of 1992	Yes	Yes	Yes	Yes	Two	None
Qatar	Auditing Law No. 7 of 1974	Yes	No	Yes	Yes	Two	None
UAE	Auditing Law No. 9 of 1975 replaced by Law No. 22 of 1995	Yes	Yes	Yes	Yes	One	None

Source: Adapted from Al-Hussaini *et al.* (2008) and Al-Shammari *et al.* (2008)

Initially, foreign-owned companies may establish to regionally distribute services and may operate within domestic market if they do not pursue domestic commercial sales exclusively. In the case of Oman, foreign investment in MSM is subject to several advantages in an effort from the government to diversify the economic activities. These include: (a) zero restrictions on capital and profit transfers; (b) low corporate tax rate of 12% and zero personal income tax are imposed into registered companies in Oman either companies owned by local or international firms; (c) subject to government approval, foreign investment is permissible in many sectors up to 100%. Still, bank sector ownership is limited to 10% with approval required from the Central Bank of Oman; and (d) Oman government has implemented privatization programs to increase investment opportunities (Heritage Foundation, 2009d; Global Trade Alert, 2009; 2009; Muscat Securities Market, 2009a, 2009b, 2009c; Oman Chamber of Commerce and Industry, 2009).

The Qatar government encourages overseas investment in Qatar. It is allowed for foreigners to invest in shares up to 49% with prior approval except for agriculture, industry, health, education, tourism, and projects involved in the development of natural resources where full or majority foreign ownership is allowed. As well as this, some sectors are limited 100% to Qatari investors or as a government monopoly. Foreign companies are subject to employ a local agent, and investment projects are screened. Regarding foreign ownership, ownership for foreigners can rise up to 100% ownership of new specified sectors and/or establishment of representative offices or branches of foreign companies without local partners (Gulf Co-Operation Council Organization, 2009b). In the case of Qatar, foreign investment is restricted to a 49% ownership and

subject to a share of a local partner. Full ownership of 100% is allowed in the free zones (2009 Index Economic Freedom, 2009h; MEDEA, 2009).

## **2.4 Corporate Governance in the GCC**

Corporate governance is defined as the system through which corporations are directed and controlled. The corporate governance structure concerns about distributing rights and responsibilities among different participants in the company such as board of directors, managers, shareholders and other stakeholders, and spelling out the rules and procedures regarding making decisions on company's affairs. In the same line, corporate governance also provides the framework through which the company can be guided to set its objectives, attain those objectives, and monitor performance. Therefore, companies that are practicing good corporate governance can be described as companies having well-defined and protected shareholder rights, a solid control environment, high levels of transparency and disclosure, and an empowered board. More important is that the interest of the company and those of shareholders are well aligned (Hawkamah & IFC, 2008). Corruption practices, such as Enron, Arthur Andersen, WorldCom, and Adelphia scandals have put corporate governance under investigation. Kawaura (2004) finds that the ineffective governance structure is responsible for the crisis of Japanese banks in the 1990s. Corporate governance matters to stakeholders for broadly similar purposes. These stakeholders include investors, companies, the public sector, and other stakeholders such as banks; suppliers; and employees (Hawkamah & IFC, 2008).

The OECD principles of Corporate Governance first endorsed by OECD ministers in 1999 (a reviewed and revised version of them is now available, since 2005), are intended to assist OECD and non-OECD governments in their efforts to evaluate and improve the legal, institutional and regulatory framework for corporate governance in their countries. The World Bank has used OECD principles of CG to assess the state of corporate governance in some of its member countries, including Arab countries. Over the years, several institutions have developed their own set of codes and principles like the Institute of International Finance's Policies of Corporate Governance and Transparency in Emerging Markets, which established a code based on criteria are considered important to international investors (Harabi, 2007; Hawkamah & IFC, 2008).

The increasing openness and integration of GCC countries with the global economy has created push-and-pull factors that are contributing to changing the corporate governance environment. Policy and regulatory reforms in the GCC have been led by international convergence and adoption of prudential and regulatory codes and standards, such as Anti-Money Laundering and Counter-Terrorist Financing (AML/CTF), Basel banking supervision core principles, and international obligations and agreements resulting from entry into WTO, Regional trade Agreements (RTAs) and Free Trade Agreements (FTAs). This has been reinforced by competitive pressure and emulation within the countries of the GCC. Moreover, international institutions, such as the IMF, World Bank, WTO and the BIS have played a role in providing technical assistance and building knowledge and capacity (Harabi, 2007; Saidi & Kumar, 2007; Hawkamah & IFC, 2008).

Globalization, liberalization and the interlinking of markets have brought about an increased pressure for change. These are compounded by the regional and international investors such as the increasing presence of international firms in the region and the increasing number of Western expatriates in senior management level positions, who are subject to global corporate standards. All these factors contribute in the creation of a superior corporate structure and offer GCC companies with the encouragement to invest in the adoption of better standards.

It is imperative to acknowledge that the boom in the GCC has been urged by the desire to diversify the economy from oil to a more sustainable business model for the future. As such, the most ideal way to achieve sustainability, prosperity and job creation in the long term context is through ensuring that firms are capable of providing investors with superior returns in the present and in the future. A framework encapsulating effective internal governance is invaluable in guiding the firms towards the above objectives while simultaneously ensuring corporate flexibility in uncertain times (Hawkamah Newsletter, 2008). Regulatory authorities throughout the region have employed steps to enhance corporate governance mechanisms owing to three factors; the downward correction in regional markets in 2005 followed by the efforts by the authorities to improve standards and protect shareholders particularly during the widespread public participation in equity markets, the inclination of GCC corporations to take part in the global market competition and thus adhere to international standards and finally, attempts to attract foreign direct investments to the Arab region (AL Majlis, The GCC Board Directors Institute, 2009).



Hawkamah's research indicates that there have been significant improvements in corporate governance in GCC region in just a few short years. Although implementation is still patchy, the concept and principles of corporate governance are now well accepted. Regulators and companies have taken substantial steps, albeit from a low base, to improve their practices. Almost all GCC countries now have corporate governance codes or guidelines in place for publicly listed companies (Saidi, 2011). However, corporate governance is still a relatively new concept in the Gulf Cooperation Council (GCC) countries. The corporate governance frameworks of GCC countries in the present time fail to meet the threshold expected by international investors (AL Majlis, The GCC Board Directors Institute, 2009). This is because corporate governance reform is primarily run in the developed markets by investors but in the GCC, the weight of corporate governance improvements lies on the regulators. This depends on a combination of factors including ownership structures of GCC firms (primarily family or state-owned), the availability of liquidity and financing present in regional banks and the underdeveloped capital markets. Arab firms are still inclined to follow concentrated ownership and hence, other factors such as generational ties and family involvement effect the firms' governance relations and agreements (INSEAD, The Business School for the World, 2010). Consequently, international investors taking corporate governance very seriously steer themselves away from GCC markets (INSEAD, The Business School for the World,2010). Further, GCC financial markets remain underdeveloped and do not sufficiently protect minority investors. The GCC largely follow a civil-law system, but are still significantly affected by their political regimes (Chahine & Tohme, 2009; Al-Shammari *et al.*, 2008; Al-Hussaini & Al-Sultan, 2008; Al-Muharrami *et al.*, 2006; Bley & Chen, 2006).

## **2.5 Auditor Choice within GCC Codes of Corporate Governance**

### **2.5.1 Sultanate of Oman**

The first country in GCC region to adopt the code of corporate governance was Oman in 2002 and Oman was the first country in the GCC that has established an independent capital market regulator. In this regard, assessing the current corporate governance requirements has begun in fall 2006 by the Capital Market Authority. In the same manner, the privatization of Muscat Securities Markets has also been considered for discussion by CMA. Nevertheless, Omani corporate governance structure is still suffering from weakness of the quality of surveillance and enforcement level by the CMA and MSM. In terms of auditor choice, Article 9 of Oman's corporate governance states that the annual general meeting shall appoint external auditors by applying the following rules: (1) the name of the auditor for election after taking into consideration the views of the audit committee shall be recommended by the board of directors; (2) the auditor election takes place in a yearly basis. Moreover, the same auditor should be rotated after four consecutive financial years. The cooling off period after the auditor rotation is two years. by the same token, Article 28 states that the auditor shall issue a certificate on corporate governance annexed with the financial report stating that corporate governance being free from any material misrepresentation (Code of Corporate Governance for MSM Listed Companies, 2006; Saidi & Kumar, 2007).

## **2.5.2 Kingdom of Bahrain**

Kingdom of Bahrain establishes a code of corporate governance that came into effect on 1<sup>st</sup> January, 2011. This code applies to all companies which are incorporate under the Bahrain Commercial Companies Law (the “company law”) whose shares are listed on the Bahrain Stock Exchange. Not a replication, this code is considered a supplement for the Bahraini company law. In particular, this code highlights the importance of the disclosure and transparency. So that, disclosure is identified as a crucial instrument for effectively outside monitoring because a solely market monitoring cannot guarantee adequate compliance with the code. Thus, the code outlines to a combined monitoring system of Ministry of Industry and Commerce (MOIC), Bahrain Monetary Agency (BMA), Bahrain Stock Exchange (BSE), Bahrain courts, board, company’s shareholders, and professional firms including auditors, lawyers, and investment advisers. Principle 3, provision 3.1 of Bahraini corporate governance indicates that audit committee recommends the selection, compensation, and oversight of the company’s outside auditor. Further, principle 7, provision 7.1 recommends that a company should require its external auditor to attend the annual shareholder meetings and be available to answer shareholder questions concerning the conduct and conclusion of the audit. It also indicates in the appendix E of corporate governance disclosure that the company shall disclose items related to reasons for any switching of auditors and reappointing of auditors (The Corporate Governance Code of Kingdom of Bahrain, 2011; Saidi & Kumar, 2007).

### **2.5.3 Kingdom of Saudi Arabia**

The Board of Capital Market Authority introduced a code of corporate governance in November 12, 2006 which is based on the Capital Market Law issued by Royal Decree No. M/30 dated January 1, 1996 that is amended by Resolution of the Board of the Capital Market Authority Number 1-10-2010 dated March 16, 2010. This new code has significantly strengthened the country's corporate governance framework. However, compliance with the code is optional and no deadline for compliance has been set. It is indicated in Article 5, provision G, that shareholders shall be entitled to discuss matters listed in the agenda of the General Assembly and raise relevant questions to the board members and to the external auditor. The board of directors or the external auditor shall answer the questions raised by shareholders in a manner that does not prejudice the company's interest. In Article 14, provision C.4, it is indicated that audit committee is responsible for recommending to the board of directors the appointment, dismissal and the Remuneration of external auditors; upon any such recommendation, regard must be made to their independence. Further, C.5 indicates that audit committee is responsible for supervision the activities of the external auditors and approve any activity beyond the scope of the audit work assigned to them during the performance of their duties. C.7 indicates that audit committee is responsible for reviewing the external auditor's comments on the financial statements and follow up the actions taken about them (Corporate Governance Regulations in the Kingdom of Saudi Arabia, 2006; Saidi & Kumar, 2007).

#### **2.5.4 Qatar**

In 2005, authorities established an independent regulator – the Qatar Financial Markets Authority (QFMA). In January 27, 2009, the authority issued Corporate Governance Code for Companies Listed in Markets Regulated by the Qatar Financial Markets Authority. Article 17, provision 17.1 indicates that in any event, any person who is or has been employed by the company’s external auditors within the last 2 years may not be a member of the audit committee. Article 17, provision 17.6.11 and Article 19, provision 19.1 indicate that audit committee is responsible for reviewing the letter of appointment of the external auditor, his business plan and any significant clarifications he requests from senior management as regards the accounting records, the financial accounts or control systems as well as the senior executive management’s reply. External auditor selection is carried out upon the recommendation of the audit committee to the board and the decision of the company’s general assembly. Article 19, provision 19.5 indicates that a listed company shall change its external auditor every three years at a maximum (Corporate Governance Code for Companies Listed in Markets Regulated by the Qatar Financial Markets Authority, 2009; Saidi & Kumar, 2007).

#### **2.5.5 United Arab Emirates (UAE)**

The UAE’s corporate governance framework is laid out in the UAE company law that applies to all companies incorporated in the UAE and in the listing requirements of the Abu Dhabi Securities Market (ADSM) and the Dubai Financial Market (DFM). The

Emirates Securities and Commodities Authority (ESCA) regulates capital markets in both Abu Dhabi and Dubai. Ministry of Economy–United Arab Emirates issued the Ministerial Resolution No. (518) of October 29, 2009 concerning governance rules and corporate discipline standards. Article 9, provision 5.a states that audit committee is responsible about developing and applying the policy for contracting with external auditors. Article 10, provisions 1 states that the board of directors shall nominate an external auditor at recommendations of the audit committee. Appointment shall be made and remunerations shall be fixed by a resolution of the general assembly of the company. Provision 2 indicates that the external auditor shall be selected on ground of efficiency, reputation and experience (Saidi & Kumar, 2007; Ministerial Resolution No. (518) Concerning Governance Rules and Corporate Discipline Standards, 2009).

## **2.6 Auditor Role within GCC Codes of Corporate Governance**

Maintaining good corporate governance practices are expected to be a significantly role played by incorporating auditors in the GCC. The corporate governance framework, as embodied in a country's laws and regulatory structure and institutions, in the six GCC countries differed widely and are at different stages of development. The Hawkamah-IIF Comparative Survey of CG in GCC report found that Oman, followed by Saudi Arabia and Kuwait had comparatively better CG frameworks than Bahrain, Qatar and the United Arab Emirates (Saidi & Kumar, 2007; Hawkamah & IFC, 2008; Harabi, 2007). Arab corporate legal system largely follows the civil-law system, but one can reasonably argue that the relation between legal origin and financial arrangements in the Arab countries merely reflects the influence of a third exogenous variable, which is the role of

the state or the nature of the political system and its national governance.<sup>3</sup> Several factors have contributed to the lack of development of CG in the GCC include: (1) isolation from the global economy, (2) there are poor enforcement of regulation and competition policies, (3) Large and competitive regional banking network that until now could not meet the liquidity needs of most GCC companies, (4) a dominance of three groups of shareholders, namely; government and its agencies, family and domestic corporations.

These types of owners dominate in the region and bring up three issues worth mentioning; first, the ownership structure of the firms may negatively impact their management and performance which, in turn, affects their corporate governance practices as managers do not possess flexible and objective autonomy in their monitoring process in the company in order to achieve its objectives.

Literature reveals that the lack of investor protection and well-developed markets for corporate control has resulted in the reliance of investors in Arab countries on the governance structure characterized by highly concentrated ownership (La Porta *et al.*, 1997, 1998, 1999, 2000). This rationale is further compounded by Omran *et al.* (2008) who stated that this type of environment is prevalent in all Arab countries. Second, the market-power position of the large firms may sustain themselves and be supported through the creation of barriers to entry for smaller firms. This is because the larger firms have economies of scale coupled with acquired competitive advantages in the form of; access to finance, distribution, relation with public administration, close relations of

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<sup>3</sup> It is documented that common-law countries generally have the strongest, and French civil-law countries have the weakest, legal protection of investors, with German and Scandinavian civil-law countries located in the middle. (La Porta, Lopez-de-Silanes, Shleifer, and Vishny, 2000, 1999, 1998, 1997).

the large business groups with the political sphere, the group's political power to influence policy-decision making concerning business regulation and reform priorities, and finally, the underdeveloped capital markets characterized by weak regulatory environments and lack of investors' equity culture (Chahine & Tohme, 2009; Harabi, 2007; Hawkamah & IFC, 2008; Saidi & Kumar, 2007).

## **2.7 Financial Scandals and Status of Qualified Audit Reports in the GCC**

Corruption practices, such as Enron, Arthur Andersen, WorldCom, and Adelphia scandals have put corporate governance under investigation. Kawaura (2004) found that the ineffective governance structure is responsible for the crisis of Japanese banks in the 1990s. In the case of Kuwait, the disciplinary committee had on one occasion investigated a case of violation of IASs requirements by the auditors in 2001. The auditor was charged for giving inadequate report concerning a company which had gone against IASs for incomplete or inaccurate disclosure of information. As a penalty, the auditor was cautioned by the Disciplinary committee. This development marked the first time since 1962 the time when the External Auditing Law was passed into law.

In 1998, there was an establishment of the Capital Market Authority (CMA) and its surveillance committee in Oman. Following the establishment of CMA and its surveillance committee, pressure has been on auditors to ensure that IASs and other regulations are being complied with properly considering the penalty for non-compliance. Two cases of noncompliance with IASs have been reported where unqualified audit reports have been presented by the external auditor. In 1986, the



Professional Accounting and Auditing Law were made and the disciplinary committee was constituted in 1999 with the purpose of carrying out investigation on the act of external auditor for failing to report the violation of an accounting regulation. Consequently, the external auditor was given warning for failing to report the violation. The external auditor and one of the Big 5 audit firms are related and this gives room for the committee to be under pressure of the firm's headquarters overseas. The committee is pressurized not to institute any penalty on the external auditor for fear of losing their reputation potentially. In what follows, evidence was found against a company's Chief Executive Officer (CEO) for going against the regulation by failing to disclose information regarding capital expenditures, other expenses and revenues in compliance with the requirements of IASs. Consequently, the CEO of the company was penalized by fine and given three years imprisonment. There was a reported case of violation of regulation in 2001 leveled against external auditor. The accusation was given to the auditor for failing to report a client company which failed to adequately disclose its activities' information in compliance with the IASs. In this case, the external auditor was given warning by the disciplinary committee. Evidence from the commercial court indicate that the chairman as well as the board of directors' members were found to have violated regulation by failing to disclose information concerning the objective of the company, in line with the requirements of IASs. The shareholders received an insufficient disclosure of information that could not be reliable upon and the fund of the company was found to be utilized for personal activities. Consequently, the chairman and the whole member of the board of directors were sentenced to prison. However, as far as audit failure is concerned, none of the auditors in each country of the GCC has been tried for prosecution in public court (Al-Shammri *et al.*, 2008).

In Bahrain, three cases of violation of law and regulation have so far been reported. In the first instance, there was a case concerning the General Trading and Food Processing Company in 1994 where the accountant of the company was accused, taken to court and found guilty. The second case concerned the Bahrain Islamic Investment Company in 2002 where E&Y was involved. Eventually, the case was settled without court intervention and the other partner involved in the case was directed to withdraw from the company. The last violation case in 2002 involved the Bahrain Saudi Bank. The case was also settled out of court and the auditor involved in the case was subsequently replaced by another (Asiri, 2009).

It can be concluded from the forgoing discussion that following the actions of the disciplinary committee on the violators in Kuwait, Oman and Bahrain, there has been improvement in audit function. There has been evidence of growing number of professional audit reports as given by the independent audit report of 50 Kuwaiti listed companies reviewed. Accordingly, out of the 50 companies, the numbers of companies which had gotten qualified reports were three, three and seven in 1996, 1999 and 2002, respectively. Also as provided by the report of the independent audit in Oman, 43 listed companies showed the number of companies with receipt of qualified report to be 2, 5 and 10 in 1999, 1996 and 2002, respectively. However, in Saudi Arabia, Qatar and the UAE, disciplinary action has not been instituted and, consequently, qualified audit reports are almost lacking in those states. By considering Bahrain, the report of the independent auditor provided showed the number of companies with the receipt of qualified report to be 0, 2, 2, and 0 in the years 1996, 1997, 1999 and 2002, respectively.

There was, however, no report of independent audit of the bank and Investment Company that was qualified in Saudi Arabia, Qatar and the UAE. The implication is that in Saudi Arabia, Qatar and the UAE, disciplinary action has not been instituted and, consequently, qualified audit reports are almost lacking in those states (Al-Shammari *et al.*, 2008; Al-Hussaini & Al-Sultan, 2008; Bley & Chen, 2006).

## **2.8 Summary and Conclusion**

In this chapter, GCC country-background, GCC audit markets, institutional factors associated with the demand for audit quality are reviewed. Within the context of GCC-institutional framework, auditors are hired in a manner that they are expected to provide a true and fair view of the audited financial statements and to play a significant role in maintaining good corporate governance. They must ensure that good corporate governance practices are adopted. They must act as the guardian of the company's financial integrity. This is because an effective and objective audit is an essential part of corporate governance. However, it is clear reported that the institutional framework related to accounting, auditing and CG in the GCC is still under development. Further, the existing institutional framework lacks of enforcement and it ignores the Arab-political and cultural settings.

However, the increasing openness and integration of the GCC countries with the global economy has created push-and-pull factors that are contributing to changing the institutional framework environment. These factors include Anti-Money Laundering and Counter-Terrorist Financing (AML/CTF), Basel Banking Supervision core

principles, and international obligations and agreements resulting from entry into WTO, Regional Trade Agreements (RTAs) and Free Trade Agreements (FTAs). Moreover, international institutions, such as the IMF, World Bank, WTO and the BIS have played a role in providing technical assistance and building knowledge and capacity. The next chapter discusses the demand for audit quality, theories of the demand for audit quality and its proxies. Further, it highlights issues related to auditor choice and reviews previous studies on determinants of auditor choice.

## **CHAPTER THREE**

### **DEMAND FOR AUDIT QUALITY AND ITS RELATED THEORIES**

#### **3.1 Introduction**

It is well established that the motivation of demanding audit services is as monitoring mechanisms mitigating the potential conflicts of interest between owners and managers as well as those among different classes of security holders (Jensen & Meckling, 1976; Watts, 1977; Watts & Zimmerman, 1981). A vast majority of prior research tries to seek a great understanding of what determinants that can influence the demand for audit services since audit service is a differentiated-quality product. And, what makes companies demand different levels of audit services. Thus, this chapter provides a comprehensive review of the issues associated with the demand for audit services.

The remainder of this chapter is organized as follows. Section 3.2 highlights the demand for audit quality and theories associated with this demand. Section 3.3 discusses the recent issues associated with auditor choice. And, section 3.7 provides a summary and conclusion of this chapter.

### **3.2 Demand for Audit Quality**

The process of matching the minimum cost between the demand side, auditees, and the supply side, auditors, in a specific environment is called an auditor choice (Datar, Feltham & Hughes, 1991). Agency theory helps to explain the demand for audit services in terms of the role of the auditor as to independently verify accounting numbers prepared by managers for use in compensation and lending contracts. In other words, Audit services are demanded as monitoring devices because of the potential conflicts of interest between owners and managers as well as those among different classes of security holders. These contracts are designed to mitigate incentive problems created by the separation of ownership and control (e.g., Jensen & Meckling, 1976; Watts, 1977; Watts & Zimmerman, 1981). In a broader sense, Wallace (1987, 1980) proposes three hypotheses for explaining the role of the audit in free and regulated markets: the monitoring hypothesis, the signaling hypothesis and the insurance hypothesis. In the same manner consistent with the context of agency theory, Dopuch (1984) proposes the substitution hypothesis that could substitute the demand for external auditor or complement its use.

It is worth to mention that the disparity in the level of agency conflicts leads to a variation in independent audit demand as a monitoring device. By reviewing the financial statements, the auditor increases the credibility of the accounting numbers and the value of the contracts to the stockholders, bondholders and managers of the firm. However, a variety of definitions is used to proxy for audit quality in the literature. Due to the inability of directly observing audit quality, several observable factors that are the

most occurrence in the auditor choice literature have been used as a surrogate, including auditor size (e.g., Chan *et al.*, 2007; DeFond, 1992), Brand-name auditor (e.g., DeFond, 1992; Fargher *et al.*, 2001; Guedhami *et al.*, 2009; Hope *et al.*, 2008; Knechel *et al.*, 2008; Lin & Liu, 2009; Wang, Wong & Xia, 2008), industry-specialist auditor (e.g., Velury *et al.*, 2003; Beasley & Petroni, 2001; Abbott & Parker, 2000; DeFond, 1992; Palmrose, 1988) and auditor independence (e.g., DeFond, 1992).

The greater the quality of the audit, that is, the probability that the auditor detects and reports accounting irregularities, the greater the audit's value to the contracting parties (DeAngelo, 1981a; Healy & Lys, 1985). DeAngelo (1981a) develops a demand and supply rationale for what she terms "audit quality." Using the work of Watts and Zimmerman (1980), she defines audit quality as the probability that an auditor will both (1) discover a breach in the accounting system, and (2) report the breach. Quality, then, captures the attribute of the audit service that helps alleviate the agency conflicts between the manager and equity holders. Despite some recent high-profile cases (e.g., Arthur Andersen), the accumulative evidence of the extant research confirms that higher audit quality is provided by large auditors as a monitoring function.

### **3.3 Theories Associated with the Demand for Audit Quality**

Regardless of why companies use auditors, the current legal and business environment requires their use. Therefore, the question arises in this context is under what circumstances companies do choose/change certain levels of audit quality. There are several different theories, hypotheses, and presumptive hypotheses that may explain the

demand for audit services. Importantly, the most commonly utilized audit theory is the agency theory and its related hypothesis as put forward by Dopuch (1984) and Wallace (1987, 1980). According to Carey *et al.* (2000), agency theory has proven to be a resilient and popular framework in its ability to explain the demand for external auditing and its suggestion of a monitoring role for external audit. More specifically, according to Wallace (1987, 1980), three hypotheses may be used to explain the role of the audit in free and regulated markets; the monitoring hypothesis, the signaling hypothesis and the insurance hypothesis. Moreover, consistent with the agency theory, Dopuch (1984) suggests that substitution hypothesis could be an alternative to the demand for external auditor or a complement to its use.

Nevertheless, even to date, there is no theory that comprehensively explains why companies change their auditors (DeAngelo, 1982; Grayson, 1999; Knapp & Elikai, 1988; Lindahl, 1996; Schwartz & Menon, 1985). In addition, there is no general theory which explains the way firms select a new auditor or gauges the cost tradeoffs in changing auditors (Blouinet *et al.*, 2005). In addition, the existing theories fall short of providing enough insight into the identification of the complete set of endogenous variables jointly and simultaneously determined with audit quality, or exogenous ones which underlie their basis (Clarkson & Simunic, 1994). The difficulty of categorizing the potential determinants which impact the auditor choice has its basis on the underlying theories because of a number of reasons; the incomprehensive underlying theories related to the auditor choice, the theories' overlapping characters (Wallace, 1984) and finally, lack of knowledge regarding behavioral issues' relation to auditor choice (Beattie & Fearnley, 1998).



### **3.3.1 Agency Theory**

A great portion of literature in the field of auditing is dedicated to the principal-agent framework. Significant works came from Jensen and Meckling (1976) and Fama and Jensen (1983). The agency theory postulates the agency relationship where the principal appropriates work to the agent. This relationship may have many drawbacks that relate to the agents' opportunism or self-interest. For instance, the agent may act to his interests as opposed to the principal's or he may only partially act in the principal's interests. This can be viewed from various facets; the agent may abuse his power for certain benefits and he may not adopt suitable actions to pursue the principal's interests if he views the action inappropriate (contrary to the principal's views of risk). The issue of information asymmetry may also arise where both parties have access to differing information level; in reality, the principal is at a loss as the agent often has greater levels of information.

In relation to corporations and issues concerning corporate control, the agency theory considers mechanisms of corporate governance, particularly the board of directors, as invaluable in monitoring agents in an attempt to ensure that any issue between the two parties are minimized. A great portion of the agency theory concerning corporations is in the context of the distinct ownership and control entities as explained by Berle and Means (1932). Accordingly, the agent is referred to managers, and principals are shareholders. This is the most common scenario attributed to the agency relationship in the context of corporate governance. Nevertheless, it is notable that the agency

relationship may also encompass other relationships such as those of company and creditor and of employer and employee (Mallin, 2007).

The agency theory explains the decision of the company to appoint an auditor. It has been utilized to shed a light on the voluntary demand for audit services and the heterogeneous demand for audit quality. The agency theory explained the auditing demand stemming from the possible manager-shareholders/interested groups' conflict, those entering into agreements with the client including creditors and/or labor unions (Ng, 1978; Jensen & Meckling, 1976). In light of the agency theory, the moral hazard issue originates from the scenario of information asymmetry that generally happens when manager has superior access to information of firm performance while shareholders are not privy to the manager's actions. In this situation, the possibility of manager's abuse of position to increase his self-interest forsaking the shareholder's interests arises. Hence, for the shareholders to handle the issue of moral hazard, it is imperative that they come up with contracts for managers stipulating that their interests be aligned with the interests of shareholders (for instance, bonus plans have to be based on net income). The elimination of information asymmetry is another way to resolve the moral hazard through transparency of the firm information (Beaver, 1989). In sum, both methods call for comprehensive and actual financial information confirmed by auditors, as shareholders need independent monitors for fairness of the disclosure of financial statements.

### **3.3.1.1 Monitoring Hypothesis**

The agency theory has explained the demand for audit quality in light of monitoring hypothesis. This hypothesis underlies the auditor selection and auditor change theory (Williams, 1988). For example, it has been revealed that firms opt for voluntary auditing even in the absence of mandatory regulation for it (Chow, 1982). It is stated that this scenario underlies the net reduction in the agency cost borne by firms (agency cost savings are higher than audit fee). Similarly, Anderson, Francis & Stokes (1993) claim that firms through hiring of superior auditing may increase their auditing experience if they are desirous of minimizing their agency costs. The main objectives of managers is to assure the shareholders and to satisfy their interests through the employment of an expert auditor to conduct audits according to the international standards, highlighting any erroneous materials and providing the right advice to shareholders (Churchill & Werbaneth, 1979; Healy & Lys, 1986; Palmrose, 1984b; Williams, 1988; Watts & Zimmerman, 1990). The reason behind such monitoring is generally considered as an attestation of the firm's financial reporting to external investors (Feltham, Hughes & Simunic, 1991). To a sufficient level, the role of monitoring has been extended to encompass the improvement of risk assessment (Johnson & Lys, 1990).

Most particularly, Weets (1999) provides an overview of three agency relationship where an auditor can avoid/minimize agency problems. First, managers often act as agents of owners where they have complete discretion over business strategy, investment, and decisions concerning financial matters. As such, opportunities may arise for them to satisfy their own interests and they may be inclined to bestow themselves

with significant remuneration, through substantial salaries or on the form of fringe benefits (e.g. expensive cars and luxury offices) (Dunn, 1996). The possibility of such opportunism along with the presence of information asymmetry leads to agency issues. Hence, owners have the incentive to create schemes urging managers to act as real agents where one of the schemes is the appointment of an auditor. On the other hand, managers may also hire an auditor to relay a non-opportunistic behavior to obtain more than the least compensation.

Second, the agency relationship leads to the demand for audit services in the owner-creditor situation where the owners are the agent's creditor. The existence of creditors urges the companies to employ an auditor to influence the audit quality. Similarly, to manager-owner relationship, asymmetric information leads to the potential for owners to behave according to their interests forsaking the creditors' interests. The level of possible wealth transfer from creditors to owners hinges on the debt proportion in the capital structure of the company. In other words, the higher the debt proportion, the higher will be the potential wealth transfer (Watts & Zimmerman, 1986).

Third, Weets (1999) has identified the employee-owner/manager relationship. Contrary to a small organization where owner/manager is in complete control of the operations through personal observation or direct supervision, the control in the context of larger firms calls for greater appropriation of duties. Behavior and actions of employees in a larger firm pose observation challenges. The employment of external auditors may be utilized to minimize the potential for loss-of-control in firm's hierarchy. In addition, in

firms with greater numbers of employees, auditors have comparatively more audit work to ensure firm control. (Abdel-Khalik, 1993).

### **3.3.1.2 Signaling Hypothesis**

Based on the product-differentiated hypothesis, firms generally employ an auditor to signal their attractive characteristics as investors consider new information concerning quality auditor employment to assess the value of firms. They are inclined to pay a higher price for firms that have superior performance (Joher, Ali, Shamsher, Annuar & Ariff, 2000). According to Hothausen and Verrecchia (1990), firms seem to signal their prior uncertainty through their employment of well-known audit firms. Signaling through superior auditor selection is a way for managers (directors) to relay additional information of the company to the market and sometimes information of their behavior (Bar-Yosef & Livnat, 1984). In the past, financial reporting was considered to be the core to monitoring purposes. However, a shift of view has occurred in the 1960s targeting the needs and provision of information for users' economic decisions (Higson, 2003). Hence, the signaling hypothesis may be considered as complementary or an alternative to the monitoring hypothesis (Ittonen, 2010). Owing to the non-observable and hard to evaluate characteristics of audit service quality, reputation has been used as a suitable proxy for it (Craswell & Frances, 1999; Shapiro, 1983).

Specifically, investors place value on auditing as the basis upon which financial information quality is enhanced (Wallace, 2004; 1987; and 1980). Therefore, information utilized in monitoring contracts may also be used to make investment

decisions. However, contrary to the monitoring aims of audit function, information hypothesis highlights investor's need for quality financial information for the determination of market values (Wallace, 1980). Generally speaking, it has been noted that the credibility of accounting information increases the risk estimation (Beaver *et al.*, 1970), the interest costs (Wallace, 2002), the underpricing of initial public offerings (Hogan, 1997; Menon & Williams, 1991; Willenborg, 1999) and bankruptcy (Menon & Williams, 1994).

There are three main advantages to information (Fama & Laffer, 1971) namely, decision making enhancement, risk minimization, and trading profit earnings. The assurance of auditors on the financial statements guarantees the realization of each advantage due to the following reasons; (i) audit function involves detection of errors and ensures that audit department carefully prepares financial records. As such, auditing provides exact data for credit and investment analysis, labor negotiations of decisions regulations. All these actions lead to the improvement of management performance. (ii) To minimize risk, investors demand superior audit quality. To do this, they have to pay higher audit fees in a form of risk premium to ensure risk minimization (Wallace, 2004; 1987; and 1980). (iii) According to the efficient market hypothesis, all information available to the public is indicated by asset prices. Hence, the use of this information could avoid obtaining abnormal returns. In other words, investors having exclusive access to new information are the sole parties that could take advantage of profits resulting from trading. This is the reason why it is possible to evaluate audit function in terms of its benefits of trading gains.

### **3.3.1.3 Insurance Hypothesis**

Among the reasons underlying the demand for higher quality is the financial report users' search for insurance against financial statement errors, misstatements, omissions or frauds. In the realm of insurance hypothesis, audit quality is considered as an implicit insurance and the firm's share price is guaranteed by employing a higher audit quality (Chow *et al.*, 1988; DeAngelo, 1981b; Francis & Wilson, 1988; Krishnan & Krishnan, 1997; Schwartz & Menon, 1985; Wallace, 1980). Specifically, with the increase in potential litigation costs, the insurance demand from managers as well as professional participants to the audit may increase owing to four reasons (Wallace, 2004; 1987; and 1980). First society demands the involvement of auditors and a manager who fails to facilitate just so, may fail in demonstrating sufficient professional care. Hence, managers will be held accountable for any negligence/fraud without the attestation of independent auditors.

Second, internal legal departments are created by auditors to defend them in liability suits. Because they are co-defendants, audits have to provide an efficient insurance coverage. Third, auditors are concerned with their reputation when faced with a suit of litigation and managers are similarly concerned with their reputation as well as the company's. Fourth, auditors are viewed as 'deep pockets' by firms who are almost bankrupt or those who are unable to pay. As such, auditors become accountable for erroneous financial reports and they are considered as a means of socializing risk. Hence, auditors often spread the cost of companies who are failing, to other clients by charging the latter higher audit prices and to society by charging higher prices in exchange for

minimal investment returns. The insurance hypothesis is hence alternatively referred to as the ‘deep pockets’ hypothesis of audit quality (Lennox, 1999).

The audit quality demand and supply are impacted by the insurance hypothesis. In demand, audit quality is priced or demanded by the users of financial information while in supply, higher quality auditors are considered as entities of ‘deep pockets’ whose reputation may be damaged with risk of litigation. Hence, auditors may employ actions to avoid business risks that include, accepting the audit engagement with the client, adjusting the audit fees on the basis of potential misrepresentation or fraud exhibited by a specific firm, issuing modified audit opinions, and if firm’s conditions have shifted to a certain level of risk, the auditor may quit (Krishnan & Krishnan, 1997). According to O’Reilly, Leitch and Tuttle (2006), the going concern of audit report information is analyzed in a less negative manner when the environment feels the auditor can offer some insurance. Stated simply, the insurance function is present when the legal system enables investors to recover their losses from auditors when the latter possess enough capital resources to compensate investors’ losses. The possibility of recovery of loss is maximized along with the auditor’s reputation offering insurance in case the audit fails (Simunic & Stein, 1995).

#### **3.3.1.4 Substitution Hypothesis**

There are other types of monitoring that could be alternatives to the demand for external audits or complements to it (Dupoch, 1984). The substitution impact implies corporate governance measures are alternatives among each other. Particularly, governance mechanisms are substitutable which indicates that substitution hypothesis may



significantly predict audit quality choice, where monitoring through the replacement of high external audit quality with internal governance devices so that lesser audit quality becomes acknowledged. For example, the demand for higher quality services may be minimized through the existence of active audit committees and formal internal audit divisions. Moreover, firm creditors with high debt-equity ratios may be able to appoint their own representatives on firm's boards (Anderson *et al.*, 1993; Matolsy, Stokes & Wright, 1999).

Extant literature reveals a negative link between the external audit quality demanded and distinct internal governance mechanisms. It is claimed that the corporate governance measures of internal audit, external audit quality and the board of directors can be substituted and they hinge on the characteristics of the company in terms of greater assets-in-place against growth. Based on the study by Yeoh and Jubb (2001), the monitoring of high external audit quality may be substituted with internal governance devices. It is revealed that firms possessing greater stability make use of superior monitoring through audit as opposed to directorships. Additionally, these firms spend greater on internal audit compared to external audit (Anderson *et al.*, 1993). Similarly, Matolsy *et al.* (1999) stated that in firms having high growth options, directors' governance is superior compared to external audit governance. Literature indicates the substitutable element of governance mechanisms. Lesser quality audit becomes acceptable to an extent where the nominal marginal costs of such activities equalize the perceived marginal benefits from conducting them (Jensen & Meckling, 1976).

Moreover, based on tests, when internal governance activities are inferior, the external governance mechanism of the takeover market is superior. Along the same line, Morck, Shleifer and Vishny (1988) state that with the increase of management ownership, the possibility of a hostile turnover decreases and a more 'friendly acquisition' increases. Also, Brickley and James (1987) stated that where a market for takeovers exists, there is not much need for internal control proxied by external board of directors and concentration of ownership. In cases where takeovers are inefficient as a market tool, the internal governance mechanisms are effective monitoring mechanisms.

In addition, researchers including Anderson *et al.* (1993) and Brickley and James (1987) also revealed that internal governance devices may be substitutable among one another. While Brickley and James (1987), revealed that a higher number of external directors or less diffusion of ownership lead to the reduction of managerial opportunism, Anderson *et al.* (1993) revealed that the relative expenditure on directors and internal auditors changes according to different corporate situations. The pioneering governance studies to examine audit as a monitoring device and its substitutability in particular firm types came from Anderson *et al.* (1993) and Matolcsy (1999). The substitution hypothesis has however only received little recognition in terms of empirical backing. Studies appear to show that audit quality could be a non-substitutable governance mechanism particularly owing to market perception (Yeoh & Jubb, 2001) where the signaling and insurance dimensions of audit quality may be stronger.

### **3.3.2 Managerial Grid Theory and Attraction-Selection-Attrition Framework: A Complementary Fashion**

The managerial grid theory stems from Blake and Mouton's (1965, 1964, and 1960) analyses of the industrial managerial behavior. They revealed that majority of managers' actions can be divided into two areas namely concern for people and concern for production. They are convinced that it is possible for the manager to be concerned with one area instead of the other. They have interpreted the categories of relationship between concerns as indications of the type of managerial behavior that is employed in a given situation. As such, the possible relationship between concerns for production and for people and the assumptions behind them provide a systematic condition for conceptualizing different types of management. The managerial grid is a squared framework comprising of 81 squares upon which Blake and Mouton plotted the five main leadership styles; 1/1, 1/9, 9/1, 5/5, and 9/9. They measured and plotted these leadership styles according to concern for production on the horizontal axis and concern for people on the vertical axis. On the former axis, 1 denotes the least concern for production while 9 denotes the highest concern for production. On the other hand, on the latter axis, 1 denotes the least concern for people while 9 denotes the highest concern for people.

In the context of the Attraction-Selection-Attrition (ASA) framework, Schneider (1983, 1987) claims that various types of organizations attract, select and retain different types of people. The framework has its basis on the rationale that similar categories of people will be lured not only to jobs but also to firms of a certain kind. The attraction process involves the rationale that people's preferences for specific organizations have their

basis on an implicit approximation of the congruence of their own personal characteristics and the work organization's attributes.

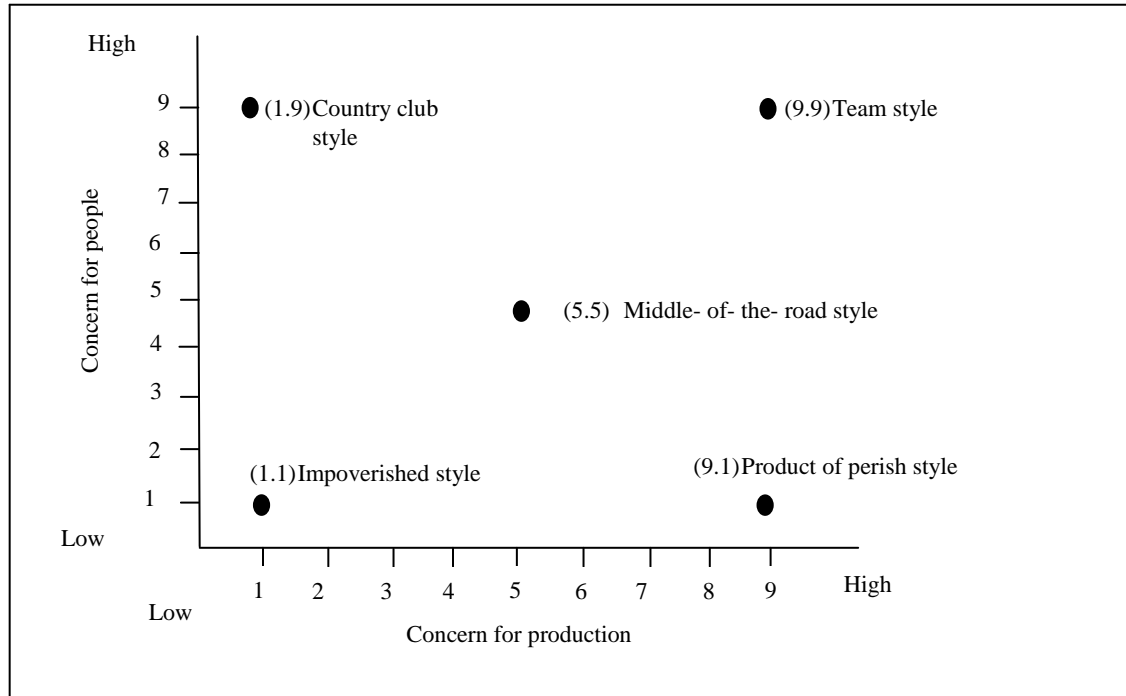


Figure 3.1  
*Managerial Grid Theory*  
 Source: Blake and Mouton (1965, 1964, 1960)

In other words, people perceive organizations differentially attractive as a function of their implicit judgments of the congruence among the organizations' goals (structures, processes, and culture as proxies of goals) and their own personalities. In the next step of ASA framework, the formal and informal selection processes employed by organizations in the recruitment and hiring of employees are explained as having the attributes that organizations are looking for. The final process is the attrition process holds the idea that people will eventually quit their jobs in organizations they do not fit in. The turnover literature is clear concerning the fact that people who are ill fitted in organizations are more inclined to leave them. Various studies have supported the ASA framework

postulations with empirical evidence (Boone, Olffen & Witteloostuijn, 2004; Schaubroeck, Ganster & Jones, 1998; Schneider, Smith & Taylor, 1998).

The complementary fashion of the managerial grid theory and the attraction-selection-attrition framework with the auditor choice process is that according to the conjectures of the managerial grid theory and attraction-selection-attrition framework, directors may show concern for people in a manner that people of a similar type will be attracted not only to jobs but also to organizations of a particular sort. Klein *et al.* (2009) find that Arab world is a collectivist society as compared to individualist culture and is manifested in a close long-term commitment to the member “group,” that being a family, extended family, or extended relationships. In addition, Mona (1986) reports that “Arab manager lives and works within a social structure where family and friendship dominate attitudes.” In particular, Haniffa and Hudaib (2006) find that GCC countries’ societal structure increases the nepotism and cronyism and results on limited professionalism in most significant institutions, including the auditing profession. While GCC countries’ nationals, generally, are influenced by tribal and sectarian affiliation. They concern only about image and how to elaborate etiquette and ceremony to meet certain concerns pertaining to work.

Al Bahar *et al.* (1996) indicate that the Arab firms are characterized to have differences in their management’s styles that can be explained by the unique Arabic cultural legacy in which the nationality matters. In other words, Arabic culture can be mediated by variables such as nationality of management. Laurent (1993) evidenced that nationality has a significant influence on the shaping of managerial assumptions than any other

national culture characteristics. It is evidenced that culture factors may influence perceptions and meanings of auditing concepts such as independent, accountability, and trust. All studies on culture show that learning about the culture of the auditee will offer guidance to the auditor. "With an understanding of how the client manages, the auditor can determine which audit tests to perform, which areas to ignore, and which areas to explore" (Haniffa & Cooke, 2002; Neu, 1992). Cultural values have been shown to influence management behavior and auditing can play an important role in resolving agency conflicts by acting as a monitoring device (Craswell *et al.*, 1995; Francis and Wilson, 1988; Palmrose, 1984).

Woodworth and Said (1996) observe that, within the auditing function, the significance of the cultural dimension, nationality, lies in the behavior of auditees, their reaction to workplace requirements and their relationship to the auditor. The existence of several types of nationalities in the market will lead to reasonable differences in the agency costs which will cause a variation in hiring quality auditors. This is being the case because of the variations in the management styles such as risk preferences and monitoring mechanisms and/or investment goals (Eichenseher, 1995; Muzaffar, 1989).

In this regard, the higher the collectivism of gulf nationality-directors on the board and audit committee, the greater the family and friendship relationships which, in turn, will lead to increase the nepotism and cronyism that are influenced by tribal and sectarian affiliation. As a result, the effectiveness of the monitoring function and providing advice of the board and audit committee would be shrunk. This environment results on limited professionalism in most significant institutions, including the auditing profession which,

consequently, may influence perceptions and meanings of auditing concepts such as independent, accountability and trust. Further, the role played by auditing in resolving agency conflicts by acting as a monitoring device will be diluted and, therefore, there would be a less desire for demanding a higher audit quality.

In opposition, managerial grid theory postulates that managers may concern for production. According to Al Bahar *et al.* (1996), companies that concern about the production are less likely to be influenced by Arabic culture and are more likely to adopt a strongly western-orientated approach. In consistence with this result, Hope *et al.* (2008) empirically reported that multinational companies are less likely to be influenced by home country cultural norms than are local firms. Ali and Azim (1996) and Terpstra (1978) find that, in GCC private companies, the priority in business is given to foreigners more than that given to locals. For instance, employers in the private sector depend heavily on foreigners who, in many cases, assume important positions and begin taking vital decisions immediately. It is suggested that, behaviorally, foreigners, because of their backgrounds, are more sensitive than nationals to the host country's organizational and work problems. That is, the nationals often do not realize existing problems and tend to take things for granted.

Foreign nationality of the manager is considered a source of knowledge about doing business in foreign countries. Managers who born in a foreign country are expected to possess valuable knowledge about economic and market factors and institutions. Further, they are aware of culture, behavior, and norms of foreign countries, that these characteristics may be invaluable in making strategic decisions especially those related

to firm's internationalization (Nielsen & Nielsen, 2010, 2009). Luo (2005) suggests that foreign natives can effectively process information regarding their origin country and find appropriate solutions for improving information processing. Besides the advantage of individual level knowledge, heterogeneous of managers' nationalities is invaluable for making strategic decisions. For instance, heterogeneous backgrounds of the managers lead to different perspectives on and interpretations of a particular situation. In this regard, it reduces the individual bias and group think and increases the quality of making decisions of the team. Keck (1997) indicates that the composition of the management members should reflect the company's complexity. Hence, heterogeneous backgrounds of the management are expected to lead to a better understanding and interpreting the complexity of the firm's internationalization. In support of this reasoning, it is found by a practitioners' oriented study conducted by the U.S. Conference Board that the higher multinational management is, the more successful global companies are (Berman 1997). It is argued that As westerns involve with Arabs, an incremental rationality is derived in Arab management styles. This environment leads to high degrees of flexibility and tolerance regarding obscurity and diversity (Ali, 1990).

Premium on decision-makers with international experiences have been put in place because of the increase in market globalization and the ensuring pressures on management to internationalize their firms (Nielsen & Nielsen, 2009). It is found that managers' international experience is important resource for increasing the company's competitive advantage (Daily *et al.*, 2000; Gunz & Jalland, 1996 Roth, 1995). Athanassiou and Nigh (2002) argue that manager's international experience can facilitate network contacts and access to sources of information.



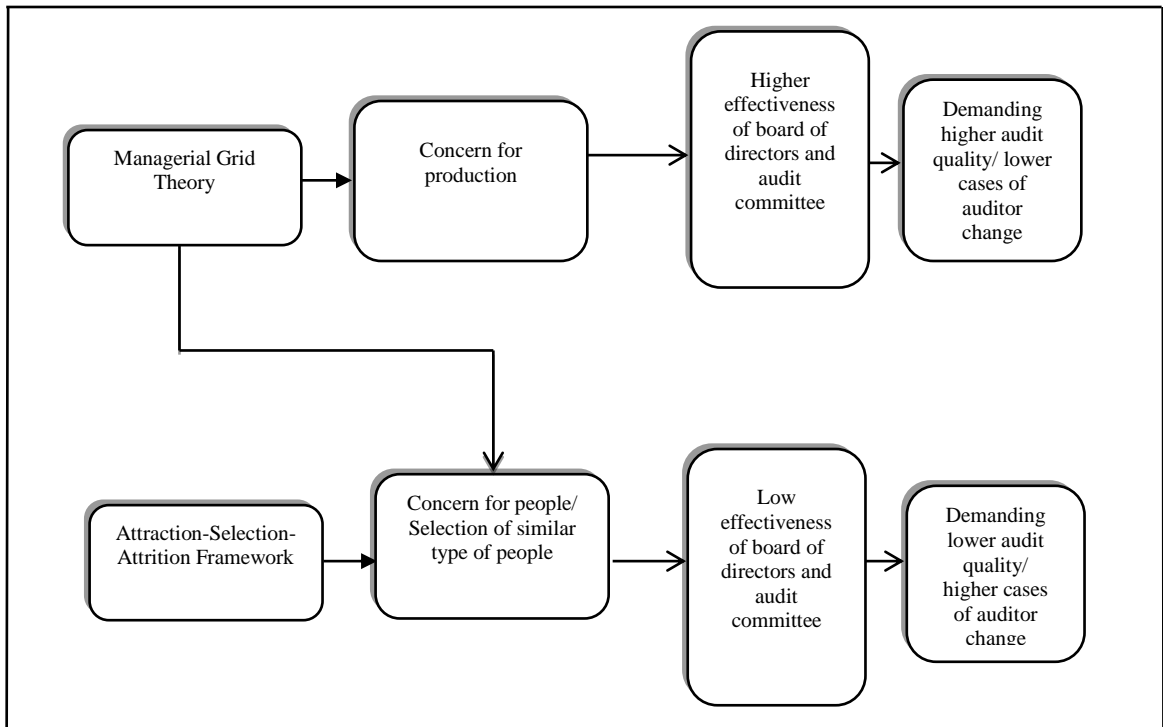


Figure 3.2  
*The Complementary Fashion of Managerial Grid Theory and Attraction-Selection-Attrition Framework*

Therefore, the higher the proportions of foreign nationalities and/or gulf nationalities with international experience, the greater the effectiveness of board of directors and audit committee in terms of monitoring function and providing advice. Under this circumstance, auditing will play an important role in resolving agency conflicts as a monitoring device that, consequently, will place a higher demand for audit services. Furthermore, effective board and audit committee members give a signaling and insurance through hiring a quality auditor in a manner that they may impart to the market additional information about the company and about their own behavior as shown in Figure 3.2.

### **3.3.3 Information Suppression Hypothesis**

This hypothesis concerns the explanation for changing auditors. According to the theory, auditor change often stems from management's inclination to confine negative or erroneous financial information. Based on Grayson's (1999) hypothesis, sometimes managers are privy to some information or negative news and they are afraid that the ongoing relation they have with the current auditor will disclose such negative news prior to their decision to so. Hence, as a ploy to prevent the disclosure, management resorts to changing auditors (Kluger & Shields, 1991) although this is frequently considered as the last resort.

Grayson (1999) lists the instances of information that urges management to keep it confidential and away from public knowledge. These include; assets/expectation requiring revaluation, events that may lead to significant income statement charges, low net income or net losses. However, according to him companies that has the notes or those who record discretionary offs or voluntarily report losses, do not require any action to delay spreading the news and they do not have the urge to replace auditors for the prevention of disclosure of news.

Along a similar line, Schwartz and Menon (1985) posit that a company that is threatened, management compensation outlook may be distorted. Hence, it is no surprise that companies in financial distress often have managements who try to delay disclosure of negative information or they employ accounting methods that can cover the problems. However, such activities may be frowned upon by auditors.

Additionally, in companies that are in dire conditions, auditors may be able to issue a qualified opinion. This qualified opinion is not what management wants because according to Schwartz and Menon (1985), management may believe that having his qualified opinion may decrease the price of the firm's securities and negatively affect the auditor's ability to report actual information; information invaluable to banker's lending decisions. Schwartz and Menon (1985) added that disagreement over accounting techniques and a required audit qualification could put pressure on the relationship between auditor and client and may urge the client to find a replacement for the auditor with someone whose views are more welcomed by management.

### **3.4 Summary and Conclusion**

In this chapter, a body of research relating to the demand for audit quality is reviewed. Previous studies have documented that audit service is a quality-differentiated product. And, companies demand different audit quality levels. Further, previous research on auditor choice is heavily based on agency theory and ignored to some extent the behavioral aspects of owners and managers.

## **CHAPTER FOUR**

### **AUDITOR CHANGE AND SELECTION: A REVIEW AND SYNTHESIS OF THE LITERATURE**

#### **4.1 Introduction**

This chapter is designed to discuss the related studies on auditor change and new auditor selection that have used a secondary-data method and to develop testable hypotheses based on the hypotheses of agency theory, managerial grid theory and attraction-selection-attrition framework, and information suppression and the direction of the previous empirical findings. Section 4.2 shows the auditor change and section 4.3 discusses the audit quality score as dependent variables of the study. Section 4.4 reviews the corporate governance mechanisms, section 4.5 discusses audit-specific characteristic and section 4.6 reviews firm-specific characteristics as independent variables of the study. In addition, section 4.3 provides a summary and conclusion of this chapter.

#### **4.2. Auditor Change**

According to Hawkamah and IFC survey of 2008, around 47% of listed companies in MENA countries (i.e., GCC) indicate that they made an auditor switch. Further, a large majority of banks and listed companies in MENA region (i.e., GCC) - namely 68.8% of

listed companies- employ international audit firms (Binder, 2009). The phenomenon of companies switching their auditors has been an enduring interest of accounting policy makers for over forty years (Luypaert & Caneghem, 2012; Nazri *et al.*, 2012a, b; Cassellet *al.*, 2012; Carpenter & Strawser, 1971). Although auditor changes are observable events, the motivations behind auditor changes are generally unobservable (Schwartz & Soo, 1996). Johnson and Lys (1990) have indicated that changes in the client's operations and activities over time can change the incumbent auditor's competitive advantage in the marketplace. From the point of view of the public and outside stockholders, it is argued that after a couple of years, auditors should be changed. The employment of the same audit firm year after years tends to reduce the independence with which that firm approaches the audit. The partners of the audit firm become friends with the financial executives of the client, some of the client's procedures may have resulted from suggestions by the auditors, and the annual audit fee may become revenue relied upon by the audit firm. Taking another course of viewpoint, Provisions that make the replacement of auditors by the firm increase auditors' power (Goldman & Barlev, 1974). From a client's viewpoint, it is argued that the continuation of a relationship with a single accounting firm prevents the auditor from taking a fresh look at the company's financial and accounting practices and planning (Burton & Robert, 1967).

The primary concern about auditor switching is that it may be the result of opinion shopping where poorly performing firms switch auditors when they are unable to pressure their incumbent auditors into issuing a clean audit opinion (Chow & Rice 1982). However, researchers have identified a number of other possible reasons for

switching auditors, including the possibility that a company may switch to a higher quality auditor in order to provide more credible information to investors and creditors, a legitimate reason (Schwartz & Menon 1985). Numerous prior studies observe that the market reaction to auditor switches is positive (negative) when a company switches to (from) a brand name auditor because brand name auditors offer better monitoring capabilities (Dunn *et al.* 1999; Eichenseher *et al.* 1989; Fried & Schiff 1981; Klock 1994; Nichols & Smith 1983). However, up to date, a limited number of studies have been conducted on auditor change using a binary variable indicator as displayed in Table 4.1. These studies have reported several mixed and inconclusive reasons for auditor changes.

### **4.3 Audit Quality Score**

DeAngelo (1981) has stated that audit quality is an unobservable task and, therefore, it is difficult to be objectively evaluated. In this regard, economists argue that when it is difficult to measure quality of services in quality-differentiated markets, market participants have incentives to devise arrangements (surrogates for quality) that minimize such measurement costs for buyers (Barzel, 1982). Empirically, several audit quality surrogates have been used by the early and recent extant research on auditor choice. Unfortunately, mixed and inconclusive results have been reported by these studies. Haskins and Williams (1990) have suggested that the conflicting of findings among previous studies on auditor choice could be attributed to the extensive restricted operationalization of the audit quality as a binary indicator. Therefore, in the social science research, there has been a strong support for the use of multiple indicators of

theoretical constructs. Nunnally & Bernstein (1994, p.86) argue that *“because constructs concern domains of observables, a better measure of any construct is obtained by combining the results from a number of measures than by taking any one of them individually... Similarly, combining several observables provides greater construct validity and scientific generalizability in the domain as a whole relative to a single measure.”*

Furthermore, Agrawal and Knoeber (1996) have argued that it gives misleading results when showing the effect of one single indicator and not considering multiple indicators of theoretical constructs. In the same vein, O’Sullivan *et al.* (2008) have stated that investigating the overall mechanisms gives a stronger effect of measurement than just examining them individually. DeFond (1992) has reported that a combination of audit quality measurements can be used to capture the same underlying construct—the auditor’s ability to alleviate agency conflicts. This combination measurement may include the size, brand name, expertise and independence. Consequently, it is suggested that the combination of these four measurements may provide more information than if they have been used individually. DeFond (1992) has also indicated that performing hypotheses testing using each of the auditor characteristics would be considered a noisy measure of the audit quality. Therefore, combining the four measurements may increase the power of the tests that would, in turn, reduce noise in the independent variable.

In his study, DeFond (1992) has used the technique of principal components analysis to model changes in auditor quality as a combination of auditor size, brand name, expertise and independence. The common factor is used in the hypotheses tests as a measure of

the auditor's ability to alleviate agency conflicts. To the best of the researcher's awareness, there is a one and only study available that has used a combined measure of several surrogates for audit quality (DeFond, 1992). The subsequent sections show the surrogates for audit quality:

#### **4.3.1 Auditor Size**

Auditor size has been seen as a proxy of audit quality (Reed, Trombley, & Dhaliwal, 2000; Colbert & Murray, 1998). It is argued that auditor size is an appropriate proxy for audit quality because of the magnitude of client-specific quasi-rents (DeAngelo, 1981a, 1981b). Danos and Eichenseher (1986) and Dopuch and Simunic (1982) find that larger corporations are more likely to select larger audit firms. Particularly, audit firm size based on companies' sales has been used as a good quality surrogate because it is suggested that companies' sales are associated with quasi-rents (Chan *et al.*, 2007; DeFond, 1992; Francis & Wilson, 1988; Johnson & Lys, 1990). This is being the case because small auditors are characterized to have fewer resources and they provide a lower audit quality than the larger audit firms (DeFond, 1992).

#### **4.3.2 Brand-Name Auditor**

It is empirically evidenced that the market perceives audit quality as a different product using the brand-name classifications (Beatty 1989; Becker *et al.* 1998; Menon & Williams 1991; Teoh & Wong 1993). Empirically, several studies find that audit firms with a well-recognized brand-name are considered a higher audit quality provider.



(Boon, McKinnon & Ross, 2007; Copley, Gaver & Gaver, 1995; Dopuch & Simunic, 1980 & 1982; Klein & Leffler, 1981; Klein *et al.*, 1978; Moizer, 1997; Palmrose, 1988; Shockley, 1981; Simunic & Stein, 1987; Libby, 1979). Healy and Lys (1986) have documented that brand-name auditor indicates of a higher audit quality and it also refers to a dissipating by the audit quality provider if there is a fail in supplying the contracted-for quality. Consequently, there will be a potential loss of reputation, audit fees, and client base (Bedard *et al.*, 2000; Burton & Roberts, 1967; Chaney *et al.*, 2004; Citron & Manalis, 2001; DeAngelo, 1981; Francis & Wilson, 1988; Woo & Koh, 2001). Further, Healy and Lys (1985) have indicated that internationally operating companies choose Big-8 because of their quality and geographic dispersion.

In addition, Palmrose (1988) has indicated that non-Big-8 firms as a group had higher litigation occurrence rates than the Big-8. The value of external audits derives from users' expectations that auditors will detect and correct/reveal any material omissions or misstatements of financial information. Failure to do so, termed an audit failure, typically results in litigation when client/users incur losses in conjunction with materially false or misleading financial information. This suggests that (under *ceteris paribus* conditions) users can view auditors with relatively low (high) litigation activity as higher (lower) quality suppliers.

There is also evidence that the Big-8 firms command price premiums (Francis, 1984; Francis & Stokes, 1986; Francis & Simon, 1987; Palmrose, 1986; Rubin, 1988; Simon & Francis, 1988). Simon and Francis (1988) report that Big-8 fees have been consistently estimated at 16% to 19% higher than non-Big-8 audit fees across several independent

studies. Big-8 price premiums are consistent with Klein & Leffler's (1981) who claim that price is an indicator of quality. Further, Francis & Simon (1987) have reported that the Big-8 price premium holds with respect to both other national firms and local-regional firms and that non-Big-8 national firms do not command a price premium over local-regional firms. In particular, the majority of the auditor choice studies has used a two-category representation of brand name to proxy for audit quality as shown in Table 4.1

### **4.3.3 Industry-Specialist Auditor**

Eichenseher and Danos (1981) report that audit industry is specialized. Auditor industry specialization is seen as a key goal to be achieved by the majority, if not all, of the large audit firms. Moreover, specialization is also looked at as one of five top issues facing the auditor industry (Simunic & Stein, 1987). Expertise of an audit firm is a surrogate of an audit quality (Almutairi *et al.*, 2008; DeFond, 1992; Gunny, Krishnan & Zhang, 2007; Hogan & Jeter, 1999; Knechel *et al.*, 2007; Solomon, Shields, & Whittington, 1999). Audit firms' industry expertise has been found to be a prominent differentiating attribute reported by buyers of Big-8 audit services (Abbott & Parker, 2000; Shockley & Holt, 1983). Novak (1998) reported that one way a Big-6 can differentiate itself, outside of size, price, and independent client rating is by specializing in a particular industry. Johnson and Lys (1989) have argued that audit firms achieve competitive advantages through specialization. Therefore, specialized auditors are expected to provide a higher level of audit quality than non-specialized auditors (Abbott & Parker, 2000).

Economies of scale and specialized audit services offered to a particular segments of market have been yielded as audit firms invest into specialized resources such as employee recruiting and training, statistical software, branch offices, and decision aids (Lindahl, 1996). As a result, cost structure variations occur among specialized audit firms in which supplying low levels of expertise or independence below the market's expectation may dissipate the level of audit firm's reputation (Casterella, Francis, Lewis & Walker, 2004; Dopuch & Simunic, 1980; Hogan & Jeter, 1999; Klein & Leffler, 1981; Mayhew & Wilkins, 2003).

The auditor's industry share can reflect audit expertise and can also proxy for audit quality and reputational effects (Dunn *et al.*, 2000; Ettredge & Greenberg, 1990; Gramling *et al.*, 1999). Consistent with these findings, Abidin *et al.* (2010), Chow and Rice (1982) and Rhode *et al.* (1974) have empirically evidenced that high concentration of similar clients tend to engage the same auditing firms within the Big-8. Hogan and Jeter (1997) have found that Big-6 industry specialized firms have achieved a successful attraction to new clients than non-specialized Big-6 audit firms. They suggest that specialization comes out with returns on investment and an increased audit quality. Carcello and Nagy (2002) report that specialized auditors are less likely to be exposed to the SEC enforcement. By the same way of token, Balsam, Krishnan and Yang (2003) highlight that clients of specialized auditors are less likely to disclose discretionary accruals and more likely to disclose earnings response coefficients.

DeAngelo (1981a, 1981b) argues that auditors will specialize in supplying varying levels of quality, which means that if a firm wishes to change audit quality, i.e., changes

in client financial and operating characteristics (Johnson & Lys, 1990), it must also change auditors (Danos & Eichenseher, 1982; Dopuch & Simunic, 1982; Eichenseher, 1984; Johnson & Lys, 1990; Simunic & Stein, 1987). It is argued that larger auditors (those with greatest number of clients within an industry) are more likely to detect and report financial misstatements because a larger client base decreases dependence on a single auditee. Further, Craswell *et al.* (1995) asserts that auditors specialize in certain industries, making them able to earn quasi-specific rents on investments in brand name, knowledge, and training. As a result, this quasi-specific rents provide specialized auditors with incentive to maintain their quality reputation, which can be damaged by litigation or allegations of audit failure (Bedard & Biggs, 1991; DeAngelo, 1981; Gramling & Stone, 2001; Owghoso, Messier & Lynch, 2002; Simunic & Stein, 1987; Wright & Wright, 1997).

Franz *et al.* (1998) examine announced litigation against Big-6 auditors. They find a significantly larger negative stock price reaction for non-event firms audited by Big-6 industry-specialist auditors vs. Big-6 industry non-specialist. Further, DeFond *et al.* (1999) find that the Big-6 specialized audit firms command a fee premium than the non-specialized Big-6 audit firms. It is argued that firms with independent and active audit committees are more likely to employ an industry-specialist auditor. Independent and active audit committee members demand a high level of audit quality due to concerns related monetary or reputational losses that may result from lawsuits or SEC sanction. In addition, O'Keffe, Kin and Gayer (1994) find that industry-specialist auditors comply with auditing standards more than the non-industry-specialist auditors. In the same manner, Carcello and Nagy (2004) indicate that they are less likely to be exposed to

Securities and Exchange Commission enforcement actions. Balsam *et al.* (2003) and Krishnan (2003) have indicate that earnings quality is higher for companies that are audited by industry-specialist auditors than the non-specialist. Further, companies audited by specialist auditors have ranked by financial analysts as having more disclosure quality than companies audited by non-specialist (Dunn & Mayhew, 2004).

Further, Gramling, Johnson and Khurana (1999) report empirically that clients of audit firms with industry specialization report earnings numbers with relatively greater power for predicting future cash flows. It is also found that industry specialist auditor enables auditors to identify and address industry specific problems and issues more thoroughly than auditors who do not have that domain-specific knowledge (Brown & Raghunandan, 1995; Craswell & Taylor, 1991; Eichenseher & Danos, 1981).

Several empirical studies on auditor choice have used industry-specialist auditor as a proxy for audit quality using a binary measurement, three-category classifications, and a continuous measurement as shown in Table 4.1

#### **4.3.4 Auditor Independence**

Auditor independence is considered as the cornerstone of the auditing profession (Abdul Nasser, Wahid & Mustapha Hudaib, 2006; Boon *et al.*, 2007; Burton & Roberts, 1967; Goldman & Barlev, 1974) due to the fact that the information produced by the auditors is used by different parties in making their strategic decisions (Moore *et al.*, 2006; Remero, 2010). Auditor independence has been defined by Antle (1984), taking into

account the conflict of interests produced, as the situation when an auditor's personal interest affects the auditing results; requiring non-cooperative behavior for independence. In general, auditor independence takes two forms. (1) Independence in fact. This form requires that auditors be and express an audit opinion as in a personal unbiased tendency and as a disinterested and expert observer.(2) Independence in appearance. This form expects that auditors are perceived from the others as they are maintaining an unbiased objective attitude of mind (Richard, 2006; Porter, Simon & Hatherly, 2003).<sup>4</sup>

Auditor-client independent relationship is distinguished from the other professional-client relationships (McInnes, 1993; Mitchell *et al.*, 1991). In this regard, DeAngelo (1981b) argues that future economic interest gained by a particular auditor from a specific client might lessen auditor independence with respect to that client. Consequently, the higher the client-specific quasi-rent stream, the lower the conditional probability that the auditor to report a breach. With support to this, several studies find that when clients pay large amounts of non-audit or total fees, investors react negatively (Francis & Ke, 2006; Khurana & Raman, 2006; Krishnan *et al.*, 2005; Krishnamurthy *et.*, 2006). In addition, Firth (1980a) finds empirically that most UK respondents perceive high fees from a client to be detrimental to independence. Moreover, Firth (1985) and McKeown, Mutchler and Hopwood (1991) argue that larger auditees benefit from their bargaining power over fee levels and as a result are less likely to receive a qualified audit opinion. Based on a cross-sectional model that includes audit opinion to

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<sup>4</sup> Taylor and Glezen (1997) indicate that the most important standard in the Code of Professional Conduct in US is the auditor independence that is given a definition as the ability to act with integrity and objectivity.

explain the level of audit fees, Firth (2002) finds a positive but insignificant association between the two determinants. A study by Beattie, Brandt, and Fearnley (1999) documents fee dependence to be the most important threat in the UK.

Reynolds and Francis (2001) examine the influence of large clients on the office-level auditor reporting decision by Big-5 auditors using 1996 data. They have measured the client influence as the proportion of the client's net sales to the total net sales of all clients audited by the report-issuing office. They have reported a significantly negative association between client influence and discretionary accruals and a significantly positive association between client influence and auditor going-concern reports. With regard to auditor choice and independence, DeFond (1992) indicates that the larger a specific client firm's fees are in relation to the total fees earned by the audit firm, the less willing the audit firm will be to disclose a breach for fear of losing the client. In his study, DeFond (1992) has used auditor independence as an audit quality surrogate in measuring the composite model of the audit quality. In an individual regression of the auditor independence model, auditor independence is found to be positively influenced by auditor independence and management stock ownership, leverage, and growth. However, issuing new finance and accruals are reported to have an insignificant association with the auditor independence.

Table 4.1

*Dependent Variables for Auditor Change and Audit Quality Surrogates*

<b>Dependent Variables</b>	<b>Author(s) and Year</b>	<b>Two-Category Classifications</b>	<b>Three-Category Classifications</b>	<b>More than Three-Category Classifications or a Continuous Measurement</b>
<b>Auditor Change</b>				
	Cassell <i>et al.</i> (2012)	A client switch from a Big 4 to a non-Big 4 vs. otherwise		
	Luybaert & Caneghem (2012)	A dummy variable that is coded one if the acquired firm switched to the acquiring firm's auditor (within a two-year window following the takeover, cf. infra); and zero otherwise.		
	Nazri <i>et al.</i> (2012a)	Auditor change is a binary variable indicating whether or not the client firms changed their auditors.		
	Robinson & Ownes-Jackson (2009)	Auditor change vs. non-auditor change		
	Hudaib & Cooke (2005)	Model 1. Auditor switch vs. non-auditor switch Model 2. Auditor switch vs. non-auditor switch		
	Lee <i>et al.</i> (2004)			"2" a change from local to Big-5; "1" a change from a local to a national auditor or from a national to a Big-5; "-2" a change from Big-5 to a local; "-1" a change from Big-5 to a national or from a national to local.
	Carcello & Neal (2003)	Auditor dismiss vs. non-auditor dismiss		
	Archambeault & DeZoort (2001)	An auditor change under suspicious circumstance vs. otherwise		



Table 4.1 (continued)  
*Dependent Variables for Auditor Change and Audit Quality Surrogates*

Dependent Variables	Author/(s) and Year	Two-category Classifications	Three-Category Classifications	More than Three-Category Classifications or a Continuous Measurement
<b>Auditor Change</b>				
	Woo & Koh (2001)	Model 1. Auditor change vs. non-auditor change		
	Lennox (2000)	Auditor switch vs. non-auditor switch		
	Krishnan <i>et al.</i> (1996)	Auditor change vs. non-auditor change		
	DeFond (1992)			Model 2. "1" an auditor change from a Big-6 to another Big-6; "2" an auditor change from a non-Big-6 to another Big-6; "3" an auditor change from a non-Big-6 to a Big-6; "4" an auditor change from a non-Big-6 to another non-Big-6.
	Schwartz & Menon (1985)	Switched audit firms vs. did not switched audit firms		
<b>Auditor Size</b>				
	Chan <i>et al.</i> (2007)			Audit quality is defined as the natural logarithm of the ratio of combined assets of listed companies audited by the new auditor to that by the old auditor in the year of auditor change.
	DeFond (1992)			The revenues of client firms audited by the old auditor are subtracted from the revenues of client firms audited by the new auditor divided by the larger of the old or new audit firm client revenues. This variable is bounded by -1 and 1, with positive numbers indicating a switch to a larger auditor.

Table 4.1 (continued)

*Dependent Variables for Auditor Change and Audit Quality Surrogates*

Dependent Variables	Author/(s) and Year	Two-Category Classifications	Three-Category Classifications	More than Three-Category Classifications or a Continuous Measurement
<b>Brand-Name Auditor</b>				
	Nazri <i>et al.</i> (2012b)	A dummy variable, "1" if the audit firm is Big-4, and "0" if the audit firm is non-Big-4		
	Guedhami <i>et al.</i> (2009)	Big 4 vs. non-Big 4		
	Lin & Liu (2009)	Top-10 vs. non-Top-10		
	Hope <i>et al.</i> (2008)	Big 4 vs. non-Big 4		
	Knechel <i>et al.</i> (2008)	Model 1. Big-6 vs. non-Big-6 (non-certified auditors, HTM and KHT) Model 2. KHT vs. HTM Model 3. Big-6 vs. KHT		
	Wang <i>et al.</i> (2008)	A client registry province or provincial-level region is the same as that of its auditor who is not a Top-10 auditor based on assets audited vs. others		
	Che Ahmad <i>et al.</i> (2006)	Model 1. Big-6 vs. non-Big-6	Model 2. Chinese auditors, Bumiputra auditors and Indian auditors	
	Fargher <i>et al.</i> (2001)	Big-6 vs. non-Big-6		
	DeFond (1992)	"2" a change from local to Big-8; "1" a change from local to second tier, or from		

Table 4.1 (continued)  
*Dependent Variables for Auditor Change and Audit Quality Surrogates*

Dependent Variables	Author/(s) and Year	Two-Category Classifications	Three-Category Classifications	More than Three-Category Classifications or a Continuous Measurement
<b>Brand-Name Auditor</b>				
				second tier to Big-8; "0" no change in classification; "1" a change from Big-8 to a second-tier, or from second tier to a local; "-2" a change from Big-8 to local.
	Firth & Smith (1992)	Big-8 vs. non-Big-8		
	Eichenseher & Shields (1989)	Big-8 vs. non-Big-8		
	Palmrose (1988)	Big-8 vs. non-Big-8		
<b>Industry-Specialist Auditor</b>				
	Velury <i>et al.</i> (2003)			Proportion of industry sales audited by an auditor
	Beasley & Petroni (2001)		"2" if the auditor is a specialist; "1" if the auditor is a non-specialist Big-6 and "0" if the auditor is a non-Big-6.	
	Abbott & Parker (2000)	Model 1. Specialist vs. non-specialist Model 2. Specialist vs. non-specialist		A continuous variable measuring the auditor's percentage of each industry group's total sales
	DeFond (1992)			"1" a change is made from a non-expert to an expert; "0" no change in expertise; "-1" a change is made from an expert to a non-expert.
	Palmrose (1988)	Industry specialist vs. non-specialist		
<b>Auditor Independence</b>				
	DeFond (1992)			The difference between the ratio of the switching client firm's revenues to the total

Table 4.1 (continued)

*Dependent Variables for Auditor Change and Audit Quality Surrogates*

<b>Dependent Variables</b>	<b>Author/(s) and Year</b>	<b>Two-Category Classifications</b>	<b>Three-Category Classifications</b>	<b>More than Three-Category Classifications or a Continuous Measurement</b>
<b>Auditor Independence</b>				
				revenues of the clients of the old auditor, minus the same ratio for the new auditor
<b>Combined measure</b>				
	DeFond (1992)			The principal components linear combination of the auditor size, industry-specialist auditor, brand-name auditor, and auditor independence.

#### 4.4 Corporate Governance Mechanisms

Several empirical studies in different disciplines have reported an association between weaknesses in governance and poor financial reporting quality, earnings manipulation, financial statement fraud, and weaker internal controls (Carcello & Neal, 2000; Carcello & Hermanson, 1999; Beasley, Beasley, Carcello, Hermanson, & Lapedes, 2000; Klein, 2002). Recently, Growing as a more active device in developed countries, audit service plays a substantially vital role in corporate governance (Cohen, Krishnamoorthy & Wright, 2002; Fan & Wong, 2005). External auditors are considered an important monitoring function in the context of corporate governance (Allen *et al.* 2005; DeFond *et al.*, 2000; Anandarajah, 2001) since stakeholders demand reliable financial information (Ashbaugh & Warfield, 2003). For instance, McKinsey and Co (2002) indicate that a key factor for making investing decision by institutional investors is corporate governance. Furthermore, Dewing and O’Russell (2004) document that corporate governance mechanisms influence positively on the issue of accountability

due to the fact that the auditor is the first person to spot corporate exploitation. By the same token, the nature of auditing function and the purpose of auditing company accounts make the auditor as the only person who is aware of the exploitation besides the wrongdoers. That is the case when sometimes the auditor at the expense of his duties and obligations chooses to fail in detecting the wrongdoing.

With support to this, auditor choice studies document that in the context of corporate governance, demanding audit service is a means of audit quality and auditor assurance (Anderson, Kadous & Koonce, 2004; Krishnance & Ye, 2005; Sainty, Taylor & Williams, 2002). Therefore, there is a positive association between the quality of corporate governance and the credibility of financial reporting (Cohen *et al.* 2002; Farbar, 2005). Under this scene, auditors must take the role of guardians in ensuring the company's financial integrity because an effective and objective audit function is one of the most essential parts of corporate governance (Low, 2002). This is to ensure that within the field of corporate governance the legal position is in line with international standards. With regard to corporate governance and auditor choice, Francis, Khurana, and Pereira (2003) report that the demand for high quality auditor is lower for countries with weaker legal environment than for the countries with stronger legal environment. Carcello *et al.* (2003) report that firms in a strong corporate governance environments are more likely to seek assurance by demanding a quality-differentiated audits in order for them to preserve their reputation, avoid litigation risk, safeguard against fraudulent financial reporting and increase the perceived credibility of reported financial information (i.e., to promote their strong corporate governance) to attract investment. Fan and Wong (2004) suggest that the external audit can be viewed as a corporate

governance mechanism to resolve the agency conflict between managers and absentee owners.

Moreover, Fan and Wong (2005) argue that as the agency conflicts between controlling shareholders and minority shareholders are difficult to be resolved by traditional corporate control tools such as board of directors, auditors can serve as an external agent to take up an important corporate governance role, particularly in emerging markets. They examine the role of external auditors in alleviating the agency problems in eight emerging East Asian countries and find that firms with agency problems are more likely to hire higher quality auditors. Choi and Wong (2007) find further that auditors play a more important role in corporate governance in countries with weak rather than strong legal institutions. It is worth mentioning that because of their ability in discovering and reporting misstatements or irregularities in the financial statements, higher quality auditors are more effective monitors in mitigating agency problems than lower quality auditor (Beattie & Fearnley, 1995; DeFond, 1992; Ashbaugh & Warfield, 2003).Piot (2005) examines the demand for auditor reputation in differing corporate governance environments in three countries – France, Germany and Canada. Using logit models, the study documents that the determinants of auditor choice are sensitive to national environments.

#### **4.4.1 Board of Directors' Effectiveness Score**

Studies of corporate governance recently concern about the board of directors. Agency theory proposes a divergence in managerial and owners' interests occur when there is a separation of ownership and control (Jensen & Meckling 1976). The board constitutes the supreme authority at the firm level in making decisions. This mechanism is a market-induced and a low-cost monitoring device. It is responsible for representing the shareholders' interests, defending these interests and fighting against nonqualified managers (Fama & Jensen, 1983; Fama, 1980). The board of directors has to fulfill two functions: (1) monitoring management and (2) providing expert advice. Both functions include the decision of auditor selection (Houque & Zijl, 2008; Kirkoset *al.*, 2008; Yatim, Kent & Clarkson, 2006).

Furthermore, empirical studies linked board of directors' characteristics and audit quality have strongly relied on agency theory that suggests the board's main function is to monitor the management. However, a more broadly role of the board of directors has been conceptualized by the strategic management. According to Hawkamah and IFC survey of 2008, around 49% of listed companies in MENA countries (i.e., GCC) consider the responsibility for corporate governance policies to the board—in-line with good practice. But, the role of the board is often misunderstood in the MENA region. According to the survey, 89.9% of MENA banks and listed companies stated that the board, and not management, was responsible for setting corporate management, which is contrary to the good practice that management develops, and the board reviews and guides corporate strategy. Furthermore, according to the same survey, 36% of listed

companies in MENA countries (i.e., GCC) indicated that the selection of the external audit firm is a competence of the board.

Several prior researches on auditor choice have empirically linked auditor choice with board of directors characteristics in an individual investigation (Beasley & Petroni, 2001; Chen & Zhou, 2007; Lee *et al.*, 2004). For instance, Beasley and Petroni (2001) have reported a significantly positive relationship between outside directors and industry-specialist auditor. Chen and Zhou (2007) find that there is a positive and significant association between board size and board independence with dismissing Andersen earlier and choosing a Big 4 successor auditor. Lee *et al.* (2004) have reported that board independence, meetings, and financial expertise are not related to the change in auditor quality. These studies have resulted, to some extent, in conflicting and inconclusive results. Another emerging line of research in auditor choice has examined board of directors characteristics using a composite score. For example, Cassell *et al.* (2012) have investigated the association of corporate governance index (independence, meetings, and financial expertise of board and audit committee members) with auditor switch from a Big 4 to a non-Big 4. They have concluded that board of directors effectiveness is related to the auditor-client realignments.

The reasoning behind using a composite measure of corporate governance mechanisms is that the ideal combination of corporate governance mechanisms is considered invaluable in decreasing the agency cost and safeguarding the shareholders' interests owing to the effectiveness of corporate governance achieved through various channels and specific mechanism's effectiveness hinges on the effectiveness of other factors (Cai



*et al.*, 2009). Additionally, Ward *et al.* (2009) claim that it is more optimal to examine the corporate mechanisms as a group of mechanisms protecting shareholders' interests and not as individual entities because they complement each other or are alternates for each other. They added that the previous studies provided inconsistent findings because they examined them individually and how each may contribute in resolving agency problems in isolation; in other words, they overlooked that individual mechanism's hinges on its counterparts. Similarly, Agrawal and Knoeber (1996) stated that the findings of the individual mechanism's impact may be erroneous as the impact of some single mechanisms is diminished in the combined model. Along the same line, the measurement of the combined impact indicates a stronger effect as compared to measurement of individual impacts (O'Sullivan *et al.*, 2008).

The present study examines the board of directors characteristics (independence, size, meetings, CEO duality, financial expertise, nationality and international experience) as a whole in a way to capture the aggregate effect of these characteristics on auditor choice. In addition, two new variables have been included in the board score; nationality and international experience of the board members. It is expected that these characteristics act in a complementary or substitutable fashion in making decisions related to auditor choice. The following sub-sections show that individual board of directors characteristics included in the board of directors' effectiveness score.

#### **4.4.1.1 Board of Directors Independence**

One of the necessary parts of corporate governance that enhances its efficiency is the independence of board of directors. It has been noted the increase in number of independent board members will lead to decrease the tendency of financial fraud (Beasley, 1996; Beasley *et al.*, 2000), reduce overstating the incomes (Dechow *et al.* 1996), improve firm performance (Agrawal & Knoeber, 1996; Baysinger & Butler, 1985), enhance quality disclosure (Haniffa & Cooke, 2002), reduce unusual accruals (Klein, 2002), decrease discretionary accruals (Klein, 2002), reduce financing debts (Anderson *et al.*, 2004), improve the solution to material weakness of internal control (Johnstone *et al.*, 2011), increase the stock returns of companies alleged of fraud in the past (Farber, 2005), and increase the audit fees (Carcello, Hermanson, Neal & Riley, 2002). The independence of board of directors is viewed to be a good device that effectively monitors and controls the activities of firm such that it lessens the exploitative behaviors of managers. As a result, a complete audit function will be necessary to be sought for (Fama, 1980; Fama & Jensen, 1983a,b). From the other perspective, board of directors who are mainly composed of insiders or outsiders and who are partially dependent on management or the firm, are likely to have a weak monitoring roles (Barnhart, Marr, & Rosenstein, 1994; Cotter, Shivdasani, & Zenner 1997; Daily, 1995; Daily & Dalton, 1994a,b; Desender, Garcia-Cestona, Crespi & Aguilera, 2009; Fama & Jensen, 1983a,b; Johnson, Hoskisson & Hitt, 1993; Siala *et al.*, 2009; Zahra & Pearce, 1989; Weisbach, 1988).

The motivations behind having directors who are independence in performing their monitoring roles and the consequences upon failure to discharge the roles effectively are derived from the following reasons. In the first instance, board of directors who could not discharge their monitoring roles effectively is liable to be sanctioned by penalty within the point of view of legal entity (Fama 1980; Fama & Jensen 1983; Gilson 1990; Hay & Knechel, 2004; Sahlman 1990). In the second instance, where the practice of effective monitoring is lacking on the path of the board, shareholders always bear the brunt of losses in case the company runs into problems. Given this situation, directors could hire a different quality auditor to safeguard the wealth own by the shareholders (Beasley *et al.* 1999; Hay & Knechel, 2004). Empirically, Beasley & Petroni (2001) has found that the presence of independent board members is associated with hiring a Big-6 specialist auditor. Lee *et al.* (2004) document a negative association between the proportion of independent board of directors and the incidence of auditor change. In the same regard, Chen and Zhou (2007) report that firms with more boards that are independent dismissed Andersen earlier and hired a Big 4 successor auditor. However, several studies have indicated to the shortcomings of having a high proportion of non-executive directors on the board. Such drawbacks include the lack of real independency (Demb & Neubauer, 1992), stifling strategic actions (Goodstein *et al.*, 1994), excessive monitoring (Baysinger & Butler, 1985), and a lack of business knowledge to be effective (Patton & Baker, 1987). According to Hawkamah and IFC survey of 2008, 55% of listed companies in MENA countries (i.e., GCC) have either one or no independent director on the board. As for AL Majlis, The GCC Board Directors Institute report in 2011, a round 64% of board members in GCC boards are independent. This increase may be a result of newly enacted regulation in the region.

#### **4.4.1.2 Board of Directors Size**

The size of board of directors plays a significant role in the monitoring and controlling of managers (Abdul Ramhan & Mohamed Ali, 2006; Chen & Zhou, 2007; Jensen, 1993; Yatimet *al.*, 2006; Lipton & Lorsch, 1992). As pointed out by Jensen (1993), board with larger size buttresses the manager to dominate and make it uneasy to arrive at an important decision unanimously. As a result, safeguarding the shareholders' interest is likely to be lessened. According to Goodstein *et al.* (1994), smaller boards having members of about four to six could perform effectively because it is possible for them to make strategic decisions without wasting time. In addition, some studies conducted empirically have revealed that board size is negatively related to financial performance (Eisenberg, Sundgren, & Wells 1998; Yermack, 1996).

Conversely, Pearce and Zahra (1992) note that board of directors that are large in size are strongly capable of exercising control. According to them, larger boards can be monitored effectively as compared to smaller one since they are not liable to be dominated by manager, and are very likely to consist of various kinds of people as members with various levels of education and technical foundation who can counter manager from dominating to safeguard the interest of shareholders. Along this line of argument, Chaganti, Mahajan, and Sharma (1985) have noted that larger boards could be worthy for their wide range of services. By viewing it from the point of performance, Dalton *et al.* (1999) observe that firms having board of directors being large do perform better. Furthermore, Anderson *et al.* (2004) note that size of board has a negative

relationship with the cost of financing debt, which implies that boards with larger size offer better monitoring service.

Monks and Minow (1995) also buttress that argument by stressing that boards with larger size have the tendency of devoting more time and effort to oversee management. The results of Beasley (1996) show that board of directors size has a significant effect on the likelihood of financial statement frauds such that any increase in the size of board size tends to increase the likelihood of financial statement fraud. In their contribution, Abdul Rahman and Mohamed Ali (2006) note that members of the board having various expertise have the tendency of improving the monitoring role of the board in lessening the extent to which earnings management happened or has effect. Chen and Zhou (2007) document that firms with larger boards dismissed Andersen earlier and chose Big 4 successor auditor. Linking board size with auditor choice, Beasley and Petroni (2001) find an insignificant association between board size and industry-specialist auditor.

The right size of the board is essential because a too low or a too high number of members can lead to a slower decision-making progress. A small board might have a lack of experienced members, whereas a big board is difficult to manage. Finding the right board size therefore is not an easy task to fulfill. The board size of various companies in GCC countries varies. The average board size in Bahrain and Qatar is around 8.5 members, there are only 6.2 members in Kuwait and 6.7 in Dubai. Possible explanations for this observation have to do with the legal framework of these countries (Binder, 2009).

#### **4.4.1.3 Board of Directors Financial Expertise**

Based on the suggestions of the agency theory that the expertise of board members is critical in assuring that the monitoring role of the board is effectively discharged. Although there is no universal definition of board expertise, recent studies examining corporate governance in an audit context have indicated that the financial expertise of its members do indeed proxy for effective monitoring (Carcello & Neal, 2003; Lee *et al.*, 2004). Empirically, Carcello and Neal (2003) find that board director financial expertise is not related to auditor dismissals following a going-concern report. In addition, Lee *et al.* (2004) document insignificant association between board of directors' financial expertise and the change in audit quality. Even though intuitively this study expects greater board financial expertise to be linked with auditor change and higher audit quality selection, the empirical findings are unclear and inconclusive. This may be explained by "hegemony theory" where the board is viewed as a passive instrument relying on top executives for information (Kosnik, 1987; Demb & Neubauer, 1992) or, because of other obligations, the board members are too busy to perform their duties effectively (Lin, Pope & Young, 2003).

According to Hawkamah and IFC survey of 2008, around 75% of listed companies in MENA countries (i.e., GCC) require the professional experience of members of board of directors. The report released by AL Majlis, The GCC Board Directors Institute in 2011 indicates that, in GCC countries, the appropriate expertise on the board is still the most important barrier to board effectiveness.

#### 4.4.1.4 Board of Directors Meetings

Number of board meetings and the behavior of individual board members is a meeting of the board that includes different factors such as surrounding such meetings (attentiveness, participation during meetings, preparation before meetings, and post-meeting follow-up). Numbers of board meetings are the only one of these factors that is publicly observable. According to Carcello *et al.* (2002), in matters of financial reporting process, board activities intensity of board activities are as they contribute to the effectiveness of its oversight functions.

Vafeas (1999) highlights that because of the advisory role, board meeting time can bring improvement in the effectiveness of a board so they can play their vital role for better management and easy access to get information that will lead to more effective monitoring. Byrne (1996) and Lipton and Lorsch (1992) report that if the board members want to give benefit to its shareholders meeting, they are more likely to perform their responsibilities. Adams and Ferreira (2007, 2011) have highlighted that a board that demonstrates a diligence in discharging its oversight responsibility is likely to enhance level of oversight of the financial reporting process (Yatim *et al.*, 2006). With regard to the board meetings in auditor choice studies, Lee *et al.* (2004) document an insignificant association of the board meetings with the change in audit quality. According to Hawkamah and IFC survey of 2008, 60% of listed companies in MENA countries (i.e., GCC) effectively met on a quarterly basis, and only 15% met between 6 to 9 times per year.

#### 4.4.1.5 CEO Duality

CEOs play role in the establishment of relationships between the company's key decision-makers and the audit firm's key people during the period of course proposal process (Addams & Davis, 1994). As per the agency theory prediction, ability of board is to perform its governance role that is likely to weaken, especially when the CEO is also the board chair. It is argued that CEO duality breaks the balance of powers between potentially restricting the board's effectiveness and the top management team of board while controlling managerial actions and initiatives (e.g., Abbott, Parker & Peters, 2004; Abdul Rahman & Haniffa, 2005; Aguilera, 2005; Boyd *et al.*, 2005; Fama & Jensen, 1983a,b; Siala *et al.*, 2009).

In this connection, CEO duality enhances information asymmetry between the board and CEO, which result in a primary source of agency problem (Eisenhardt, 1989). Abdul Rahman and Mohamed Ali (2006) and Dechow *et al.* (1996) highlighted that firms identified as earnings manipulators are more likely to have a CEO who also serves as a board chair. Klein (2002) finds that absolute value of DAC is positively related with the CEO who holds a position on the compensation committee and board's nominating.

Nevertheless, Maitlis (2004) indicates that in the organizational governance, CEO can be a positive force, and can boost up effectiveness of boards, the independent board is a tougher monitor as per his views; so the CEO may be reluctant to share information. If the board of directors is designed to enhance the managerial decision making, then the presence of the CEO on the board could be improved through the information flow



towards the board members, as well the discussions and interactions, that will lead to more valuable guideline and directions (Desender, 2009). Therefore, when the board's priority is to assist management strategically rather than monitor its actions may CEO increase the information flow towards the board members. Increased levels of disclosure and effective communication could decrease the need for external auditing and increase the understanding between board members and management(Forbes & Milliken, 1999). If the CEO is the chairman of the board of directors, this effect will likely to be stronger. By the same way of token, proponents of the stewardship theory argue that this role will enhance the performance of firms because the management's compensation is tied to the firm performance, and that the CEO's strategic vision can be shaped the destiny of the firm with lowest board interference (Rechner & Dalton, 1991).

In this regard, in the presence of a dominant CEO, non-executive directors are expected to have minimum influence in intensive audit and they will seek a minimum demand for external audit (O'Sullivan, 2000). Lee *et al.* (2004) document that in the case when CEO is the chair of the board of directors, the power of the board to decrease management's influence on supporting the external auditor.CEO is likely to be involved in the auditor selection process either in a role as a director of their current employer or other companies or in the role of chief executive (Allen, Linville,& Stott, 2005). Weisbach (1988) has proved the relationship between CEO turnover and board composition. Beasley and Petroni (2001) have documented that new CEOs may prefer brand-name auditors. Lin and Liu (2009) have reported a significantly negative relationship between the selection of Top 10 auditors and CEO. Empirically, Lee *et al.* (2004) are unable to find a significant association between CEO duality and the change in audit quality.

According to Hawkamah and IFC survey of 2008, around 42.3% of listed companies in MENA countries (i.e., GCC) indicate that there is a combination of CEO and chairman functions. It is also reported that in most MENA countries, owners of companies tend to fulfill the roles of both chairman and CEO (many times referred to as general manager, president, or managing director) (Center for International Private Enterprise Global Corporate Governance Forum, 2011). Thus, when there is a duality of the two functions of general manager and chairman of the board, this enables one person to influence the board's decision whether or not to choose a more highly reputed external auditor.

#### **4.4.1.6 Board of Directors Nationality**

Culture has been acknowledged as a highly elusive construct (Jahoda, 1984) although it is known to encapsulate factors such as social, political and other others that have the potential impact on individual's behavior (Hamid *et al.*, 1993). Culture is defined as the shared ways groups of people understand and interpret the world and it also defined as the way in which a group of people solve problems (Trompenaars, 1993).

Owing to accounting and auditing involvement in both technical and cognitive activities, the various cultural elements existing in the country may impact the auditing practice. Specifically, two cultural aspects that have the potential to influence the profession are the ideology and socio-economic structure. The first one comprises of societal norms and values including collectivism, fatalism, attitude towards time, professionalism, innovation, flexibility, dominance of religion, sentiments, ethical principles, and

worldviews among the many everyday life factors. The second one involves the political and legal system, the power of the profession, the tax system, education system and others that exist in the country (Haniffa & Cooke, 2002).

Puxty *et al.* (1987) and Willmot (1986) have highlighted the need for the study of accounting within its social context in their seminal works. Accordingly, Gray's (1988) framework has been employed to examine the relation between determined national cultural dimensions and accounting values. Gray's (1988) model encapsulates four accounting values that are related to Hofstede's (1980) societal values. The values are professionalism, uniformity, conservatism, and secrecy. According to Gray (1988), the secrecy versus transparency dimension of accounting subculture values is "a preference for confidentiality and the restriction of disclosure of information about the business only to those who are closely involved with its management and financing as opposed to a more transparent, open and publicly accountable approach." He has added that secrecy is linked to uncertainty avoidance and power distance in a negative way and to individualism in a positive way. Under this framework, uncertainty-avoiding societies often exhibit secretive inclinations to skirt away from potential conflict with external individuals. With a large power distance, managers are expected to keep information secret for the preservation of power inequalities. Moreover, in individualistic societies, more secrecy is expected compared to collectivist societies where people often have the same common beliefs and in most cases, the same information.

Among the many researchers who made use of Gray's framework are Klein *et al.* (2009) whose study involved several Arab countries including Egypt, Iraq, Kuwait, Lebanon,

Libya, Saudi Arabia and the UAE. Regarding the power distance (PD) dimension, the findings in the context of Arab countries indicated a high-PD score of 80 with a ranking of the seventh top score out of 53 countries implying a significant level of inequality of societal power and wealth. For uncertainty avoidance (UA), the findings revealed a high score for the Arab countries at 68 implying the society's low tolerance for uncertainty. Attempts at minimizing the level of uncertainty are evident from the established strict rules, laws, policies, and regulations. On the other hand, for the masculinity aspect (MAS), the findings revealed a score of 52 which is just a little higher compared to the 50.2 average for the countries and they rank 23rd out of 53 countries indicating that although Arab women have limited rights, this may be owed to the Muslim religion as opposed to a cultural paradigm. As for individualism, the findings of the dimension showed a score of 38 in comparison to the world average of 64 implying that Arab countries are primarily collectivist societies that exhibit a close long-term commitment to the member group in the form of family, extended family or extended relationships. The current study is unable to apply Gray's work as a cultural contextual determinant because there is no variation in the dimension scores among GCC countries.

As a cultural source of an origin of a country, in GCC countries, the nature of Gulf nationality is that the priority in business is given to foreigners more than that given to locals (Ali & Azim, 1996; Terpstra, 1978). This is because there are scarce resources, such as human capital (Chahine & Tohme, 2009). For instance, employers in the private sector depend heavily on foreigners who, in many cases, assume important positions and begin taking vital decisions immediately. It is suggested that, behaviorally, foreigners, because of their backgrounds, are more sensitive than nationals to the host country's

organizational and work problems. That is, the nationals often do not realize existing problems and tend to take things for granted (Ali & Azim, 1996; Terpstra, 1978). For example, the Kuwaiti Government, since gaining independence in 1961, has controlled most of the economic sectors and has extensively relied on foreigners to perform the most difficult and challenging economic tasks (Al-Kazemi, 2001). Further, the imbalance in 2005 in UAE stood at 9.3% Nationals and 90.7% foreigner employees, and if that trend were to continue, the foreigner workforce as a proportion may well increase to create an even larger imbalance (Pech, 2009). It is also found that MNCs operating in Kuwait, other GCC countries are not an exception, face fundamental challenges. They have relied heavily on foreigners.

Nevertheless, MNCs have recruited bright and influential Kuwaitis. The latter are normally employed for their connection and network with policymakers. MNCs should promote Kuwaitis to assume important jobs. In this context, MNCs will be perceived as a fair place for talented nationals to have challenging and meaningful jobs (Al-Kazemi & Ali, 2001). Abdel-Halim and Ashour (1995) find that Kuwaiti nationals, like other Arab Gulf citizens, lack technical competence, & proper work values and career orientations. Therefore, the authors have concluded that Kuwait is heavily reliant on imported, ready-made human capital of all types and skills to run and manage most of the technological and sophisticated operations. Male Kuwaitis, like other Arab Gulf citizens, prefer to work at state enterprises which provide flexible compensation packages with high job security but less demanding work, and female Kuwaitis, like other Arab Gulf citizens, prefer to work in the public sector because of widespread discrimination against them at the state and private business enterprises. Al-Remahy

(1995) argues that the managerial problems in Kuwait stem from the nature and orientations of the society, educational system, and economic growth. He has indicated that these factors have produced three general problems: a deeply held belief among individuals that they are entitled to managerial jobs; preference for a stable income, less work, and socially respected position; and irrationality in public spending that has resulted in overstating and establishing economically insignificant projects.

While GCC countries' nationals, generally, are influenced by tribal and sectarian affiliation. They concern only about image and how to elaborate etiquette and ceremony to meet certain concerns pertaining to work. Furthermore, GCC nationals prefer high levels of pay, promotion and entertaining training opportunities, and suitable office hours. These attitudes and practices are endorsed by GCC governments and are institutionalized through various legislations and government decrees. Governments in the GCC look at this situation based on the tribal system as useful for their political stability in which tribal attitudes and loyalty are rewarded (Abdel-Halim & Ashour, 1995; Ali & Azim, 1996). Al Baharet *al.* (1996) indicate that the Arabic cultural heritage is unique in a manner that the nationality of the managers is an important component which, in turn, creates differences in business organizations. In other words, Arabic culture can be mediated by variables such as nationality of ownership and nationality of management.

In addition, Mona (1986) reports that "Arab manager lives and works within a social structure where family and friendship dominate attitudes." With the same line, it is evidenced that culture factors may influence perceptions and meanings of auditing

concepts such as independent, accountability, and trust. According to Al-Kazemi & Ali (2007; 2002), managers in developing countries (Middle East) take for granted a very important role in designing national priorities and economic plans. Barsalou (1985) states that in most parts on the world it is not acceptable to pay a supervisor less than a subordinate simply because of the nationality, but this case is common in Saudi Arabia where it is possible to find subordinates who receive higher than their supervisors because of their Saudi nationality. Further, it is also the case to find experienced workers who are supervised by a less experienced and better-paid worker particularly because the latter has Saudi nationality and the others do not. Further, cultural factors are important because the traditions of a nation are instilled in its people and might help explain why things are as they are (Haniffa & Cooke, 2002). According to Haniffa and Hudaib (2006), GCC countries' societal structure increases the nepotism and cronyism and results on limited professionalism in most significant institutions, including the auditing profession. In other words, the political and legal structure based on the power of the autocratic regimes would lead to dysfunctional audit profession and limited to serving public interests.

One important yet largely neglected determinant of management's cultural orientation and preferences is nationality (Nielsen & Nielsen, 2010; 2009). Cross-cultural psychology literature suggests that national origin influences underlying orientations and values as well as cognitions (Schwarz, 1992; Hofstede, 1980). These nationality-derived qualities, in turn, affect a person's behavior as well as how this person perceives certain strategies (Hambrick, Davison, Snell & Snow, 1998). Much of the cultural patterns of thinking, feeling, and acting are acquired in early childhood because at that time a

person is most susceptible to learning and assimilation. These patterns are deeply rooted and once they have established themselves within a person's mind, they are unlikely to change substantially through subsequent experiences (Hofstede & Hofstede, 2005).

According to the findings of Nielsen & Nielsen (2009; 2010), the managers' nationalities affect their cognition and values and underlies their preferences for specific types of strategic actions; in other words, nationality results in varying preferences and choices. In the context of business knowledge and network contacts, nationality underlies the content and structure of cognitive schemas and hence influences the manager's way of collecting, processing, organizing, and using information (Shaw, 1990). Along with the innate cultural values of the manager's country of origin, the cognitive bases develop a filter through which information is chosen and interpreted providing the strategic selection basis (Hambrick & Mason, 1984). Similarly, according to Laurent (1993), nationality has a significant impact upon the development of managerial assumptions compared to other national culture characteristics.

Extant studies have generally reported positive impacts of heterogeneity on many outcomes. The rationale proposed is that employing a heterogeneous management improves the knowledge base, cognitive abilities, and the overall problem-defining along with problem-solving skills of the group (Bunderson, 2003; Hambrick, Cho & Chen, 1996). In an extremely dynamic environment, information-processing requirements need the determination of superior adaptive capabilities and hence, heterogeneous management is more suitable (Harrison, Price, Gavin & Florey, 2002). In



sum, management heterogeneity is of great significance to firms operating in industries that have dynamic environments.<sup>5</sup>

According to Al Bahar *et al.* (1996), companies that concern about the production are less likely to be influenced by Arabic culture and are more likely to adopt a strongly western-orientated approach. In consistence with this result, Hope *et al.* (2008) empirically reported that multinational companies are less likely to be influenced by home country cultural norms than are local firms, especially with international expansion. Consistent with the Managerial Grid Theory, Blake and Mouton (1965, 1964, 1960) have begun analyzing industrial managerial behavior. In their studies, they find most managers' actions could be categorized into two areas – concern for people and concern for production. They believe that it is possible for a manager to have one concern without the other. The types of relationships between concerns are interpreted by Blake and Mouton as being indicants of the type of managerial behavior a given manner will employ.

Foreign nationality of the manager is considered a source of knowledge about doing business in foreign countries. Managers who born in a foreign country are expected to possess valuable knowledge about economic and market factors and institutions.

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<sup>5</sup> On the other hand, some researchers contend that heterogeneity generates tension or a gulf that constrains the information exchange and thus adversely affects firm performance (Ancona and Caldwell, 1992). Researchers find that heterogeneous management cause less social integration and communication frequency and high turnover in top management (Wagner, Pfeffer and O'Reilly, 1984). Diverse viewpoints, different thinking wave-lengths, uncommon vocabularies, paradigms, and objectives often make a heterogeneous management a net liability to the organization (Hambrick, Cho and Chen, 1996). Heterogeneous management thus can create strains in the decision-making process, which may contribute negatively to organizational performance (Pfeffer, 1983). O'Reilly, Snyder and Boothe (1993) find that management homogeneity is associated with better management dynamics and related to more efficient (*Continued*) firm adaptation to change. Chahine & Tohme (2009) document that Arab works better with foreigners than they do with Arab.

Further, they are aware of culture, behavior, and norms of foreign countries, that these characteristics may be invaluable in making strategic decisions especially those related to firm's internationalization (Nielsen & Nielsen, 2010, 2009). Luo (2005) suggests that foreign natives can effectively process information regarding their origin country and find appropriate solutions for improving information processing. Besides the advantage of individual level knowledge, heterogeneous of managers' nationalities is invaluable for making strategic decisions. For instance, heterogeneous backgrounds of the managers lead to different perspectives on and interpretations of a particular situation. In this regard, it reduces the individual bias and group think and increases the quality of making decisions of the team. Keck (1997) indicates that the composition of the management members should reflect the company's complexity. Hence, heterogeneous backgrounds of the management is expected to lead to a better understanding and interpreting the complexity of the firm's internationalization. In support of this reasoning, it is found by a practitioners' oriented study conducted by the U.S. Conference Board that the higher multinational management is, the more successful global companies are (Berman, 1997).

In consistent with this suggestion, it is well established from the previous discussion that nationality as a cultural dimension may influence the auditing profession practices. The existence of several types of nationalities in the market will lead to reasonable distinctions in the agency costs and selecting and changing audit quality. This is being the case because of the variations in the management styles such as risk preferences and monitoring mechanisms and/or investment goals (Eichenseher, 1995; Muzaffar, 1989). All studies on culture show that learning about the culture of the auditee will offer guidance to the auditor. "With an understanding of how the client manages, the auditor

can determine which audit tests to perform, which areas to ignore, and which areas to explore” (Haniffa & Cooke, 2002; Neu, 1992). Cultural values have been shown to influence management behavior and auditing can play an important role in resolving agency conflicts by acting as a monitoring device (Craswell *et al.*, 1995; Francis & Wilson, 1988; Hope *et al.*, 2008; Palmrose, 1984). Similarly, Ahmed *et al.* (2006) find that foreign-controlled companies hire quality-differentiated auditors and they do not concern about ethnicity. Woodworth & Said (1996) report that foreigners coming from lower economic countries than Saudi Arabia and working as internal auditors need their jobs more than their culture needs. In such case, they can scarify their culture tendencies and commit themselves to the requirements of the job. A study conducted by Median Chamber of Commerce (1998) find that about 63% of managers in the local companies in Saudi Arabia consider the implementation of Saudisation as a negative effect to their companies in terms of productivity and competition. For instance, SCOPA has forced audit firms operating in the GCC to hire at least 30% of their staff composed of Saudi nationals.

Nonetheless, Arab firms have a distinctive cultural heritage that have been brought into from a long history. This culture does not contribute to good corporate governance practices (Ali, 1995). Chahine (2007) indicates that as board members in the GCC are mostly dependent and related to main owners, poor communication and decision-making processes are more likely to dominate the monitoring role of the board of directors. In consistent with this, it is argued that the ambiguity will be tolerated and the diversity will be accepted as foreign and Arab managers run the company because there will an increasing sense of realism in the Arab management styles (Ali, 1990). As Arab firms

involving foreign shareholders are more exposed to western approaches, they would benefit from a greater pragmatism (Chahine & Tohme, 2009).

In GCC countries, the issue of nationality influences substantially the business conducted since auditing plays an important role to solve agency conflicts, nationality issue would significantly influences this role (Craswell *et al.*, 1995; Francis & Wilson, 1988; Palmrose, 1984). Further, Woodworth and Said (1996) observe that, within the auditing function, the significance of the cultural dimension, nationality, lies in the behavior of auditees, their reaction to workplace requirements and their relationship to the auditor. Moreover, they indicate that companies from the Third World incorporating in Saudi Arabia looks at audit function as a threat to their businesses, especially when the auditor is a Saudi national. Linking culture studies with auditor choice, a little of this research has extended to the Arab world (Al-Twajjri & Al-Muhaiza, 1996). Moreover, As it is much related to business networking, studies on auditor choice have paid less devoteness to the issues of auditor choice and culture (Che Ahmad *et al.*, 2006).

Che Ahmed *et al.* (2006) tests the association of ethnic groups (Chinese, Bumiputra, and foreign ownerships) with the demand for audit quality in Malaysia. They have indicated to the issue of ethnicity and not nationality because Chinese examined in this study may have a Malaysian nationality but their ethnic group is a Chinese. In addition, Woodworth and Said (1996) examine the relationship between internal auditors and auditees and focused on the reactions of auditees with different cultural orientations–nationalities– to set of audit encounters. Therefore, their study looked at the relationships of internal

auditors' nationalities with the nationalities of their employers. Unlike previous studies, this study narrows down the concept of the culture from its broad meaning of social, political, and other factors to the national culture dimension refers to "nationality" based on Hamiet *al.* (1993)'s suggestion. In GCC countries, any person does not hold a GCC nationality is considered a foreigner in spite of his ethnic group. This includes other Arab nationalities working in the GCC.<sup>6</sup>

#### **4.4.1.7 Board of Directors International Experience**

International experience is well-thought-out as a cultural source of a different country that the board member is exposed to. A premium on decision-makers with international experiences have been put in place because of the increase in market globalization and the ensuring pressures on management to internationalize their firms (Nielsen & Nielsen, 2009). It is found that managers' international experience is important resource for increasing the company's competitive advantage (Daily *et al.*, 2000; Gunz & Jalland, 1996; Roth, 1995). Athanassiou and Nigh (2002) argue that manager's international experience can facilitate network contacts and access to sources of information. In particular, Gupta and Govindarajan (2002) argue that national culture influences the strategic decisions of the firms in entering and operating internationally.

It is also further documented that managers who have international experience are found to better cope with international operations' uncertainty and they are less likely to perceive foreign investments as risky environment and they are more confident and

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<sup>6</sup> For more details, see GCC nationalities' laws at [www.GGC-Legal.org](http://www.GGC-Legal.org).

accurate in estimating risks and returns on foreign investments. Consequently, they are more likely to be aggressive in committing resources and assuming effective control over the foreign operations. Also, they are more confident in their ability to transfer their managerial skills and to rise above the psychic distance in doing international business (Carpenter *et al.*, 2001; Erramilli, 1991; Schwenk, 1988; Tung & Miller, 1990). To this end, Nielsen and Nielsen (2009, 2010) report that international experience is important for making decisions at the international level and it is expected to lead to different preferences and choices.<sup>7</sup> To this end, it is expected that international experience as a cultural dimension may influence the auditing profession practices. The existence of board members with international experience will lead to rational differences in the agency costs and hiring quality auditors.

Recent reports about GCC corporate governance indicate that GCC boards remain extremely homogenous. This is despite a growing recognition of the value of bringing in international expertise (AL Majlis, The GCC Board Directors Institute, 2011; INSEAD, 2010). Over 40% of board members interviewed said that appointing board members that are from outside the GCC would add significant value to the board. With many

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<sup>7</sup> Nielsen and Nielsen (2009, 2021) indicate that prior studies have used single surrogates (either nationality or international experience) to refer to management internationalization. Carpenter and Reilly (2006) observe that there is a lack of construct validity measures echelons research. In the same line, Cook and Campbell (1979) report that *“since single operationalizations both under-represent constructs and contain irrelevancies, construct validity will be lower in single exemplar research than in research where each construct is multiply operationalized.”* Nielsen and Nielsen (2009, 2021) document that the major drawback of using nationality as a proxy for manager’s internationalization is that it only captures the influence of one country/culture exposure and it does not reflect the other cultures exposures. Therefore, international experience, however, can be used as a different proxy than nationality in capturing the other cultures/countries exposures. Under this case, it could be argued that international experience and nationality are two distinguished sources of knowledge and expertise that enable a management to effectively manage an internationalized corporation.

companies deriving a growing share of value from expansion into international markets, a greater diversity of perspectives, both local and international, could benefit GCC companies. It has been established that diversity on the board promotes better corporate governance and is a key factor for economic growth and higher company performance (AL Majlis, The GCC Board Directors Institute, 2011).

Table 4.2  
*Issues of Board of Directors in GCC Codes: Largely Similar*

	<b>Bahrain</b>	<b>Oman</b>	<b>Qatar</b>	<b>Saudi Arabia</b>	<b>UAE</b>
Board Independence	At least three independent directors. One-third should be independent in controlled companies.	One third independent	One third independent	One third independent (or 2 members, whichever is greater)	One third Independent
The roles of the Chairman and CEO	Should be separate	Should be separate	Should be separate	Should be separate	Should be separate
Board size	No more than 15 Members.			Not less than 3, not more than 11.	
Board of directors meeting frequency	4 times	4 times	6 times		6 times
Board of directors financial expertise		Expert in financial accounting and corporate finance			
Board of directors international expertise		It is required if the company operates in international markets			

Source: Hawakamah Report (2011) Table 2, p.2 and GCC Codes of Corporate Governances

#### **4.4.2 Audit committee's effectiveness score**

The attentions of regulatory authorities as well as academics are increasingly dedicated in recent times towards audit committees (Abbott & Parker, 2000; Lennox & Park, 2007; Wolnizer, 1995). This is because audit committees are now being observed to be effective handles in operating corporate governance employed in the corporate governance models of Japan-German and Anglo-Saxon (Karim & Zijl, 2008). The audit committees perform an essential responsibility of monitoring in order to ensure corporate accountability and financial reports quality. This important role of audit committee serves as mediator in closing the gap of information asymmetry that may exist between the external auditor and board of directors (Klein 1998; Birkett, 1986), and promoting the independence of the auditor (Carcello & Neal, 2003; Mautz & Neumann, 1977). The literatures at international level have been synthesized by Wolnizer (1995) with the claim that the supervisory role of audit committee be basically one, accounting and financial reporting; two, auditors and auditing; and three, corporate governance.

With respect to audit function, audit committees have been proved to have three potential actions that could be taken in respect of the external auditor with the likely anticipated outcome of greater audit coverage and assurance. The first action involves the attempt by the committee members in convincing the management to choose auditor with greater reputation and knowledge (Carcello & Neal, 2003; Cohen *et al.*, 2004; Kaplan & Mauldin, 2008; Krishnan & Ye, 2005). As a result of this action, the relation of audit committees and external audit becomes complicated since their association come



from the demand for and supply of audit services by the client and external auditor, respectively (Cohen *et al.*, 2004; Collier & Gregory, 1996).

The second action involves the audit committee ability to charge the existing external auditor to offer a brilliant effort in audit quantity (Simunic & Stein 1996). With brilliant effort or improved scope of audit in relation to improved quality, it follows that the effort of audit committee is going to be related to improved quality (Lennox & Park, 2007; Wolnizer, 1995). It has been proved by DeZoort (1997) that audit committee involves the work of external audit with the belief by audit committee members that their primary responsibility is to review the work of the external auditor. Carcello *et al.* (2002b) confirms that out of the report given by audit committee, 85% of it shows that the scope of audit plan to be done by the auditor is subjected to review by the committee.

The third action is that audit committee affects the extent of audit coverage indirectly by way of mitigating threats inflicted by management to substitute the auditor for another. Essentially, the audit committee should make known the fundamental responsibility of regulating auditor suspected switch. Specifically, careful and thorough oversight ought to be provided by the audit committees with a view to making sure that the interests of the shareholders are not compromised by the management. In a similar way, attempt to block management from preventing unreasonable switch by auditor ought to be regulated by strong and effective audit committee (Knapp, 1991).

Furthermore, Moore *et al.* (2006) has noted that the role of choosing external auditor should be that of audit committee and is not responsible to select the managers. The incumbent auditor should be rotated at the end of five years in order to get rid of the management incentives of getting a tailor-made opinion by the audit during these durations of incumbent auditor. Thereafter, the auditor can be switched by the company to prevent familiarization with the client. Nonetheless, Nelson (2006) has noted that choosing and changing of auditors as an alternative way could have a negative effect on the objective of having auditor with poor quality changed. Another limitation of this alternative solution is that it views auditors as the one checking over the investors in the communities where different shareholders such as customers, creditors, employees, and vendors look up to firms. Remero (2010) indicates that suppose the board of directors hire auditors such that they perform the role of satisfying the interest of the owners, the interest of other external stakeholders are not simultaneously protected fully. Given this situation, Eichenseher, Shields and Hagigi (1989) report that there will be a respond from outside shareholders in favor of audit switch decision of the firm with audit committees in spite of whether they (outside shareholders) know or know not that a composition of managerial control of a firm has an audit committee. This has been the case since the concern firms give permission to those representing the interest of outside equity to give a closer look at the auditor's decision-making framework.

The extant research on auditor choice has linked audit committee characteristics and auditor choice in individual tests (Abbott & Parker, 2000; Archambeault & DeZoort, 2001; Carcello & Neal, 2003; Chen & Zhou, 2007; Lee *et al.*, 2004; Robinson & Owens-Jackson, 2009). These studies have resulted in contradictory and inconclusive results.

A very recently empirical study conducted by Cassell *et al.* (2012) has examined a composite measure of audit committee characteristics with auditor-client realignments. Following Cassell *et al.* (2012), the present study tests the audit committee characteristics (independence, size, meetings, financial expertise, nationality and international experience) as a combined measure in order to capture the aggregate effect of these characteristics on auditor choice. In addition, two variables have been included in the audit committee score; nationality and international experience of the audit committee members, which have not been previously tested. It is expected that these characteristics act in a complementary or substitutable fashion in making decisions related to auditor choice. The reasoning behind using the aggregate measure of audit committee characteristics is the same stated above about the board of directors' composite measure (section 4.2.2.1).

#### **4.4.2.1 Audit Committee Independence**

The independence characteristic has the most compelling theoretical and empirical support. It is the most critical attribute indicating of the audit committee effectiveness (Robinson & Owens-Jackson, 2009; Klein, 2002).<sup>8</sup> Vicknair *et al.* (1993) suggest that audit committee must be independent of the management in order to function effectively. This implies that both internal and external auditors have to be free of undue influences and interferences of the management members. Similarly, Yatim *et al.* (2006) report that independent audit committee is capable of protecting the reliability of the accounting process and promoting objectivity on

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<sup>8</sup> Audit committee composition varies greatly across firms because audit committees lack standardized guidance (Archambeault and DeZoort, 2001).

the part of the audit committee. As such, the firm's internal control will be strengthened and the levels of both inherent and control risk will be reduced.

Importantly, it is evidenced that independent audit committee members are expected to worry about harming their market reputation than insiders or gray members. So that they would provide greater oversight to the financial reporting process (Abbott *et al.*, 2003; Abbott & Parker, 2000). In addition, Independent audit committees increase financial reporting and audit quality by reducing opportunities for management fraud (Beasley *et al.* 2000), significantly decrease financial reporting problems (Abbott *et al.*, 2004; Dechow *et al.*, 1996; McMullen, 1996), improve the effectiveness of the firm's internal audit function (Scarborough *et al.* 1998), positively influence the amount of audit fees paid to the external auditor (Abbott *et al.*, 2003), decrease discretionary accruals (Xie *et al.*, 2003), and reduce abnormal accruals (Klein, 2002a). However, Peasnell *et al.* (2001) do not find sufficient evidence on the effectiveness of the audit committee in reducing the level of earnings management.

Carcello and Neal (2003, 2000) observe that independent audit committee members can mitigate management's switching threats when there are highly contentious circumstances between management and the auditor. They empirically document that financially distressed companies comprised entirely from independent audit committee members are more likely to be given a going-concern modification and, under these circumstances, their auditors are less likely to be switched. Moreover, it is documented that firms with independent audit committee members are more likely to involve negotiations between the auditor and management regarding the determination of audit plan/scope that often may have incentives to minimize audit fees. Given these

negotiations, independent audit committee can potentially protect the auditor from pressure of management in completing the audit quickly and accepting without supporting evidence the management representations, and/or limiting the audit scope. Therefore, independent audit committee compromises the power of the management that might be imposed into the auditor (Baysinger & Butler, 1985; Emby & Davidson, 1998; Knapp, 1991; Reinstein *et al.*, 1984).

Previous studies examining the relation between audit committee and auditor choice have produced conflicting and inconclusive results. Eichenseher and Shields (1989) and Lee *et al.* (2004) find that demanding a higher auditor reputation is related to the independent members in the audit committee. Carcello and Neal (2003) find that audit committees with greater independence are less likely to dismiss the audit firm following the issuance of new going-concern reports. Robinson and Owens-Jackson (2009) report a significantly negative association between audit committee independence and the incidence of auditor change. Archambeault and DeZoort (2001) document that audit committee independence is related negatively to suspicious auditor switching. Further, Chen and Zhou (2007) find that audit committee with more independent members had dismissed Andersen sooner and hired a Big 4 successor auditor. On the other hand, Cottell and Rankin (1988) find that the presence of a voluntarily formed audit committee has no effect on the probability of a change in auditors or the selection of a Big-8 auditor. According to Hawkamah and IFC survey of 2008, there is a high presence of audit committees (77.8%) in MENA countries (i.e., GCC), but only 26.4% of these committees are composed of a majority of independent directors, in line with good corporate governance. While, particularly, a recent report released by AL Majlis, The GCC

Board Directors Institute in 2011 indicates that 67% of GCC companies have an audit committee (increased from 20% in 2009).

#### **4.4.2.2 Audit Committee Size**

Kalbers and Fogarty (1993) suggest that the size of the audit committee do indeed proxy for its effectiveness. In this regard, Pincus *et al.* (1989) argue that since audit committee is an expensive monitoring mechanism and large size of the committee indicates to a greater resources spent on this mechanism, it is expected that large size audit committee are more likely to improve the audit function. From a control perspective, the accounting, auditing, and fraud literature (Kiger & Scheiner, 1997) indicates that increasing the number of people involved with an activity substantially decreases the opportunity for wrongdoing because collusion becomes more difficult. In addition, it is found that large audit committees enhance the quality of financial reporting (Yatim *et al.*, 2006), decrease the cost of debt financing (Anderson *et al.*, 2004), decrease opinion shopping behavior (Archambeault & DeZoort, 2010) and select a Big 4 successor auditor after the early dismiss of the Arther Anderson (Chen & Zhou, 2007).

#### **4.4.2.3 Audit Committee Meetings**

A number of studies and governance best practices call for audit committees to be diligent in carrying out their duties. To be effective, board and audit committee members must be willing to invest a substantial amount of time and energy to their respective responsibilities (Lee *et al.*, 2004).Furthermore, it is indicated that an active audit

committee is more likely to influence management or board decisions. (Abbott *et al.*, 2004; Arel, Brody & Pany, 2006; DeZoort *et al.*, 2002; Robinson & Owens-Jackson, 2009). An audit committee that reports high levels of activity is assumed to take its duties seriously and perform more effectively than a committee that reports low levels of activity (Archambeault & DeZoort, 2001). Importantly, by meeting and communicating frequently, for instance, with the external auditor, the audit committee can alert the auditor on a particular auditing issue requiring greater attention from the auditor (Gray, 2003; Menon & Williams, 1994; Raghunandan *et al.*, 1998).

Several empirical studies have reported that the frequency of audit committee meetings influences negatively on the earnings management (Abdul Rahman & Mohamed Ali, 2006; Xie *et al.*, 2003), fraudulent financial reporting (Abbott *et al.*, 2000; Beasley *et al.*, 2000), financial reporting problems and misstatements (Abbott *et al.*, 2000; Yatim *et al.*, 2006), cost of debt financing (Andersen *et al.*, 2004) and it increases the likelihood of enforcement action by the Securities and Exchange Commission (McMullen & Raghundan, 1996). However, Lee *et al.* (2004) document empirically that there is an association between the number of audit committee meetings and both auditor resignation and the selection of a high-quality successor auditor. Abbot and Parker (2000) find a significantly positive association between audit committee activity and the selection of an industry-specialist auditor. Chen and Zhou (2007) document a significantly positive association between audit committee meetings and the choice of Big 4 successor auditor after dismissing Arthur Andersen. Conversely, Archambeault and DeZoort (2001) find an insignificant association between audit committee meetings and the incidence of suspicious auditor change. Moreover, Robinson and Owens-Jackson

(2009) report that audit committee meetings are related to the likelihood of auditor change. In this regard, Hymowitz and Lublin (2003) observe that it is often in some cases that audit committees spend far more time than they used to reviewing financial statements and overseeing auditors.

#### **4.4.2.4 Audit Committee Financial Expertise**

Previous studies argue that financial expertise influence positively the audit committee effectiveness (DeFond, Hann, & Hu 2005).Recent empirical studies investigating corporate governance in an audit setting have evidenced that audit committee members' experience do indeed proxy for audit committee effectiveness (Carcello & Neal 2003; Lee *et al.*, 2004).Fama and Jensen (1983) conjecture that audit committee members have invested a substantial amount of effort to build up their financial experience and, consequently, they have a strong incentive to practice their monitoring role in order to maintain their reputation in the market labor. It is well-known that audit committee members have a wide variety of backgrounds and it might be the case that there is an absence of the experience or technical knowledge needed for supervising effectively the accounting and auditing functions (Kalbers & Fogarty 1993; Lee *et al.*, 2004; Yatim *et al.*, 2006).

It is argued that financial experts of the audit committee members are expected to perform effectively their controlling roles on the financial reporting process, especially when it comes to exercising internal controls or detecting material misstatements (Krishnan 2005; Read,Rama & Raghunandan,2001). In a like manner, DeZoort (1998)



states that expert audit committee members are found to make more consistent judgments, have better self-insight, and reach consensus more often than audit committee members without experience. Further, audit committee members with financial experience have found to better understand auditing issues and risks and their procedures (DeZoort & Salterio, 2001). Cohen *et al.* (2002) and Knapp (1991) also find that external auditors do not refer complex auditing issues to audit committee members who are perceived as not being experts.

It is also documented that audit committee members' experience influence negatively on aggressive financial reporting (Ng & Tan, 2003), financial restatements (Abbott *et al.*, 2004), aggressive earnings management (Bedard, Chtourou, & Courtean, 2004; Choi *et al.*, 2004; Xie *et al.*, 2003), reporting problems (McMullen & Raghunandan, 1996), the quality of financial reporting (DeFond *et al.*, 2005) and audit fees (Abbott *et al.*, 2003). Linking audit committee financial expertise and auditor choice, Robinson & Owens-Jackson (2009) document a significantly negative association between audit committee financial expertise and auditor change. Chen and Zhou (2007) document that audit committees with greater financial expertise had dismissed Andersen and hired a Big 4 successor auditor. However, Carcello and Neal (2003) find insignificantly association between audit committee financial expertise and the incidence of auditor switch. In the same regard, Lee *et al.* (2004) report an insignificant association of audit committee financial expertise with the change in auditor quality. In addition, Archambeault & DeZoort (2001) report a significantly negative relationship between audit committee financial expertise and the suspicious auditor change.

#### **4.4.2.5 Audit Committee Nationality**

As discussed in the previous section 4.2.2.1.1.6, nationality has been recognized as an essential factor determining cultural orientation and preferences of management, yet focus of attention has not been placed on it (Nielsen & Nielsen, 2010; 2009). Nationality as established in the earlier analysis is a dimension of culture which has the likelihood of affecting the professional practices of auditing. As a result of variety of nationalities existing in the market there will be considerable changes in agency costs as well as the audit services that will be demanded for. Differences in how business is being practices with respect to risk preferences, investment objectives and the approach to monitoring brought about this (Eichenseher, 1995; Muzaffar, 1989). Several studies with respect to culture have proved that by learning the auditee's culture, the auditor will have the opportunity to be guided. As the auditor is able to get insight into the way the client manages, he or she will be able to decide properly on the audit test to be conducted, the areas to be explored and covered (Haniffa& Cooke, 2002).

There have been evidences that management behavior has been affected by cultural values and in remedying the agency conflicts, auditing serving as a monitoring device has the potential of playing a significant role (Craswell *et al.*, 1995; Francis & Wilson, 1988; Palmrose, 1984). In a similar way, Ahmed *et al.* (2006) has reported that companies controlled by foreigners employ auditors with variety of qualities without considering the ethnicity. Woodworth & Said (1996) find that foreigners that come from countries with lower economy compared to Saudi Arabia and who is an internal auditors have preference for their jobs compared to their culture. This implies that

sacrifice can be made of their culture tendencies in favor of their job commitment. Median Chamber of Commerce (1998) carries out a study in Saudi Arabia and reports that almost 63% of local companies' managers deem it a negative impact to implement Saudisation in respect of productivity and competition to their companies. SCOPA for example has compelled operating audit firms within the GCC to make their staff composition contain the minimum of 30% of Saudi nationals.

However, the disintegration of culture as well as no continuity of history left behind cause a setback for Arab firms as these do not make it conducive for sound development of management practices (Ali, 1995). The board members within the GCC as shown by Chahine (2007) are in most cases reliant and associated with the main owners, inadequate communication and the process of making decision has the likelihood of dominating the board of directors monitoring role. To support this, western contacts have been noted to have given room for an increasing role of pragmatism in the management styles of Arab, in which they have been flexible, accommodating for any uncertainty and diverse in nature (Ali, 1990). With the involvement of foreign shareholders by the Arab firms they are more exposed to the ways and methods of westerners, in which case, a greater pragmatism is likely to benefit them (Chahine & Tohme, 2009).

Nationality issue in GCC countries largely affects the business activities and will to a certain extent affect the essential role played by auditing in agency conflicts (Craswell *et al.*, 1995; Francis & Wilson, 1988; Palmrose, 1984). Within the auditing function, Woodworth and Said (1996) note that the importance of nationality as a cultural

dimension depends on the auditees' behavior in term of how they react to requirements put in place at work and how they are related to the auditor. Furthermore, it was shown that Third World companies in Saudi Arabia perceived audit role as a business threat particularly if the auditor is an indigene of Saudi Arabia. Few studies on the connection of culture and auditor choice have been extended to the Arab nations (Al-Twaijri & Al-Muhaiza, 1996). In addition, not much focus has been placed on the way in which the issue of auditor choice has been connected with culture even though auditor choice has a close relationship with business networking (Che Ahmad *et al.*, 2006).

Che Ahmed *et al.* (2006) have conducted a study to examine the degree of influences of ethnic association (Chinese ownerships, Bumiputra ownerships, and foreign ownerships) on the Malaysian audit service market. The issue of ethnicity rather than nationality was paid attention to since Chinese may comprise a Malaysian nationality whereas Chinese is their ethnic group. More so, Woodworth and Said (1996) investigate the association of internal auditors with auditees while paying attention to the reactions of auditees having various orientations of culture (nationalities). This study considers the internal auditors' nationalities in relation to their employers' nationalities. In their study as compared to the past studies, the cultural concept as suggested by Hamid *et al.* (1993) was reduced to a narrow form, (national culture dimension known as nationality) from its diverse form (social, political, and other factors). It was expected that firms having larger number of foreign-nationality as members of audit committee will likely employ more of auditor with various qualities.

#### **4.4.2.6 Audit Committee International Experience**

As has been aforementioned deeply that there is a connection between culture and the demand for auditquality (section 4.2.2.1.1.6), it is well recognized in the literature that the multinational companies benefit from the international experiences of their managers (Carpenter *et al.* 2001; Athanassiou & Nigh 1999). Such experience influences positively on the competitive advantage of the firm (Daily *et al.* 2000; Roth 1995). For instance, through managers with international experience, companies can easily acquire network contacts and access to sources of information (Athanassiou & Nigh 2002). Moreover, Gunz and Jalland (1996) observe that this international experience can influence on managers' perceptions and personalities and contributes to higher international orientation of management (Gunz & Jalland 1996).

It is also further documented that managers who have international experience are found to better cope with international operations' uncertainty and they are less likely to perceive foreign investments as risky environment and they are more confident and accurate in estimating risks and returns on foreign investments. Consequently, they are more likely to be an aggressive in committing resources and assuming effective control over the foreign operations. In addition, they are more confident in their ability to transfer their managerial skills and to rise above the psychic distance in doing international business (Carpenter *et al.*, 2001; Erramilli, 1991; Schwenk, 1988; Tung & Miller, 1990). Thus, this study argues that firms with a greater number of international experts on the audit committees with more likely to demand higher quality auditors.

Table 4.3  
*Issues of Audit Committee in GCC Codes: Largely Similar*

	<b>Bahrain</b>	<b>Oman</b>	<b>Qatar</b>	<b>Saudi Arabia</b>	<b>UAE</b>
Composition	At least 3 members	At least 3 NEDs	At least 3 NEDs	At least 3 NEDs	At least 3 NEDs
Independence	Majority independent	Majority independent	Majority independent	Majority independent	Majority Independent
Financial expert	Majority should be financial experts	At least one financial expert	At least one financial expert	At least one financial expert	At least one financial Expert
Meeting frequency	At least 4 meetings	At least 4 meetings	At least 4 meetings		
Recommend the appointment/dismissal of the external auditor	Yes	Yes	Yes	Yes	Yes
Auditor rotation		Every 4 years with a 2-year cooling off Period	Every 3 years at a Maximum		

Source: Hawakamah Report (2011) Table 5, p.5

#### 4.4.3 Ownership Structure

Consideration has been given to the structure of company ownership as an important factor in analyzing change in the auditor selection. Craswell, Francis and Taylor (1995) have suggested that studies be conducted to analyze the connection of demand for a distinctive audits quality to the structure of ownership. Pugliese *et al.* (2009) and Aguilera (2005) argue for a wider perspective of corporate governance to be developed as it provides the details of the various national institutions where the practices of corporate governance are fixed in. As argued by Aguilera (2005), the ownership structure as a national institution makes it possible for the mechanism of corporate governance and as well limits its wideness.

Agency theory posits that the structure of a firm ownership has influence on the demand for external auditing by the firm (DeFond 1992; Fama 1980; Francis & Wilson, 1988; Jensen and Meckling, 1976; Watts and Zimmerman 1986). There is difficulty in the application of direct supervision by the shareholders as a result of higher cost involved especially where the share ownership is not concentrated. For this reason, the mechanism of governance used was to rely on external audit to alleviate the associated agency problems. On the other hand, where the share ownership is not dispersed but concentrated, two opposing perspectives exist with respect to quality of accounting information.

In the first instance, Fama and Jensen (1983) and Shleifer and Vishny (1997) point out that the first perspective was of the stand that where the ownership concentration grows to a point at which an owner has the effective capability of regulating the firm, then it could employ that hiring auditor is to release non transparent financial reports. Their self-interests are satisfied to the maximum via a non-transparent behavior or through benefit transfers, where the minority of shareholders are expropriated (Anderson *et al.*, 2004; La Porta *et al.*, 2002) with the use of earnings management. In this case, the agency problems may be stimulated and this causes reduction in the demand for a distinctive quality of audit. Copley and Douthett (2002) support this argument by pointing out that high ownership retention have the tendency of affecting corporate governance adversely. In addition, regulating the individual dealings of owners has not been internally and externally challenged by the boards of directors and takeover markets, respectively (Chau & Leung, 2006; Claessens *et al.*, 2002).

The proponent of the second perspective were Jensen and Meckling (1976) who argued that agency cost decreases with the owners being the largest shareholder and this calls for the management of earnings to mitigate contractual limitations or problems. This has the likelihood effect of promoting the regulation of owners to enhance earnings and hire high quality auditor. The owners who control could have the belief that by hiring auditor with high quality it gives a sign of better corporate governance and a sign of reliable financial report to shareholders and other investors who are minority. In addition, it is put forward that the greater number of votes possessed by the owners who control gives them the opportunity to affect the behaviors of managers, especially in taking decisions regarding investment.

In order to achieve adequate regulation of managers' behaviors, many mechanisms such as expert board members, reputable auditors, and lawyers could also be imposed and their investments are guarded (Alexander & Paquerot, 2000; Demsetz & Lehn, 1985). A proposition was made by Agrawal and Mandelker (1990), Demsetz (1983) and Shleifer and Vishny (1986) that the controlling owners have positive relationship with the efficacy of the designed structure of control. Desenderet *al.* (2009) put forward two contentions: One, that ownership structure has direct effects on the board of directors' features and preferences. Two, the primary focus of board determines the demand for the services of external audit by the board of directors. As a result, ownership concentration offers the opportunity to the principal shareholders to exercise direct control in directing the company.



With respect to decision on whether to hire auditor with high quality, controlling owners take into consideration the alternative forgone arising from the gains obtained from raising capital and the costs involved from forgoing the gains that could arise from non-transparency (Chau & Leung, 2006; Lin & Liu, 2009). Many studies (Archambeault & DeZoort, 2001; Beattie & Fearnley, 1995; Chow & Rice, 1982; DeAngelo, 1981; Eichenseher & Shields, 1989; Francis & Wilson, 1988; Hudaib & Cooke, 2005; Johnson & Lys, 1990; Lee *et al.*, 2004; Lennox, 2000; Palmrose, 1986; Williams, 1988) have investigated the association of managerial ownership (proxy for a structure of firm ownership) with audit quality in the advanced countries having diffused ownership as their features.<sup>9</sup> Few studies have been conducted with the inclusion of ownership to analyze differences in the quality of auditor (Chan *et al.*, 2007; Velury, Reisch & O'Reilly, 2003; Wang *et al.*, 2007). However, the empirical results regarding the relationship between the ownership control and the audit quality have been mixed and inconclusive.

There are three groups of shareholder in GCC countries having substantive equity ownership namely the government and its agencies, the dominant families, and the domestic corporations. The three groups have the capacity of affecting the degree and quality of disclosure, to the extent of influencing the audit demand. Since these groups often have those who represent them on the board of directors of the companies which give them the opportunity to have way to internal information, they are referred to as

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<sup>9</sup> The use of managerial ownership as a proxy for firm's ownership structure does not fit the GCC context, due to differences in the level of ownership concentration and in the associated type of agency problems. Unlike the situation in Western economies, GCC ownership structure are characterized by the control of three groups of shareholders: government, family and domestic corporations.

insiders. In the region of the GCC, these firms have been dominated in relation to the development of overall private sector and these have raised three main concerns.

Firstly, the ownership structure of these business groups has the tendency of influencing their management as well as performance adversely with the consequence of affecting the practices of corporate governance since managers lack flexible independence as well as objective to monitor the processes taking place within the company (Chahine & Tohme, 2009; Alsaeed, 2006; Al-Shammari *et al.*, 2008). Investors in the Arab nations have depended on governance structure which has the dominance of highly concentrated ownership because of the lack of strong protection on investor and more so, the market for corporate control is not adequately developed (Omran *et al.*, 2008; Woodward, 1997). The corporate legal system in Arab nations go by the system of civil law, but the way in which legal origin is related to financial arrangements in this nations reflects the effect of state's role, the kind of political system and its central governance (Omran *et al.*, 2008). Secondly, the degree of market power possesses by some of these business groups could be so sustainable and influential to the extent of creating barriers to entry into the market for the less competitive ones. There are advantages of economies of scale in different sectors enjoyed by them as well as advantages of competition acquired in accessing finance, in distribution, and in their association with the public administration.

Thirdly, these business groups always have close association with the political system and possess the political power with which they can influence decision making on government policy over business regulation and reform to their preferences. According to Claessens *et al.* (2006) insiders dominate the boards of directors in emerging nations

like in Asia where the presence of any outsiders are rarely seen and so, the concerns of minority shareholders are not alleviated. Chahine (2007) points out that in the GCC, there is likelihood of having unsound communication and poor processes of making decision to dominate the supervisory role of the board of directors since the board members are strongly reliant on and associated with the main owners.

#### **4.4.3.1 Government Ownership**

Government ownership is defined as those companies in which some share are owned by the government (Feng, Qin & Tong, 2004) or if the government (via its investment companies) is one of the substantial shareholder in the company (Ramirez & Ling, 2003). Previous research has shown that companies that have greater proportion of government ownership often possess the feature of not reporting much conservative earnings (Bushman & Piotroski, 2006), weaken transparency in financial report (Bushman *et al.*, 2004), pay back the voters for their support, for contributing politically, and for their bribery (Rajan & Zingales, 2003; Shleifer & Vishny, 1993, 1994; La Porta *et al.*, 2002), disclose earnings with lower quality in their report (Chaney, Faccio & Parsley, 2011), acquire the property of minority investors for public use (La Porta *et al.*, 2002; Shleifer & Vishny, 1997) and offer financial insurance to outside shareholders for supporting the government financially and politically (Wang *et al.*, 2008). The modification of opinions gotten was less since government could threaten local auditors not to employ their services or their license might not be renewed (Chen *et al.*, 2000). Since government owners have political power on local auditors the collusion costs

faced by them is minimal. Consequently, these features have the tendency of causing the companies controlled by government to hire auditors with low quality.

Qi *et al.* (2000) and Xu & Wang (1999) reports that in China greater degree of ownership by government causes many agency problems of making corporate governance ineffective which leads to inadequate performance of firm with the result of not demanding for much independent auditing to provide accounting information with high quality (DeFond *et al.* 2000; Wang *et al.* 2005). As reported by Guedhami *et al.* (2009), government owners in the course of guarding their interests politically, could consider it its priority to hire auditors with good conduct in providing financial statements. In addition, it has been proved that companies having political links often have the opportunity of getting cheap loans (Claessens *et al.*, 2008; Faccio, 2007) which permit them to raise enough capital but, not lessening asymmetry of information with a reliable financial statements (Wang *et al.*, 2008). According to Chaney *et al.* (2011), firms having political links never face penalty for higher costs of borrowing in spite of the quality of their earnings that is poor. Consequently, there is likelihood of hiring auditors with low quality (Guedhami *et al.*, 2009). As pointed out by Wang *et al.* (2007), local audit firms have information advantages. The local audit firms have familiarity (as a result of affiliation of local audit firms with regional governments) with the local governments and could have good knowledge on how to audit firms controlled by the local government.

Gao (1996) and Oian (1996) note that with high degree of ownership by government there results in many agency problems. Firstly, there is “absence of

principal.”Government that represents all the people is the principal of government shares and the various tiers of government regulatory authorities are the agents. The classical agency theory poses it that agents are responsible to provide service to the satisfaction of the interest of the principal. As a result of absence of a principal or due to the uncertainty of property rights however, there is none of the agent with the enough motivation to maximize profit for the main principal. Government is responsible to represent all the people (or public) by acting as the principal (owner) and delegate managers (agents) to carry out day-to-day operation of activities. Nonetheless, the federal government, ministries, and local governments as the regulatory authorities who implement de facto ownership rights on the enterprises never bore the left over risks on the regulation and employment of the assets of an enterprise. The profits realized as residual claims are publicly socialized through budgetary subsidies while the losses in form of risks encountered are shifted over to the public through government loans.

Secondly, agency problem is concerned with the ineffective supervision of the agent by the principal. Government’s control on the board of directors is dependent upon to serve as protection of the government properties’ values. Despite that, most of the board members representing the interest of government are given appointment and payable by the local government by considering their administrative rankings instead of their performance ability (Xu & Wang, 1999; Zhou & Wang, 2000), they may lack enough managerial ability to supervise the diverged behavior of the management. In addition, the priorities of the local government are not of necessity to go along the same line of the government.

Thirdly, agency problem arises out of the political influence of the government over corporate decisions. Government by regulating the board of directors could shift its managerial goal of profit maximization to the development of infrastructures, employment generation, and the maximization of social welfare (Williamson 1984). As documented by Ramaswamy, Liandand Veliyath (2002), the board nominees by the government are mainly bureaucrats and in corporate matters they have little expertise. As government agents, even though they are trained for the oversight work in corporate matters, they lack a high motivation for effective monitoring in companies where they serve as board nominees since the companies' performance does not affect their tenure and career prospects. In addition, the nominees have the tendency of taking side with the management since most of the important business families are connected to the political elite who have considerable clout on the working of these dominating institutions owned by government.

In addition, because governments in emerging economies give support to the policy of social welfare goals, they never tended toward profit realization and for this reason their monitoring role suffers from proper watchfulness. Empirically, Guedhami *et al.* (2009) document a significantly negative relationship between the government's equity stake and the choice of Big 4 audit firms. Wang *et al.* (2008) report that local SOEs have the strongest propensity to hire small local auditors, while central SOEs are not different from non-state firms in their likelihood of hiring small local auditors. Chan *et al.* (2007) find a negative association between government ownership and auditor size.

The GCC's government-owned companies are becoming significant players in their respective domestic stock markets. However, some markets in the region exempt some of the listed government-owned enterprises from requirements on transparency and disclosure. This needs to be settled, and all listed companies even if they are government-owned companies should be subject to the same standards of disclosure and transparency. Furthermore, improving the corporate governance of government-owned companies will lead to mutually reinforcing multiple rewards of significant efficiency gains, improvement in the quality of public services, increased foreign investment, and ultimately improved growth prospects. In many instances, better performing government-controlled companies can have positive fiscal implications, insofar as government budgets are all too often called to the rescue of large government-owned companies (Saidi, 2011, 2010)

#### **4.4.3.2 Family Ownership**

Family ownership or family controlled is defined as a control by a family, an individual, or an unlisted company (Maury, 2006). Agency theory suggests the possibility of the development of conflict in family business (Fama & Jensen 1983). Particularly, empirical researches carried out on this business segment have been few. For example, Daily and Dollinger (1992) indicate that conclusions have not been drawn on the studies of the family business as a result of ownership and control which are closely aligned. Chau and Gray (2002) show that firms controlled by family have disclosed considerably low financial information in meeting the requirements set as compared with the broader ownership. Brunninge and Nordqvist (2004) report that companies controlled by family

often have strong influences on the responsibility of board of directors and such ownership are less willing to appoint independent directors. In this regard, Carey *et al.* (2000) reveal that the audit quality demand has positive relationship with the level of family ownership.

Two features give rise to the demand for audit quality in firms controlled by family. One is the presence of members who are non-family among the board of directors. Given this scenario, there could be a kind of management responsibility delegation from family owners to non-family members. As a result, the agency costs tend to increase given the rise in the percentage of non-family members. This development also causes the owners to gradually lose much of their control and hence calls for the need to hire higher audit quality. DeFond (1992) argues that the ownership separation and control often yield a divergence in the priorities of manager and owner in relation to the action of manager on the one hand, and causes the action of manager to be absorbed imperfectly by the owner on the other.

Two is the presence of representative of non-family on the board of directors. When the ownership is greatly diverse, the agency conflict will be higher since most of family owners would have the opportunity to direct the resources in satisfying their own interests. Consequent upon the diversion of resources by the ownership is the shortage of resources that would be available to the non-family owners. Benston (1985) indicates that effective monitoring by the non-family owners relies on the level of family ownership as well as the percentages that represents them on the board. For this reason, an increase in the percentage of non-family owners as well as the director



representations causes an increase in the demand for monitoring exercise to be displayed with the outcome of greater quality of audit demand (Carey *et al.*, 2000).

Arab firms still tend to have concentrated ownership, so generational ties and family involvement often impact governance relations and agreements and they are in the core of political and economic influence (INSEAD, The Business School for the World, 2010). Over 50% of large family owned businesses in the GCC would like to list in the region's stock exchanges; 20% of those are already planning to issue IPOs and 30% are intending to do so in the near future (Hawkamah newsletter, 2009). The main reasons that drive family business IPOs include: enhancing the company's profile and reputation; providing an exit route for family members by divestment; providing capital to finance expansion; providing acquisition currency in the form of shares; and international recognition (depending on the choice of market) (Hawkamah newsletter, 2009). Directors are understood to be the most powerful and influential individuals in a company hierarchy because families with most board representation can be thought of as controlling the economy (TNI Market Insight, 2008). GCC families hold on average between 19% and 30% of company board seats (TNI Market Insight, 2008). Research shows that only 30% of family-run businesses survive into a second generation, 12% make it to a third, and a mere 3% transition successfully into a fourth generation and beyond (Center For International Private Enterprise Global Corporate Governance Forum, 2011).

#### **4.4.3.3 Domestic Corporate Ownership**

Jensen and Meckling (1976) suggest that an increase in the holdings of the owner-largest shareholder reduces agency costs and thus, the need to manage earnings in order to alleviate contractual constraints that, consequently, will motivate the controlling owners to improve earnings informativeness by demanding a higher quality auditor. To signal good corporate governance practices and credible financial reporting, the substantial shareholder who acts as a controlling owner demands a higher audit services.

In many emerging countries, domestic corporations are among the largest group of blockholders (Claessens *et al.*, 2000). Allen and Phillips (2000) present evidence that supports the argument that corporate ownership provides significant benefits to firms involved in certain business agreements by reducing the costs of monitoring the alliances or ventures between firms and their corporate blockholders. It is further indicated that higher degrees of technical and organizational and financial resources are provided by domestic investors than those provided by foreign investors (Chibber & Majumdar, 1999; Djankov & Hoekman, 2000; Khanna & Palepu, 2000). In addition, the local investors' monitoring roles are usually influenced by local governmental and business ties and networks (Claessens *et al.*, 2000; Dharwadkar, George & Brandes, 2000; Douma *et al.*, 2006).

## **4.5 Audit-Specific Characteristic**

### **4.5.1 Audit Fee**

According to the agency theory, audit fees with various levels can lead to change in the demand for audit quality (Fama & Jensen, 1983; Jensen & Meckling, 1976; Wallace, 1980, 1987). Audit quality has direct relationship to the independence of auditor since without independence the opinion of audit is meaningless. The various levels of audit fees cause the effects of economic dependence auditor on the audit client (Bryan-Low, 2003; Gunny *et al.*, 2007; Weil & Tannenbaum, 2001).

Empirical studies have shown that Big-8 audit firms can likely have larger fees due to the quality of their work that is high, the influence of their reputation, the related costs involved, and the position of their oligopolistic market especially in the case of larger firm audited. It is expected that Big-8 fees are lower due to economies of scale of the auditor (Pong & Wittengton, 1994). Studies such as Beattie and Fearnley (1995); Bedardet *al.* (2000); DeAngelo (1981a); Ettredge and Greenberg (1990); Hogan (1997); Turpen (1990); and Simon & Francis (1988) have indicated that saving cost of firm as a client which was brought about by a decrease in audit fee is a significant justification for the changing of auditors by the firms for less costly one.

According to the report of study in US by Simon and Francis (1988), client firms made a lower payment for fees relative to the higher one they would have paid if the clients had had the features of necessary fees in the earlier 3 years of their engagement in audit. On average, the fee discount of 24% was found at the earlier year of engagement in audit.

The discount disappears having stood for extra two years at a low level. In particular, they show that reduction in fee which brings about switches of auditors could show variation in the quality of auditor or efficiency in the level of technology as compared to the form of fee reduction that constitute threat to the independence of auditor. The test was done again in order to make correction for the impacts of unexpected results by making use of observations on the same level of auditor changes only.

With respect to a given client, assumption was made that there is absence of any significant differences in efficiency between auditors belonging to the same class and that there is comparable reputations among the auditors of a given class. The same outcome was arrived at as that got from subsample with the use of statistical tests and the same levels of auditor variation. The conclusion was that reduction of fee could worsen the problem associated with independence caused by the presence of quasi-rents as analyzed by DeAngelo (1981a). In their study, Beattie and Fearnley (1995) find that in the UK listed companies, 66% of them that deemed it necessary to change their auditor gave the current levels of audit fee ranking as a motive for deeming it necessary to have a change. Pong and Whittington (1994) have also provided analysis of the effect encountered in the year one of changing auditor, and pointed out that the new auditors appointed have the tendency of charging lower fee as compared to incumbent auditors. Furthermore, Woo and Koh (2001) show that if companies have the feeling that no significance difference exist in the quality of audit provided with the lower audit fee charged, then the companies appoint another auditor. Hudiab and Cooke (2005) observe that with a higher level of fee, there is fewer tendencies for a qualified audit to give

opinion because a client will not want to allow an audit qualification if the audit fees paid are higher than average.

In spite of the fact that firms obtain the services of auditors whose charges are the cheapest many reasons abound for the discouragement of firms from continuous variation of auditors just to conserve audit fees (Kallunki, Sahlstrom & Zerni, 2007; Lindahl, 1996). The costs of switching as described by Klemperer (1995) refer to the special costs the customers incur as suppliers are changed. The costs of switching occur due to the fact that customers who had earlier bought services from one supplier encounter extra costs in a case where they choose to switch to another supplier for the same services. Due to the fact that the costs of switching offer firms a kind of monopolistic power, the firms encounter an opportunity cost to either invest in market share by reducing the price charge to have new customers or the firms realize profits by increasing the prices charge on the customer relationships in existence. With the presence of switching costs, several studies have confirmed the preference of business relations with long period in industries that produce complex and tailored goods or services (Campbell, 1985; Ford *et al.*, 1986; Stewart, 1998).

The report by Francis (1984) and Simunic (1980) confirms inconsistent results with respect to audit services pricing while Simunic (1980) reports that in US market, audit prices bear no significant difference between Big-8 and non-Big-8 audit firms in a small sample companies characterized as having sales lesser than \$ 125 million and a large sample companies characterized as having sales greater or equal to \$ 125 million. This finding has consistence with the structure of competitive market without product

differentiation to the Big-8 audit firms. As a contradiction, it was reported by Francis (1984) that in the Australian market, audit prices associated with Big-8 was considerably greater than those associated with non-Big-8 in the small and large sample of companies. The results provide consistency with a structure of competitive market with product differentiation to the Big-8 audit firms. The distinction in the size of auditee in the foregoing two studies might provide explanation for the results contradiction. In Simunic (1980), the average size of asset for small and large auditees amounted to \$177 and \$892 million (US dollars), respectively, as distinct from that in Francis (1984) with \$8 and \$90 million (Australian dollars). The distinctions in the size of auditee indicate that Simunic and Francis really got two samples stemming from the larger and smaller end of the size continuum, respectively. On this basis, Francis would have no ability to generalize with respect to “larger” auditees regarding Big-8 product differentiation.

Simunic’s model has been tested by some studies by using various time periods and industries in analyzing data. Others have examined the particular factors determining the audit fee by the firms in various countries as well as different institutional environments (Craswellet *al.*, 1995; Francis *et al.*, 2003; Taylor & Simon, 1999). In recent studies, Che Ahmad *et al.* (2006) have empirically reported that there is a positive association between auditor choice among brand name and audit fees. Woo and Koh (2001) find that higher audit fees are associated with auditor changes. Cassell *et al.* (2012) document a significantly negative association between abnormal audit fees and the auditor change from Big 4 to non-Big 4 audit firms. Fargher *et al.* (2001) report an insignificant association between audit fees and the selection of Big-6 audit firms. In the same regard, Hudaib and Cooke (2005) find an insignificant relationship between audit

fees and the propensity to switch for distressed qualified auditees and management director change. In their pre-SAS600 model, they find that audit fees are associated with auditor change and, in post-SAS600, they could not find this association. Nazri *et al.* (2012b) find that audit fees are positively related to audit quality. With this in mind, studies linking audit fees with auditor choice produce contradictory results.

## **4.6 Firm-Specific Characteristics**

### **4.6.1 Firm Size**

Fama & Jensen (1983b, 1982a) argue that there is a significant association between firm size and its agency cost variables. Firm size is one of the key determinants that influences the auditor selection process (Haskins & Williams, 1990; Johnson & Lys, 1990). Large firms were crucial in considering the public interest associated with the attest function, both because they control a substantial proportion of the country's resources and because their economic power over public accounting firms is potentially the greatest. Several reasons have been exhibited to explain why a large company seeks to hire a large size audit firm. Large companies have a bigger volume of business transactions, a wide range of stakeholders, greater agency tension and they have more to lose if something has gone wrongly. In addition, large companies are characterized as having more dispersed ownership and diversified operations that make their auditing task more complex and potentially risky (Burton & Roberts, 1967; Haskins & Williams, 1990; Johnson & Lys, 1990).

The increase in the size of organization increases the number of agency relationships (Dopuch & Simunic, 1980). Furthermore, Increases in organizational size are likely to increase the remoteness of the principal(s) and, thus, decrease the ability of the principal(s) to observe the actions of agent(s). Further, the likelihood is greater that the agent(s) has (have) a comparative advantage in producing financial information. Therefore, the attendant information asymmetry problems increase with increases in organizational size. Consequently, the increases in organizational size are likely to increase the magnitude of the potential wealth transfers (agency costs) (Palmrose, 1984a). In the GCC, the top scoring company is a very small one by any standard. In terms of market capitalization, it ranks approximately 345 out of 581 companies. Similarly, the best companies in each exchange are also not the largest by market capitalization (The National Investor, 2001).

Previous studies have produced mixed results with regard to the company size and its association with auditor choice. With regard to the association between firm size and the selection of brand name auditor (Big 4/6/8), Gudhami *et al.* (2009), Hope *et al.* (2008), Knechel *et al.* (2008) and Palmrose (1988) find a significantly positive relationship. In the same regard, Lin and Liu (2009) document that firm size is positively related to the selection of Top-10 audit firms. Chan *et al.* (2007) report an insignificant association between client size and audit firm size. On the other hand, Che Ahmad (2006) and Woo and Koh (2001) report a significantly negative association between firm size and the choice of Big-6 audit firms. Further, Wang *et al.* (2006) find that firm size is negatively associated with the selection of small local audit firms. Che Ahmad (2006) report that there is a significantly negative association between firm size and the selection of



Chinese auditors. Fargher *et al.* (2001), Firth and Smith (1992) and Woo and Koh (2001) report an insignificant relationship between firm size and the selection of brand name audit firms (Big/4/6/8).

In terms of the change to or from the brandname audit firms, Cassel *et al.* (2012) document that firm size is negatively associated with auditor change from Big 4 to non-Big 4 audit firms. However, Lee *et al.* (2004) report that firm size is positively associated with the change among Big-5, national and local audit firms. While Eichenseher and Shields (1989) find no association between firm size and the auditor change from non-Big-8 to Big-8 audit firms. Abbott and Parker (2000) find that firm size is positively related to the selection of a specialist auditor. However, Velury *et al.* (2003) report that firm size has no association with the demand for specialist auditor.

With respect to auditor change, Nazri *et al.* (2012a) and Robinson and Owens-Jackson (2009) report a significantly positive association between firm size and the incidence of auditor change. While Krishnan *et al.* (1996) document a significantly negative association between firm size and auditor change in the following year of receiving qualified audit opinion. Schwartz and Menon (1985) find no association between firm size and auditor change by failing companies. Further, Carcello and Neal (2003) document an insignificant relationship between firm size and auditor change after receiving a going concern report.

#### **4.6.2 Firm Performance**

According to the information suppression hypothesis, the pressure stemming from financial distress can put a strain on auditor-client relations and produce irreconcilable differences. Specifically, there are increased incentives for management and auditors to sever their ties in a failing firm environment. A distressed company's needs can be different from what a healthy company is looking to receive. The change in a company's financial condition may produce a change in the desired package of audit services (Schwartz & Menon, 1985). Woo and Koh (2001) indicate that auditors who are working with higher perceived audit and business risks will apply higher audit procedures and use more conservative accounting treatments or if there is still a distressed situation, the incumbent auditor might resign. Moreover, companies with unsound financial positions may select another auditor in the essence of receiving more favorable audit reports (Citron & Taffler, 1992; Haskins & Williams, 1990). Lindahl (1996) reports that one indication of financial distress is a loss that may lead to auditor change.

The financial distress variable can be viewed as influencing auditor switches in two different ways: (1) the complex business uncertainties present in financially distressed firms may create conditions that are conducive to switching auditors, since financial distress may be correlated with the existence of factors that give rise to auditor switching. These determinants might be reporting disputes or anticipated qualified opinions, management changes, audit fees, or "insurance" motives as well as other unidentified factors. Because these factors may prevail more often in a faltering

business financially distressed companies may tend to have a greater propensity to make auditor changes than healthy ones. (2) The influence of factors that are instrumental in auditor switching may be contingent upon the financial condition of the firm. First, the factors associated with auditor changes in distressed companies may not be the same factors that are associated with auditor changes in financially healthy companies. Second, the relative importance of various factors may depend upon the financial condition of the firm. Auditor switches in healthy companies, for example, may be motivated by such factors as the client's need for additional services, or the successor auditor's demonstrated skill or experience in the particular industry in which the client conducts its business. Such factors as audit fees or reporting changes may prove more touchy issues for failing companies than for healthy ones (Schwartz & Menon, 1985).

This contention is born out of the "insurance" hypothesis of auditing. This hypothesis views the demand for auditing as being partially explained by the need for businesses to search out insurance for liabilities that might arise in the event of bankruptcy. Auditors cast in this role of co-insurer against corporate failure can have "deep pockets" in the event a bankrupt client is unable to pay losses from litigation. This insurance demand, which arises out of the auditor's professional liability exposure, can be thought of as a means for distributing risk. Thus management, given the authority and responsibility to report on the financial status and activities of the firm, can limit its own liability exposure and that of any related third parties (Wallace, 1980). It is worth to mention that there is no consensus regarding the best predictors of financial distress (Williams, 1988). It is evidenced that the percentage change in return on assets was considered an

appropriate surrogate for measuring firm performance because of its recurring presence in the literature (Altman, 1968; Beaver, 1966; Williams; 1988).

Previous empirical investigations have produced contradictory results on the association between financial status and auditor choice. Lin and Liu (2009) report a significantly positive association between ROA and the selection of Top-10 audit firms. However, Abbott and Parker (2000) find an insignificant association between ROA and the selection of industry-specialist auditor. It is reported that ROA is not related to the selection of Big 4 audit firm (Woo & Koh, 2001) and also it is not associated with auditor change (Williams, 1988; Woo & Koh, 2001). Further, it is documented that ROA has an insignificant association with the selection of small local audit firms (Wang *et al.*, 2006) and with the selection of Big 4 (Gudhami *et al.*, 2009).

#### **4.6.3 Leverage**

Agency theory conjectures that there is a relatively positive association between agency tension and leverage (Jensen & Meckling, 1976). Debt-holders may hire a costly monitoring device in order to prevent a potential wealth transfers that may take place from debt-holders to equity holders or to managers. Further, they also have an incentive to be sure that the financial information prepared by the borrower is accurate. At the same time, the borrower will have a strongly incentive to signal the quality of his earnings and asset values by hiring a higher quality auditor. Lennox (2000; 1999) reports that leverage has significant effects on audit reporting in UK companies. Chow (1982) suggests that the greater the proportion of debt in a company's capital structure,

the greater the potential for wealth transfers (that is, agency costs) from bondholders to shareholders. Therefore, an independent auditor is required to enhance the reliability of accounting information used to verify covenant compliance (Woo & Koh, 2001). Debt agreements are always subject to level of accounting information disclosed which, in turn, leads to a limited wealth transfer, thereby reducing the residual loss. Under this circumstance, the role of auditing is to increase the reliability of the accounting information. Therefore, the debt agreements' compliance will be verified.

It is found that companies reduce their effective interest rate by hiring a big size audit firms (Blackwell *et al.*, 1998; Causholli & Knechel, 2007; Mansi *et al.*, 2004; Pitman & Fortin, 2004). By the same way of token, it is found that income-increasing accounting methods can be used to avoid debt covenant violations (DeFond & Jiambalvo, 1994). And, since these violations increase with leverage (Duke & Hunt, 1990), auditing can facilitate the enforcement of debt covenants which restrict the actions of management; changes in leverage, investment decisions and dividend payouts. In a like manner, when companies extent the collateral available to support a loan and when the notional value of the collateral is overstated as a result of aggressive accounting practices, a creditor's risk is affected. Therefore, the borrower's choice of auditor is conditional on the extent of a firm's leverage (Smith & Warner, 1979).

Earlier studies document mixed results in terms of the association of leverage and auditor choice. With regard to the association of leverage with the brand name auditor (Big/4/6/8), DeFond (1992) and Hope *et al.* (2008) report a significant and positive association. In addition, Wang *et al.* (2006) report a significantly negative association

between leverage and the selection of Top-10 audit firms. However, Che Ahmad (2006) and Lin and Liu (2009) document an insignificant association of the leverage with the selection of Chinese auditors and the selection of Top-10 audit firms, respectively. On the other hand, Che Ahmad *et al.* (2006), Fargher *et al.* (2001), Firth and Smith (1992), Knechel *et al.* (2008) and Gudhami *et al.* (2009) are unable to find any association between leverage and the brandname auditors. In terms of industry-specialist auditor, Abbott and Parker (2000) and Velury *et al.* (2003) find an insignificant association between leverage and the selection of industry-specialist auditor.

With respect to the association between auditor leverage and auditor size, DeFond (1992) find a significantly positive association while Chan *et al.* (2007) are unable to report such association. As for audit quality change, Lee *et al.* (2004) report that leverage is positively associated with the probability change among Big 4, national and local audit firms. Eichenseher & Shields (1989) document that leverage is positively related to the incidence of change from non-Big 4 to Big 4 audit firms. However, Woo and Koh (2001) report an insignificant association between leverage and the audit quality change from/to Big 4. Further, Lennox (2000) finds an insignificant association between leverage and auditor change for opinion shopping. As for the incidence of auditor change, Woo and Koh (2001) report a significantly positive association between leverage and auditor change. With respect to the auditor independence, DeFond (1992) finds that leverage is positively related to the selection of independent auditor.

#### 4.6.4 Management Change

Company's president, chief executive officer, chief financial officer, and treasurer are considered important management positions. They play an essential and influential role in the client's decision to retain or replace an auditor because of changing in contracting environment. Specifically, a change in management director causes a switch to another audit firm because new management attempts to disassociate from previous relationships and prefers to deal with familiar parties. New management may be dissatisfied with the quality of past services provided by the company's auditor, as well as with the cost of the audit. A new management team charged with the responsibility of bringing about a corporate recovery may view the selection of reporting methods as a means for influencing the decisions of suppliers of capital by portraying corporate performance in a more favorable light, and this may be facilitated by finding an auditor willing to sanction those methods advocated by management (Hudaib & Cooke, 2005; Woo & Koh, 2001).

Beattie and Fearnley (1998) provide further evidence vis-a-vis management change. They have reported that 35% of auditor change companies cite top management changes as a reason for being switched. Empirically, Nazri *et al.* (2012a) and Robinson and Owens-Jackson (2009) report a significantly positive association between management change and the propensity of auditor change. Carcello and Neal (2003) report a significantly positive relationship between management change and the auditor change after receiving a going concern report. However, Williams (1988) reports an insignificant association between management change and the incidence of

auditorswitch. Further, Schwartz and Menon (1985) find no association between management change and auditor switch by the failing firms. Nazri *et al.* (2012b) document a significantly positive association between management change and audit quality.

#### **4.7 Summary and Conclusion**

In this chapter, secondary-data studies of auditor change and selection are reviewed. Previous studies have documented that audit service is a quality-differentiated product. And, companies demand different audit quality levels. However, the previous studies on audit service demand have resulted in mixed and inconclusive results. This may be attributed to the different characteristics at the level of the company, country and auditor choice issues. Hence, it is not applicable to generalize the previous studies' findings to the context of GCC countries. Further empirical investigations are needed to identify the determinants influencing the auditor change/selection decisions in the setting of GCC countries and to verify whether Western economic theory; agency theory is suitable in the GCC environment and/or several other behaviors should be addressed.



## CHAPTER FIVE

### RESEARCH DESIGN AND METHODOLOGY

#### 5.1 Introduction

A comprehensive theoretical frameworks are developed in order for answering the research questions stated in Chapter 1 (section 1.4). Based on the literature reviewed in chapter 4, it is difficult, to some extent, to conclude from the body of the previous studies on auditor choice the more important sources of an auditor change and/or an auditor selection (Anderson *et al.*, 1993; Lindahl, 1996). In addition, the process of an auditor selection varies among stakeholders and organizations (Abdel-Khalik, 1993; Hermanson *et al.*, 1994; Knechel, 2001). Equally important, there is no particular factor or single collection of organizational or environmental factors forming the optimal determinants of auditor choice (Ginsberg & Venkatraman, 1985). Wallace (1984) indicates that there is a struggle to classify the potential variables influencing the auditor choice based on the underlying theories because of the shortage and overlay in the underlying theories in explaining the auditor choice<sup>10</sup> and the unawareness of the behavioral issues related to auditor choice. Thus, section 5.2 of this chapter discusses the theoretical framework, section 5.3 highlights the hypotheses development, section

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<sup>10</sup> Deis & Hill (1998) point to two particular issues regarding the auditor choice research: the unavailability of measures of ex post audit quality, and the general failure to model both the demand and supply sides of the market for audit services. Palmrose (1984b) indicate that the auditor-choice models are developed from a demand perspective. It assumes, therefore, that auditors are willing to supply services to any client. In reality, this is unlikely to be the case. Therefore, the auditor choice/client acceptance decision is more complex than implied by the model. Particularly for quality-differentiated auditors, audit risk and the exposure to reputation diminishment are assessed before taking on a client.

5.4 shows the formal hypotheses, section 5.5 outlines the measurements of the variables, section 5.6 discusses the specifications of the models, and section 5.7 outlines the data collection followed by section 5.8 that highlights the summary and conclusion.

## **5.2 Theoretical Frameworks**

Based on the literature reviewed in Chapter 4, there are numerous studies conducted on auditor choice. Studies in US, UK, Australia and similar markets are carried out in contexts that are described as having a dispersed ownership and different corporate governance characteristics. Mixed and inconclusive findings amongst those studies are reported. However, to the best of the researcher's knowledge, a study concerning auditor choice in GCC setting does not exist. Thus, this study fills the gap by investigating other potential factors that may influence auditor choice in the GCC.

The research frameworks of this study are developed based on the agency theoretical framework, as an underpinning theory for this study, the other related concepts discussed in several theories (managerial grid theory, attraction-selection-attrition framework and information suppression hypotheses). Research frameworks are developed to investigate potential factors that are associated with auditor choice. The determinants of auditor choice are generally identified from the variables included in previous studies. Obviously, most of the related literature on auditor choice investigates similar variables of auditor change and those of auditor selection.

### **5.2.1 Theoretical Framework of the Auditor Change (Model 1)**

As discussed in chapter 1, the auditor change framework (Model 1) is theoretically developed by including three categories of determinants. The first category is the corporate governance mechanisms which include board of directors' effectiveness score (board of directors independence, size, meetings, financial expertise, nationality, international experience, and CEO duality), audit committee's effectiveness score (audit committee independence, size, meetings, financial expertise, nationality and international experience), government ownership, family ownership and domestic corporate ownership.

As has been extensively discussed in the prior and subsequent sections, theoretically and collectively, agency theory and its related hypotheses, managerial grid theory and attraction-selection-attrition framework have been used to explain the negative association of board of directors effectiveness and audit committee effectiveness with the incidence of auditor change. These two combined variables are considered new determinants introduced into the auditor change model. Looking at them from an individual perspective, board independence, board size, board meetings, board financial expertise, board nationality, board international experience, and CEO duality, audit committee independence, audit committee size, audit committee meetings, audit committee financial expertise, audit committee nationality and audit committee international experience are theorized as new determinants to the composite scores of both board and audit committee. This is because these variables have been composited into a one score, for the first time, and tested with the auditor choice discipline. In

particular, board nationality, board international experience, audit committee nationality and audit committee international experience represent unique contextually-cultural

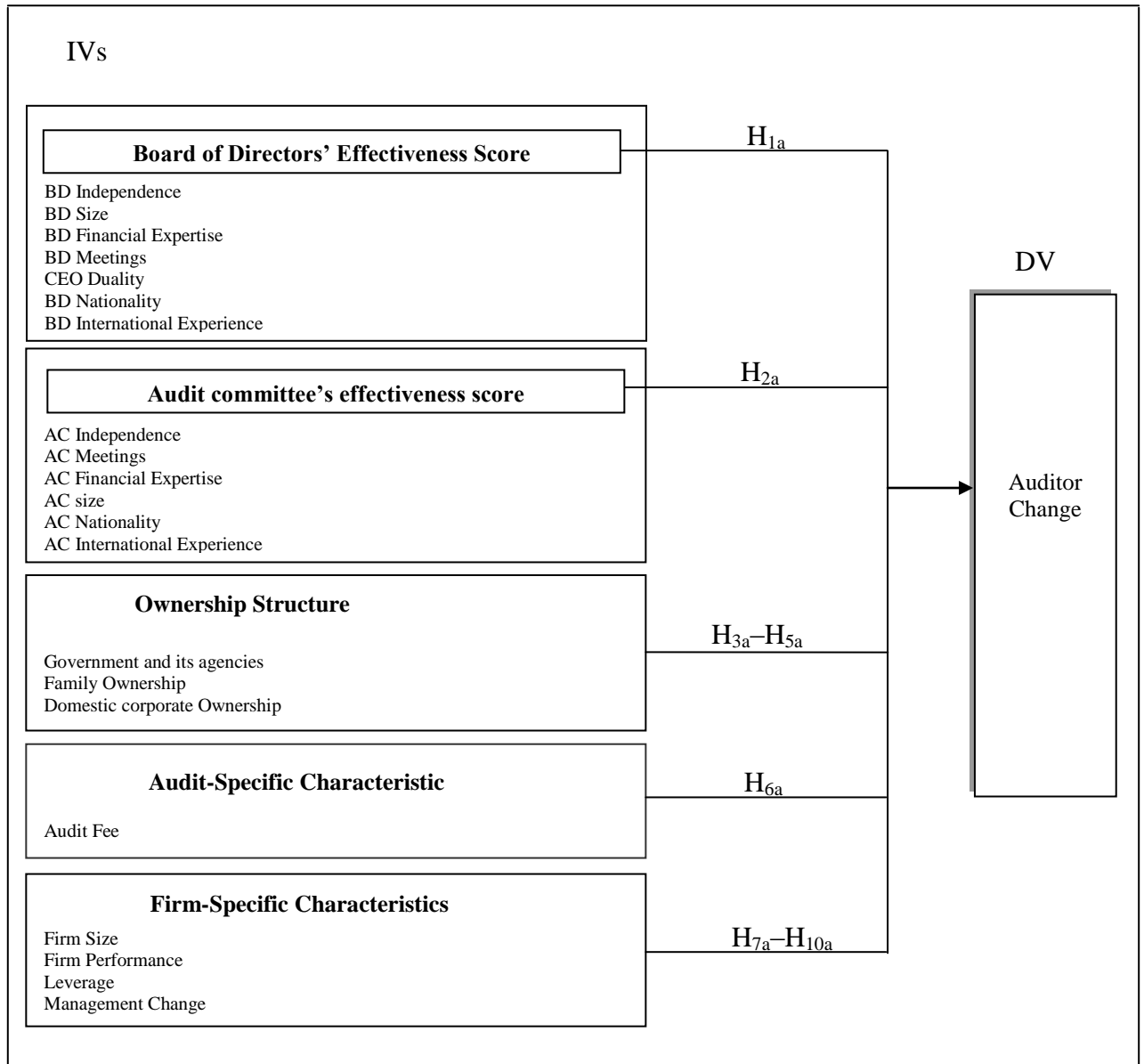


Figure 5.1  
Theoretical Framework of the Auditor Change (Model 1)

determinants in GCC setting. In addition, this study uses two behavioral theories, namely; managerial grid theory and attraction-selection-attrition framework, that have not been applied before in the context of auditing to explain the association between the two contextual variables and auditor change. Furthermore, this study uses a combination of behavioral and economic multi-theoretic perspective to examine the association of board of directors and audit committee effectiveness with auditor choice.

As for the ownership structure, government ownership, family ownership and domestic corporate ownership are also considered unique category of determinants introduced into the auditor change framework (Model 1). Agency theory and its related hypotheses have systematically been applied to explain the positive association of the government ownership, the negative association of the family ownership and domestic corporate ownership with the probability of auditor change.

The second category of determinant is the audit-specific characteristic; audit fee. This variable is replicated from the previous studies on auditor change using the agency theory to expound its positive association with the event of auditor change.

The third category of variables is the firm-specific characteristics; firm size, leverage, firm performance, and management change. These variables are replicated from the extant research on auditor choice except management change. Agency theory and its related hypotheses have been used to explicate the positive association of firm size, leverage and management change with the incidence of auditor change. With respect to firm performance, agency theory and information suppression hypothesis have been

used to describe the negative association between firm performance and auditor change. Figure 5.1 depicts the diagrammatic representation of the theoretical framework of auditor change model (Model 1) examined in this study.

### **5.2.2 Theoretical Framework of the Auditor Selection (Model 2)**

This study applies and extends DeFond's (1992) model of audit quality to be applicable for empirical investigation in the context of the GCC. As stated earlier (section 4.2.1.2), DeFond (1992) reports that auditor size, brand name, industry-specialist, and independence may be used in combination to capture the same underlying construct—the auditor's ability to alleviate agency conflicts. These variables are expected to be imperfect measures of audit quality when considering as a group and not individually. As a result, if each of these variables is a noisy measure of audit quality, combining them should increase the power of the tests by reducing noise in the dependent variable. Nunnally & Bernstein (1994, p.86) argue that *“because constructs concern domains of observables, a better measure of any construct is obtained by combining the results from a number of measures than by taking any one of them individually... Similarly, combining several observables provides greater construct validity and scientific generalizability in the domain as a whole relative to a single measure.”* In particular, given the institutional, regulatory and audit market differences between the US and the GCC, the combined score of audit quality is expected to be different. Therefore, the ability of auditors in alleviating the agency conflicts in these distinct environments may vary. In this regard, DeFond and Francis (2005) call for a research outside U.S.

In his study, DeFond (1992) has examined management ownership, leverage, short-term accruals, firm growth and new financing. For a better results, this study adopts and extends comprehensively DeFond's (1992) model by including new determinants that have not been addressed in DeFond's (1992) study. These determinants are the similar variables examined in the auditor change framework (Model 1), namely; corporate governance mechanisms, audit-specific characteristic, and firm-specific characteristics.

The first category of determinants is the corporate governance mechanisms which include board of directors' effectiveness score (board of directors independence, size, financial expertise, meetings, nationality, international experience, and CEO duality), audit committee's effectiveness score (audit committee independence, size, financial expertise, meetings, nationality and international experience), government ownership, family ownership and domestic corporate ownership. As has been expansively discussed in the previous and succeeding sections, theoretically and collectively, agency theory and its related hypotheses, managerial grid theory and attraction-selection-attrition framework have been used to explain the positive association of board of directors effectiveness and audit committee effectiveness with the choice of audit quality.

These two combined variables are considered new determinants introduced into the auditor selection model. Looking at them from an individual perspective, board of directors independence, board size, board financial expertise, board meetings, board nationality, board international experience, CEO duality, audit committee independence, audit committee size, audit committee financial expertise, audit committee meetings, audit committee nationality and audit committee international experience are also

theorized as new determinants structuring the composite scores of both board and audit committee. In particular, board nationality, board international experience, audit committee nationality, and audit committee international experience represent unique contextually-cultural determinants in the GCC setting.

This study also uses two behavioral theories, namely; managerial grid theory and attraction-selection-attrition framework, that have not been applied before in the context of auditing to explain the association between the two contextual variables and auditor selection. In addition, this study uses a combination of behavioral and economic multi-theoretic perspective to examine the association of board of directors and audit committee effectiveness with auditor selection.

As for the ownership structure, government ownership, family ownership and domestic corporate ownership, they are also considered new determinants introduced into the auditor selection model. Agency theory and its related hypotheses have thoroughly been applied to explain the negative association of the government ownership, the positive association of the family ownership and domestic corporate ownership with the choice of audit quality. The second category of determinant is the audit-specific characteristic; audit fee. This variable is also considered as a new determinant introduced into the DeFond's (1992) model. The agency theory is utilized to expound its positive association with the quality of auditor selected. The third category of variables is the firm-specific characteristics; firm size, leverage, firm performance and management change. Firm performance and management change are considered new determinants addressed into the DeFond's (1992) model. Agency theory and its related



hypotheses have been used to explicate the positive association of firm size, leverage and management change with the quality of the selected auditor. With respect to firm performance, agency theory and information suppression hypothesis have been used to describe the positive association of the firm performance with quality of auditor selected. Figure 5.2 depicts the diagrammatic representation of the theoretical framework of the auditor selection model (Model 2) examined in this study.

DeFond (1992) indicates that the period over which the change in agency costs is measured should coincide with either the manager's planning horizon or reaction time to the change. If managers change their auditors in reaction to changes in agency conflicts, the change in agency conflicts should be measured over some period prior to the change. If managers change their auditors in anticipation of changes in agency conflicts, the change in agency conflicts should be measured subsequent to the change. Managers will react to or anticipate agency cost changes depending upon factors such as whether the changes are predictable.

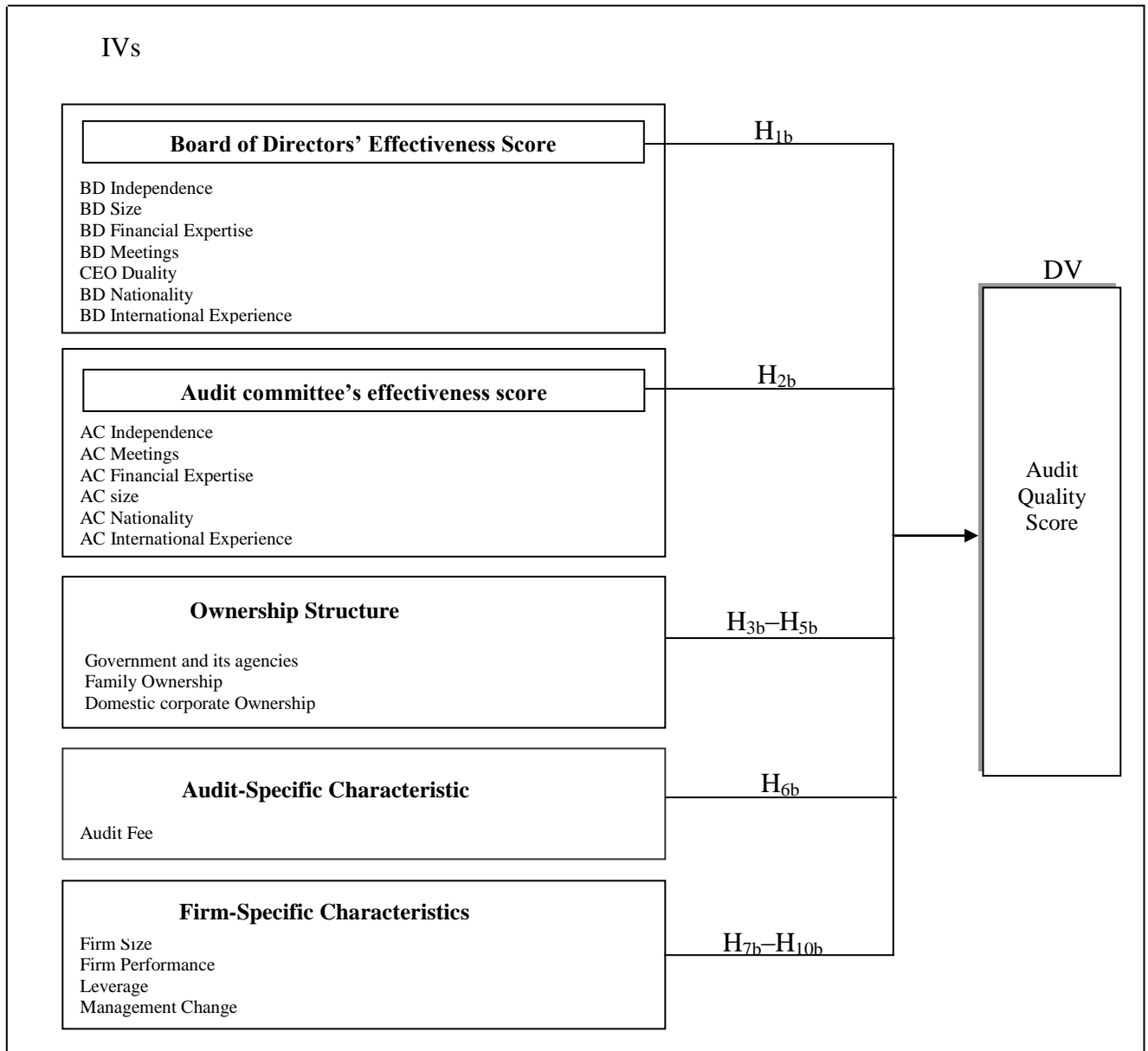


Figure 5.2  
*Theoretical Framework of the Auditor Selection (Model 2)*

Due to the absence of a theory which provides direction in deciding when managers will react to and when they will anticipate agency conflict changes, this study tries to capture the changes in the agency cost-related company variables that are expected to exist before “*ex-ante*” and after the auditor change “*ex-post*” in the auditor change framework (Model 1) and the changes in the agency cost-related company variables before “*ex-ante*” and after “*ex-post*” the new auditor selection in the auditor selection framework (Model 2).<sup>11</sup> In the auditor change framework (Model 1), the year before the “auditor change year” is called “pre-auditor change year” and symbolized a “ $t_{-1}$ .” The year after the “auditor change year” is called “post-auditor change year” and symbolized a “ $t_1$ .” In the auditor selection framework (Model 2), the year prior to the new auditor selection is termed “pre-new auditor selection year.” It has been given a symbol of “ $t_{-1}$ .” And, the year after the new auditor selection is called “post new-auditor selection year.” It has been given a symbol of “ $t_1$ .” The level of each agency conflict variable in the auditor change framework (Model 1) is measured in the both periods of “pre-auditor change period,  $t_{-1}$ ” and “post-auditor change period,  $t_1$ .” As for the new auditor selection framework (Model 2), the level of each agency conflict variable is measured in the both

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<sup>11</sup> The periods of pre-auditor change and post-auditor change have been used by several previous studies (Burton & Roberts, 1967; Eichenseher & Shields, 1989; Palmrose, 1984b; Nichols & Smith, 1983; Simon & Francis, 1988; Williams, 1988; Schwartz & Menon, 1985; Fried & Schiff, 1981; Johnson & Lys, 1990; DeFond, 1992; Lennox, 2000; DeBerg, Kaplan & Pany, 1991. Lindahl (1996) documents that this procedure corrects the methodological flaws in the previous cross-sectional studies of auditor changes. DeFond (1992) and Francis & Wilson (1988), capturing the causal changes expected to be found both before and after the auditor switch, document that measuring the changes in agency conflict variables over a period prior to the change in auditor suggests an assumption that managers react to changes in agency conflicts. However, managers may also be anticipating agency conflict changes when they switch auditors. For example, an increase in audit quality may be made in anticipation of an increase in leverage (which increases agency conflicts) in order to obtain better credit terms. Similarly, if a decrease in management ownership (an increase in agency conflicts) is accompanied by a public stock offering, audit quality may be increased ex-ante in order to gain the confidence of outside investors. Fried & Schiff (1981) indicate that the selection of time period and the use of data from both sides of the announcement date were motivated by a desire to avoid potential biases resulting from unstable  $\beta$ s. Therefore, a time interval of five years was used to estimate sample and control betas.

years of “pre-new auditor selection year,  $t_{-1}$ ” and “post-new auditor selection year,  $t_1$ .” Thus, agency cost-related company variables are tested as “levels” in the frameworks to be estimated, Model 1 and Model 2. Figures 5.3 and 5.4 show the changes in the agency cost-related company variables that are expected to take place in the auditor change framework (Model 1) and in the auditor selection framework (Model 2) both before and after the auditor change and the new auditor selection within the considered period of study (from 2005 to 2010).

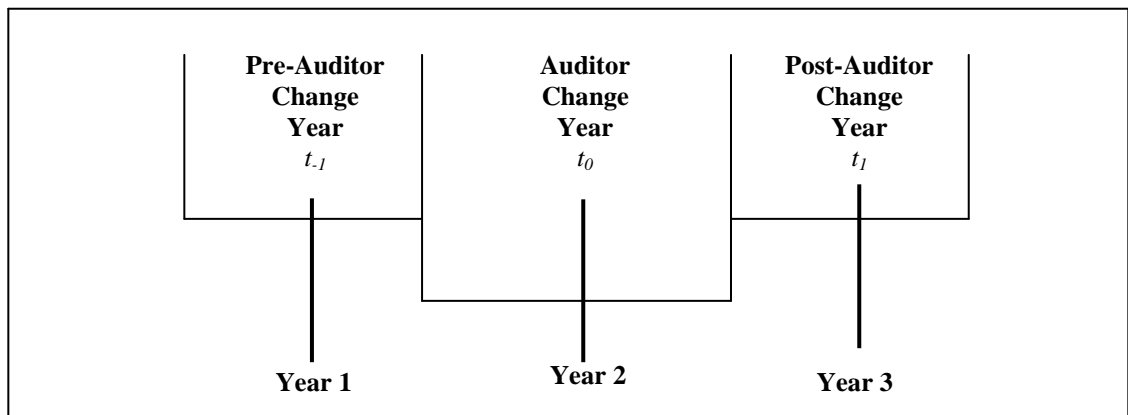


Figure 5.3  
*Cross-Temporal Differences in the Auditor Change Framework*

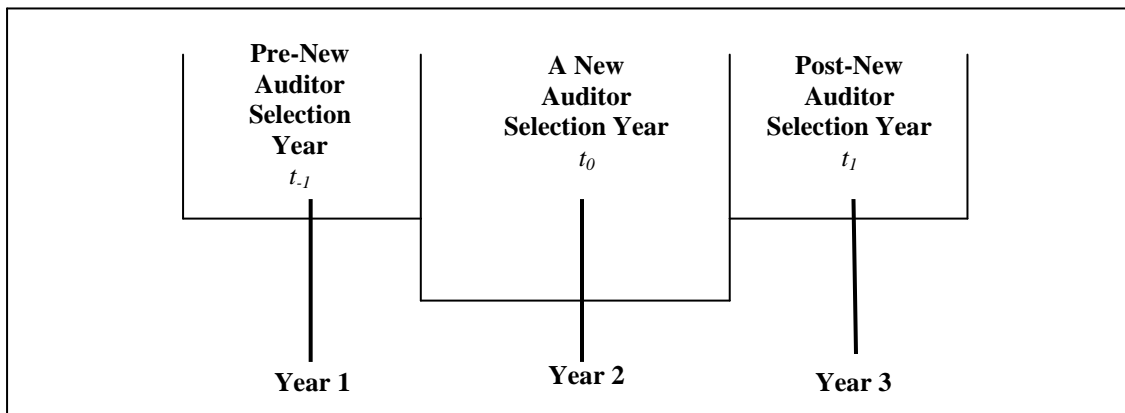


Figure 5.4  
*Cross-Temporal Differences in the Auditor Selection Framework*

### **5.3 Hypotheses Development**

It is worth to highpoint that the prior research on auditor choice has been examined in different regulatory business environments and audit markets with more focus on Anglo-Saxon countries, undifferentiating in the type of auditor change, several methodological weaknesses such as omission of important variables, population definition; and sample size and type; weak empirical tests, different typical statistical analysis, investigating auditor choice issues under specific situations such merger/acquisition, the influence of economic and industrial conditions over the extended time-periods examined, and weak theoretical constructs. Particularly, the aforementioned reasons cause contradictory and limited results in the previous studies of auditor choice that may be extended to describe the same situations when linking auditor choice with the tested variables.

In the context of the GCC, issues of auditor choice are unknown due to lack of studies in this discipline. In addition, these countries' settings of regulatory framework, audit markets, and unique culture compared to those of the prior auditor choice studies are different. Therefore, the hypotheses of this study are developed based on the suggestions of the underlying theories (agency theory, managerial grid theory, attraction-selection-attrition framework and information suppression hypothesis), empirical studies' findings, and the international and regional reports about GCC countries such as OECD, Hawakamah, AL Majlis, The GCC Board Directors Institute, INSEAD, TNI Market Insight, Center For International Private Enterprise Global Corporate Governance Forum and The National Investor.

### **5.3.1 Corporate Governance Mechanisms**

#### **5.3.1.1 Board of Directors Effectiveness**

Based on the suggestions of agency theory, managerial grid theory and attraction-selection-attrition framework that different characteristics of board of directors may explain a variation in the audit demand. Past research demonstrates that board of directors is the highest authority at the company level that is responsible to work in the best interest of shareholders, to defend these interests and to fight against nonqualified managers (it joins the roles of control and authorization) (Sialaet *al.*, 2009). Further, the board of directors is the common apex of the decision control system in public corporations, is a market-induced, low-cost mechanism for monitoring management (Fama & Jensen, 1983; Fama, 1980).

Shareholders delegate their decision control rights to boards as a more efficient way of ratifying and monitoring managerial decisions and, thus, monitoring managerial decisions becomes essential for a board of directors to ensure that shareholders' interests are protected (Fama & Jensen, 1983). According to Hawkamah and IFC survey of 2008, around 49% of listed companies in MENA countries (i.e., GCC) consider the responsibility for corporate governance policies to the board—in-line with good practice. Nevertheless, the role of the board is often misunderstood in the MENA region. According to the survey, 89.9% of MENA banks and listed companies stated that the board, and not management, was responsible for setting corporate management, which is contrary to the good practice that management develops, and the board reviews and guides corporate strategy.

The board fulfills two functions: monitoring management and providing expert advice. Both functions imply that the board plays a role in the auditor choice decision (Houqe & Zijl, 2008; Yatim *et al.*, 2006). Therefore, the board of directors can influence in a substantial way the decision of auditor choice. According to the same survey, 36% of the listed companies in MENA countries (i.e., GCC) indicated that the selection of the external audit firm is a competence of the board.

In particular, board independence is considered by the agency theory as the most effective monitoring and controlling device of firm activities (Brickley *et al.*, 1994; Fama, 1980; Fama & Jensen, 1983a,b). Avoiding legal liability and punishments, independent auditors imply effective monitoring by demanding a higher audit quality (Beasley *et al.*, 1999; Gilson 1990; Hay & Knechel, 2004; Sahlman 1990). Beasley and Petroni (2001) have found that the presence of independent board members is associated with hiring a Big-6 specialist auditor. Lee *et al.* (2004) document a negative association between the proportion of independent board of directors and the incidence of auditor change. In the same regard, Chen and Zhou (2007) report that firms with more independent boards dismissed Andersen earlier and hired a Big 4 successor auditor. As for AL Majlis, The GCC Board Directors Institute's report in 2011, a round 64% of board members in GCC boards are independent. This increase may be a result of newly enacted regulation in the region.

With respect to board size, agency theory reveals that large board size supports manager domination and leads to difficulties in finding a consensus on significant decisions (Jensen, 1993). Consequently, the protection of the interests of the shareholders would

be reduced. Goodstein *et al.* (1994) argue that smaller boards, between four to six members might be more effective since they are able to make timely strategic decisions. Moreover, some empirical studies show a negative relation between board size and financial performance (Eisenberget *al.*, 1998; Yermack, 1996). As for the board of director financial expertise, agency theory suggests that the expertise of board members is critical in assuring that the monitoring role of the board is effectively discharged. Although there is no universal definition of board expertise, recent studies examining corporate governance in an audit context have indicated that the financial expertise of its members do indeed proxy for effective monitoring (Carcello & Neal, 2003; Lee *et al.*, 2004).

With regard to board of directors meeting, Byrne (1996) and Lipton and Lorsch (1992) argue that boards that meet frequently are more likely to perform their duties diligently and are beneficial to shareholders. Similarly, Conger *et al.*(1998) and Vafeas (1999) argue that board meeting time can improve the effectiveness of a board because of the advisory role they play to management and they access information that can help them in applying more effective monitoring (Adams & Ferreira, 2007, 2011). Therefore, a board that demonstrates a greater diligence in discharging its oversight responsibilities is likely to enhance the level of oversight of the financial reporting process (Yatim *et al.*, 2006). In terms of CEO duality, agency theory predicts that a board's ability to perform its governance role is likely to weaken when the CEO is also the board chair (Abbott *et al.*, 2004; Abdul Rahman & Haniffa, 2005; Aguilera 2005; Dechow *et al.*, 1996; Fama & Jensen, 1983a,b;Siala *et al.*, 2009). This is because the CEO duality breaks the balance of powers between the top management team and the board, potentially restricting the



board's effectiveness in controlling managerial initiatives and actions (Boyd *et al.*, 2005). Furthermore, CEO duality increases information asymmetry between the CEO and the board, which may become a primary source of agency problems (Eisenhardt, 1989). Lin and Liu (2009) report a significantly negative association between CEO and the selection of Top 10 auditors.

Regarding the nationality and international experience of the board of directors, it was reported that culture factors such as the above two may impact the perceptions along with meanings of auditing concepts like independence, accountability and trust. These were also revealed to impact management behavior while auditing was reported to have a key role as a monitoring mechanism in the resolution of agency conflicts (Craswell *et al.*, 1995; Francis & Wilson, 1988; Haniffa & Cooke, 2002; Neu, 1992; Palmrose, 1984). Accordingly, on the basis of the managerial grid theory and attraction-selection-attrition framework's initial recommendation in which managers may be concerned of people, in the context of the Gulf firms, the higher the collectivism of gulf nationality-directors sitting on the board and gulf-nationality-directors lacking international experience, the higher will be the family and friendship relation's dominance and the higher will be the nepotism and cronyism that are both impacted by tribal and sectarian connections. Consequently, the effectiveness of the monitoring function and provision of advice by the board and audit committee would be diminished and the environment leads to confined professionalism in institutions like the auditing profession and may impact the perceptions and meanings of auditing concepts like independence, accountability and trust. In addition, the auditing role in tackling agency conflicts as a

monitoring mechanism will be weakened and there will be a less desire in demanding higher audit quality.

Contrastingly, the managerial grid theory proposes that managers may also be concerned of production. Al Bahar *et al.* (1996) state that concerns regarding production are not as likely to be influenced by Arab culture and are more inclined to employ a highly Western-orientated approach. In other words, the higher the proportions of foreign nationalities and/or gulf nationalities with international experience, the greater will be the board's and the audit committee's effectiveness in light of functions of monitoring and provision of advice. Under such circumstance, auditing plays a key role in the resolution of agency conflicts as a monitoring mechanism which leads to a higher demand for audit services. Moreover, effective board and audit committee members provide signaling and insurance by hiring quality auditor in a way that they may inform the market additional information regarding the company and their own behavior.

The above studies on auditor choice have empirically linked auditor choice with board of directors characteristics in an individual test (Beasley & Petroni, 2001; Chen & Zhou, 2007; Lee *et al.*, 2004). They have resulted, to some extent, in conflicting and inconclusive results. Another emerging line of research in auditor choice has examined board of directors characteristics using a composite score. For example, Cassell *et al.* (2012) have investigated the influence of corporate governance index (independence, meetings, and financial expertise of board and audit committee members) on auditor

switch from a Big 4 to a non-Big 4. They concluded that board of directors effectiveness is related to the auditor-client realignments.

The reasoning behind using a composite measure of corporate governance mechanisms is that the optimal combination of corporate governance mechanisms is considered better in reducing the agency cost and protecting the interest of all shareholders because effectiveness of corporate governance achieved via different channels and particular mechanism's effectiveness depends on the effectiveness of others (Cai *et al.*, 2009). In addition, Ward *et al.* (2009) argue that it is best to look at corporate mechanisms as a bundle of mechanisms to protect shareholder interests and not in isolation from each other because these governance mechanisms act in a complementary or substitutable fashion. Moreover, they argue that the reason behind the previous studies' provision of somewhat mixed results is that they have looked to governance mechanisms in isolation from each other and how each mechanism can address agency problems, so they ignored the idea that effectiveness of single mechanisms depends on the other mechanisms. In addition, Agrawal and Knoeber (1996) argue that the results on the effect of single mechanisms might be misleading by showing that the effect of some single mechanisms on firm performance disappeared in the combined model. In the same line, it gives a stronger effect of measurement when investigating the overall corporate governance mechanisms than just examining them individually (O'Sullivan *et al.*, 2008).

The current study investigates the board of directors characteristics including, independence, size, meetings, CEO duality, financial expertise, nationality and international experience in a group to encapsulate their impact on auditor choice. This

examination method is consistent with the combination of board of directors characteristics as a better proxy for the board of directors effectiveness as perceived by client firms in the hopes of decreasing agency conflicts through the enhancement of the monitoring function and provision of advice. Various characteristics of board of directors may be explained through various agency conflict variables. Accordingly, the rationale is consistent with client firms' perception that specific characteristics offer information concerning the board's ability to minimize particular types of agency conflicts.

The foregoing arguments are summarized in expecting direct evidence on the association between board of directors effectiveness and auditor change in the auditor change framework (Model 1) and between board of directors effectiveness and the audit quality in the auditor selection framework (Model 2). The testable hypotheses are stated in direct forms, respectively:

*H<sub>1a\_change</sub>: Ceteris paribus, there is a negative association between board of directors effectiveness and auditor change.*

*H<sub>1b\_selection</sub>: Ceteris paribus, there is a positive association between board of directors effectiveness and audit quality.*

### **5.3.1.2 Audit Committee Effectiveness**

In a broad sense, agency theory, managerial grid theory and attraction-selection-attrition framework conjecture that different characteristics of audit committee may explain a variation in the audit demand. An important role of monitoring has been played by the

audit committee in assuring the quality of financial reports and corporate accountability. The audit committee's role stands in the middle between the board of directors and the external auditor in bridging the information asymmetry, facilitating the monitoring process (Birkett, 1986; Klein, 1998), and enhancing the auditor independence (Carcello & Neal, 2003; Mautz & Neumann, 1977). Committee members can attempt to persuade management to select a more knowledgeable auditor with greater reputation (Carcello & Neal, 2003; Cohen *et al.*, 2004; Kaplan & Mauldin, 2008; Krishnan & Ye, 2005). Effective audit committee should block unjustified auditor switches as an incidence of opinion shopping (Archambeault & DeZoort, 2001; Knapp, 1991). Moore *et al.* (2006) argue that audit committee has to be responsible for selecting the external auditor and not the managers. A recent report released by AL Majlis, The GCC Board Directors Institute in 2011 indicates that 67% of GCC companies have an audit committee (increased from 20% in 2009).

In specific, as for the audit committee independence, this characteristic has the most compelling theoretical and empirical support. It is the most critical attribute indicating of the audit committee effectiveness (Klein, 2002; Robinson & Owens-Jackson, 2009). Eichenseher and Shields (1989) and Lee *et al.* (2004) find that demanding a higher auditor reputation is related to the independent members in the audit committee. Carcello and Neal (2003) find that audit committees with greater independence are less likely to dismiss the audit firm following the issuance of new going-concern reports. Robinson and Owens-Jackson (2009) report a significantly negative association between audit committee independence and the incidence of auditor change. Archambeault and DeZoort (2001) document that audit committee independence is related negatively to suspicious auditor switching. Further, Chen and Zhou

(2007) find that audit committee with more independent members had dismissed Andersen sooner and hired a Big 4 successor auditor.

With respect to audit committee size, Kalbers and Fogarty (1993) suggest that the size of the audit committee do indeed proxy for its effectiveness. In this regard, Pincus *et al.* (1989) argue that since audit committee is an expensive monitoring mechanism and large size of the committee indicates to a greater resources spent on this mechanism, it is expected that large size audit committee are more likely to improve the audit function. It is also found that large audit committees decrease opinion shopping behavior (Archambeault & DeZoort, 2010) and select a Big 4 successor auditor after the early dismiss of the Arther Andersen (Chen & Zhou, 2007). As for audit committee meetings, it is indicated that an active audit committee is more likely to influence management or board decisions. (Abbott *et al.*, 2004; Arel *et al.*, 2006; Beasley *et al.*, 1999; DeZoort *et al.*, 2002; Hughes, 1999; Kalbers & Fogarty, 1993; Park, 1998; Robinson & Owens-Jackson, 2009). Lee *et al.* (2004) document empirically that there is an association between the number of audit committee meetings and both auditor resignation and the selection of a high-quality successor auditor. Abbot and Parker (2000) find a significantly positive association between audit committee activity and the selection of an industry-specialist auditor. Chen and Zhou (2007) document a significantly positive association between audit committee meetings and the choice of Big 4 successor auditor after dismissing Arthur Andersen.

In terms of audit committee financial expertise, it does indeed proxy for audit committee effectiveness (Carcello & Neal, 2003; Lee *et al.*, 2004). Fama and Jensen (1983)

conjecture that audit committee members have invested a substantial amount of effort to build up their financial experience and, consequently, they have a strong incentive to practice their monitoring role in order to maintain their reputation in the market labor. Robinson and Owens-Jackson (2009) document a significantly negative association between audit committee financial expertise and auditor change. Chen and Zhou (2007) document that audit committees with greater financial expertise had dismissed Andersen and hired a Big 4 successor auditor. Concerning audit committee nationality and international experience, as in depth aforementioned that these characteristics influence audit committee effectiveness on applying the monitoring function and providing advice. In specific, the effectiveness of the monitoring function and providing advice of the audit committee is increased by the inclusion of foreign nationalities and local citizens with a wide range of international experiences that, in turn, may lead to lower the frequency of the auditor change and increase the demand for higher audit quality.

The extant research on auditor choice has linked audit committee characteristics and auditor choice in individual tests (Abbott & Parker, 2000; Archambeault & DeZoort, 2001; Carcello & Neal, 2003; Chen & Zhou, 2007; Lee *et al.*, 2004; Robinson & Owens-Jackson, 2009). These studies have resulted in contradictory and inconclusive results. A very recently empirical study conducted by Cassell *et al.* (2012) has examined a composite measure of audit committee characteristics with auditor-client realignments. Thus, the present study tests the audit committee characteristics (independence, size, meetings, financial expertise, nationality and international experience) as a combined measure in order to capture the aggregate effect of these characteristics on auditor choice. This is consistent with the integration of audit committee characteristics being a

better proxy for the board of directors effectiveness perceived by client firms to reduce the agency conflicts by enhancing the effectiveness of monitoring function and providing advice. Different audit committee characteristics may be explained by different agency conflict variables. If this is the case, it is in line with client firms perceiving that specific audit committee characteristics provide information on the audit committee ability to alleviate specific types of agency conflicts. The reasoning behind using the aggregate measure of audit committee characteristics is the same stated above about the composite measure of the board of directors effectiveness in section 5.3.1.1.

The foundation of these arguments leads the present study proposing direct evidence on the association between audit committee effectiveness and auditor change in the auditor change framework (Model 1) and between audit committee effectiveness and the audit quality in the auditor selection framework (Model 2). The testable hypotheses are stated in direct forms, respectively:

*H<sub>2a\_change</sub>: Ceteris paribus, there is a negative association between audit committee effectiveness and auditor change.*

*H<sub>2b\_selection</sub>: Ceteris paribus, there is a positive association between audit committee effectiveness and audit quality.*

### **5.3.1.3 Ownership Structure**

#### **5.3.1.3.1 Government Ownership**

High levels of government ownership create a series of agency problems of ineffective corporate governance that directly results in poor firm performance and, consequently,



little demand for independent auditing to supply quality accounting information (DeFond *et al.*, 2000; Qi *et al.*, 2000; Wang *et al.*, 2005; Xu & Wang, 1999). Guedhami *et al.* (2009) report that government owners protecting their political interests may prefer to appoint auditors who are more conducive to rendering financial statements and less informative about underlying firm performance. Moreover, it is evidenced that companies with political connections access to cheap loans (Claessens *et al.*, 2008; Faccio, 2007) which, consequently, make them raise capital through these connections without having to reduce information asymmetry with more credible financial statements (Wang *et al.*, 2008).

Further, Chaney *et al.* (2011) document that politically connected firms, despite their poorer quality earnings, are not penalized with higher borrowing costs. As a result, a lower-quality auditors are more likely to be demanded (Guedhami *et al.*, 2009). Empirically linking government ownership with auditor choice, Guedhami *et al.* (2009) document a significantly negative relationship between the government's equity stake and the choice of Big 4 audit firms. Wang *et al.* (2008) report that local SOEs have the strongest propensity to hire small local auditors, while central SOEs are not different from non-state firms in their likelihood of hiring small local auditors. Chan *et al.* (2007) find a negative association between government ownership and auditor size.

The above discussion guides the present study to propose direct associations between government ownership and auditor change in the auditor change framework (Model 1) and between government ownership and the audit quality in the auditor selection

framework (Model 2). The testable hypotheses are identified in direct forms, respectively:

*H<sub>3a\_change</sub>: Ceteris paribus, there is a positive association between government ownership and auditor change.*

*H<sub>3b\_selection</sub>: Ceteris paribus, there is a negative association between government ownership and audit quality.*

### **5.3.1.3.2 Family Ownership**

In contrary with the previous studies, this study uses the agency framework and follows Carey *et al.* (2000) arguing that agency problems such as self-interest, conflict of interests and goals and information asymmetry can still arise in family businesses. Therefore, agency theory predicts the existence of potential conflict in family business (Fama & Jensen, 1983). Carey *et al.* (2000) find that the demand for audit quality is positively associated with the degree of family ownership. This is because of the existence of non-family members and representation on the board of directors. Jensen and Meckling (1976) argue that agency costs are more likely to be reduced as there is an increase in the holdings of the owner-largest shareholder. Accordingly, the need to manage earnings in order to alleviate contractual constraints that, consequently, will motivate the controlling owners to improve earnings informativeness by demanding a higher quality auditor. The controlling owner may accept as true that hiring a high-quality auditor is a signal of good corporate governance and credible financial reporting to minority shareholders and other investors.

In GCC setting, the family has been at the core of political and economic influence, families with most board representation can be thought of as controlling the economy (TNI Market Insight, 2008). They hold on average between 19% and 30% of company board seats (TNI Market Insight, 2008). Over 50% of large family owned businesses would like to list in the region's stock exchanges; 20% of those are already planning to issue IPOs and 30% are intending to do so in the near future (Hawkamah newsletter, 2009). The main reasons that drive family business IPOs include: enhancing the company's profile and reputation; providing an exit route for family members by divestment; providing capital to finance expansion; providing acquisition currency in the form of shares; and international recognition (depending on the choice of market) (Hawkamah newsletter, 2009).

On the basis of these rationales, the present study proposes direct evidence on the association between family ownership and auditor change in the auditor change framework (Model 1) and between family ownership and the audit quality in the auditor selection framework (Model 2). The testable hypotheses are stated in direct forms, respectively:

*H<sub>4a\_change</sub>: Ceteris paribus, there is a negative association between family ownership and auditor change.*

*H<sub>4b\_selection</sub>: Ceteris paribus, there is a positive association between family ownership and audit quality.*

### 5.3.1.3.3 Domestic Corporate Ownership

The agency costs would be reduced in a case when there is an increase in the holdings of the owner-largest shareholder. Therefore, the controlling owners will be motivated to improve earnings informativeness due to their need in managing earnings for the purpose of alleviating contractual constraints. This circumstance is associated with demanding a higher audit quality (Jensen & Meckling, 1976). Hiring a high audit quality by the controlling owners is expected to signal a good practice of corporate governance and it gives a credible financial reporting from the perspective of the minority shareholders and other investors. Allen and Phillips (2000) empirically report that corporate ownership can reduce the costs of monitoring the alliances or ventures between firms and their substantial shareholders in companies involved in certain business agreements. It is further indicated that higher degrees of technical and organizational and financial resources are provided by domestic investors than those provided by foreign investors (Chibber & Majumdar, 1999; Djankov & Hoekman, 2000; Khanna & Palepu, 2000). This leads to propose direct evidence on the association between domestic corporate ownership and auditor change in the auditor change framework (Model 1) and between domestic corporate ownership and the audit quality in the auditor selection framework (Model 2). The testable hypotheses are stated in direct forms, respectively:

*H<sub>5a\_change</sub>: Ceteris paribus, there is a negative association between domestic corporate ownership and auditor change.*

*H<sub>5b\_selection</sub>: Ceteris paribus, there is a positive association between domestic corporate ownership and audit quality.*

## **5.3.2 Audit-Specific Characteristic**

### **5.3.2.1 Audit Fees**

Agency theory suggests that different levels of audit fees can cause a variation in the audit quality demand (Fama & Jensen, 1983; Jensen & Meckling, 1976; Wallace, 1980, 1987). It is empirically well recognized that Big-8 audit firms (now Big 4) may have higher audit fees, possibly because of the higher quality of their work (including a reputation effect) and the associated costs, and also possibly because of their oligopolistic market position, particularly for larger auditees (Francis, 1984). Some studies argue that the client firm's cost savings arising from audit fee reductions is an important reason for auditor switches, i.e. the firms change auditors to get cheaper auditing services (Beattie & Fearnley, 1995; Bedard *et al.*, 2000; DeAngelo, 1981a; Ettredge & Greenberg, 1990; Hogan, 1997; Simon & Francis, 1988; Turpen, 1990). Beattie and Fearnley (1995) report that 66% of the UK listed companies considering changing their auditor ranked the level of the current audit fee as a reason for considering the change.

In addition, Woo and Koh (2001) indicate that companies select another auditor if they perceive there is no difference in the audit quality offered them with a lower audit fee. Although firms tend to purchase auditing services from the cheapest supplier, there are reasons discouraging firms from repeatedly switching auditors simply to save on audit fees (Kallunkiet *al.*, 2007; Lindahl, 1996). Che Ahmad *et al.* (2006) have empirically report that there is a positive association between auditor choice among brand name and

audit fees. Woo and Koh (2001) find that higher audit fees are associated with auditor changes.

On the background of the above discussion, the present study proposes direct associations between audit fees and auditor change in the auditor change framework (Model 1) and between audit fees and the audit quality in the auditor selection framework (Model 2). The testable hypotheses are identified in direct forms, respectively:

*H<sub>6a\_change</sub>: Ceteris paribus, there is a positive association between audit fees and auditor change.*

*H<sub>6b\_selection</sub>: Ceteris paribus, there is a positive association between audit fees and audit quality.*

### **5.3.3 Firm-Specific Characteristics**

#### **5.3.3.1 Firm Size**

Fama and Jensen (1983b, 1982a) argue that there is a significant association between firm size and its agency cost variables. The increase in the size of organization increases the number of agency relationships (Dopuch & Simunic, 1980). Firm size is one of the key determinants that influence the auditor selection process (Haskins & Williams, 1990; Johnson & Lys, 1990). Several reasons have been exhibited to explain why a large company seeks to hire a large auditor size. Large companies have a bigger volume of business transactions, a wide range of stakeholders, greater agency tension and they have more to lose if something has gone wrongly. Also, large companies are

characterized as having more dispersed ownership and diversified operations that make their auditing task more complex and potentially risky (Burton & Roberts, 1967).

Lin and Liu (2009) document that firm size is positively related to the selection of Top-10 audit firms. With regard to the association between firm size and the selection of brandname auditor (Big 4/6/8), Palmrose (1988), Hope *et al.* (2008), Knechel *et al.* (2008), Gudhami *et al.* (2009) find a significantly positive relationship. Further, Wang *et al.* (2006) find that firm size is negatively associated with the selection of small local audit firms. Cassel *et al.* (2012) document that firm size is negatively associated with auditor change from Big 4 to non-Big 4 audit firms. However, Lee *et al.* (2004) report that firm size is positively associated with the change among Big-5, national and local audit firms. Abbott and Parker (2000) find that firm size is positively related to the selection of specialist auditor. Robinson and Owens-Jackson (2009) report a significantly positive association between firm size and the incidence of auditor change.

Motivated by the above discussion, the present study expects direct associations between firm size and auditor change in the auditor change framework (Model 1) and between firm size and the audit quality in the auditor selection framework (Model 2). The testable hypotheses are expressed in this expectation, respectively:

*H<sub>7a\_change</sub>: Ceteris paribus, there is a positive association between firm size and auditor change.*

*H<sub>7b\_selection</sub>: Ceteris paribus, there is a positive association between firm size and audit quality.*

### **5.3.3.2 Firm Performance**

Based on the information suppression hypothesis, financially distressed companies may be more likely than healthy companies to change auditors. The pressure stemming from financial distress can put a strain on auditor-client relations and produce irreconcilable differences. Specifically, there are increased incentives for management and auditors to sever their ties in a failing firm environment. A distressed company's needs can be different from what a healthy company is looking to receive. The change in a company's financial condition may produce a change in the desired package of audit services (Schwartz & Menon, 1985). Woo and Koh (2001) indicate that auditors who are working with higher perceived audit and business risks will put on more audit procedures and conservative accounting treatments or if there is still a distressed situation, the incumbent auditor might resign. Moreover, companies with unsound financial positions may select another auditor in the essence of receiving more favorable audit reports (Citron & Taffler, 1992; Haskins & Williams, 1990). Lindahl (1996) reports that one indication of financial distress is a loss which may lead to an auditor change.

This contention is born out of the "insurance" hypothesis of auditing. This hypothesis views the demand for auditing as being partially explained by the need for businesses to search out insurance for liabilities that might arise in the event of bankruptcy. Auditors cast in this role of co-insurer against corporate failure can have "deep pockets" in the event a bankrupt client is unable to pay losses from litigation. Lin and Liu (2009) report



a significantly positive association between ROA and the selection of Top-10 audit firms.

Driven by the above discussion, the present study proposes direct associations between firm performance and auditor change in the auditor change framework (Model 1) and between firm performance and the audit quality in the auditor selection framework (Model 2). The testable hypotheses are identified in direct forms, respectively:

*H<sub>8a\_change</sub>: Ceteris paribus, there is a negative association between firm performance and auditor change.*

*H<sub>8b\_selection</sub>: Ceteris paribus, there is a positive association between firm performance and audit quality.*

### **5.3.3.3 Leverage**

Agency theory conjectures that there is a relatively positive association between agency tension and leverage (Jensen & Meckling, 1976). Debt-holders may hire a costly monitoring device in order to prevent a potential wealth transfers that may take place from debt-holders to equity holders or to managers. Further, they also have an incentive to be sure that the financial information prepared by the borrower is accurate. At the same time, the borrower will have a strongly incentive to signal the quality of his earnings and asset values by hiring a higher quality auditor. Chow (1982) suggests that the greater the proportion of debt in a company's capital structure, the greater the potential for wealth transfers (that is, agency costs) from bondholders to shareholders.

Therefore, an independent auditor is required to enhance the reliability of accounting information used to verify covenant compliance (Woo & Koh, 2001).

It is found that companies reduce their effective interest rate by hiring a big size audit firm (Blackwell *et al.*, 1998; Causholli & Knechel, 2007; Mansi *et al.*, 2004; Pitman & Fortin, 2004). Further, when companies extent the collateral available to support a loan and when the notional value of the collateral is overstated as a result of aggressive accounting practices, a creditor's risk is affected. Therefore, the borrower's choice of auditor is conditional on the extent of a firm's leverage (Smith & Warner, 1979). With regard to the association of leverage with the brand name auditor (Big 4/6/8), DeFond (1992) and Hope *et al.* (2008) report a significant and positive association. With respect to the association between auditor leverage and auditor size, DeFond (1992) find a significantly positive association. As for audit quality change, Lee *et al.* (2004) report that leverage is positively associated with the probability change among Big 4, national and local audit firms. Eichenseher and Shields (1989) document that leverage is positively related to the incidence of a change from non-Big 4 to Big 4 audit firms. With respect to the incidence of auditor change, Woo and Koh (2001) report a significantly positive association between leverage and auditor change. In terms of the auditor independence, DeFond (1992) find that leverage is positively related to the selection of independent auditor.

The above discussion builds the foundation for proposing direct associations between leverage and auditor change in the auditor change framework (Model 1) and between

leverage and the audit quality in the auditor selection framework (Model 2). The testable hypotheses are expressed in this expectation, respectively:

*H<sub>9a\_change</sub>: Ceteris paribus, there is a positive association between leverage and auditor change.*

*H<sub>9b\_selection</sub>: Ceteris paribus, there is a positive association between leverage and audit quality.*

#### **5.3.3.4 Management Change**

Company's president, chief executive officer, chief financial officer and treasurer are considered important management positions. They play an essential and influential role in the client's decision to retain or replace an auditor because of changing in contracting environment. Specifically, a change in management director causes a switch to another audit firm because new management attempts to disassociate from previous relationships and prefers to deal with familiar parties. New management may be dissatisfied with the quality of past services provided by the company's auditor, as well as with the cost of the audit. A new management team charged with the responsibility of bringing about a corporate recovery may view the selection of reporting methods as a means for influencing the decisions of suppliers of capital by portraying corporate performance in a more favorable light, and this may be facilitated by finding an auditor willing to sanction those methods advocated by management (Burton & Roberts, 1967; Carpenter & Strawser, 1971; Hudaib & Cooke, 2005; Lurie, 1977; Schwartz & Menon, 1985; Woo & Koh, 2001).

Beattie and Fearnley (1998) provide further evidence vis-a-vis management change. They have reported that 35% of auditor change companies cite top management changes as a reason for being switched. Empirically, Robinson and Owens-Jackson (2009) report a significantly positive association between management change and the propensity of auditor change. Carcello & Neal (2003) report a significantly positive relationship between management change and the auditor change after receiving a going concern report.

The above discussion place the basis for proposing direct associations between management change and auditor change in the auditor change framework (Model 1) and between management change and the audit quality in the auditor selection framework (Model 2). The testable hypotheses are expressed in this expectation, respectively:

*H<sub>10a\_change</sub>: Ceteris paribus, there is a positive association between management change and auditor change.*

*H<sub>10b\_selection</sub>: Ceteris paribus, there is a positive association between management change and audit quality.*

## **5.4 Measurements of Variables**

### **5.4.1 Auditor Change**

Although auditor changes are observable events, the motivations behind auditor switching are generally unobservable (Schwartz & Soo, 1996). The dependent variable in the auditor change framework (Model 1) is a dichotomous measure based on a change or no change categories in auditor. A change in audit firm is assigned a value of “1” and

a no-change in the audit firm is assigned a value of “0.” This measurement has been used by several earlier and recent studies (Robinson & Owens-Jackson, 2009; Woo & Koh, 2001; Williams, 1988).

#### **5.4.2 Audit Quality Score**

It is well established by the prior and recent research on auditing that there is no consensus of a single proxy for audit quality and the available proxies have more than one measurement. It is also worth to highlight that one of the reasons the previous studies have produced conflicting results is that they use different simple audit quality proxies and/or the binary indicator variables of audit quality. Importantly, one of the rigorous studies using a complicated and comprehensive measurement of audit quality is that conducted by DeFond (1992) in U.S. data. This study uses a combination of four audit quality surrogates that have a recurring presence in the literature, namely; brand name auditor, auditor size, auditor specialist and auditor independence.

DeFond (1992) reports that a combination of measurement can be used to capture the same underlying construct – the auditor’s ability to alleviate agency conflicts. Consequently, it is suggested that the combination of these four measurements may provide more information than if they have been individually used. DeFond (1992) also indicates that performing hypotheses testing using each of the auditor characteristics would be considered a noisy measure of the audit quality. Therefore, combining the four measurements may increase the power of the tests that would, subsequently, reduce noise in the independent variable. To the best of the researcher’s knowledge, DeFond’s

(1992) study is the only one that uses the comprehensive combination of four surrogates of audit quality because he concludes that the results obtained by this combined measure are similar to those obtained by using the simple model of brand name. Unlike DeFond's (1992) study that has been conducted in U.S., this study is carried out in GCC setting which is considered a different institutional and audit environment. Accordingly, different results are expected to be reported. Therefore, the similar measurement of the comprehensive combined measure of audit quality is adopted by this study. The four surrogates of audit quality used to construct the combined measure of audit quality have been measured as follows:

#### **5.4.2.1 Auditor Size**

Auditor size is measured as the total client assets audited by the old auditor subtracted from the total client assets audited by the new auditor and this difference is divided by the larger of the old or new audit firm total client assets. This measurement is bounded by minus one and one, with positive numbers indicating a switch to a larger auditor. This measurement is considered a good surrogate for audit quality (Chan *et al.*, 2007; DeAngelo, 1981; DeFond *et al.*, 2000; Johnson & Lys, 1990; Reynolds & Francis, 2001).<sup>12</sup>

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<sup>12</sup> This study follows the traditional approach to measure auditor size based on the book value of the clientele's assets.

#### **5.4.2.2 Brand Name Auditor**

The change in brand name reputation is computed by assigning a value of “2” to Big 4 firms, “1” to second tier firms and “0” to local firms (those that do not fit into the other categories). The value of the audit firm prior to the switch then is subtracted from the value of the firm subsequent to the switch to yield a rank-ordered variable taking on one of five values (-2, -1, 0, 1, 2). Positive numbers indicate “upgrade;” an increase in brand name reputation while negative numbers indicate “downgrade;” a decrease. This category enables the model to consider the direction of auditor change. This measure is specifically used by DeFond (1992) and Lee *et al.* (2004). Importantly, classifying auditors as three categories of quality differentiation is previously used by Bedingfield and Loeb (1974), Burton and Loeb (1967) and Carpenter and Strawser (1971).

#### **5.4.2.3 Industry-Specialist Auditor**

Industry-specialist auditor variable classifies audit firms as an “industry-specialist auditor” if its market share in the client’s industry is 10% or greater and “non-industry-specialist auditor.” Companies are then coded “1” if they have changed from “non-industry-specialist auditor” to an “industry-specialist auditor,” “0” if they have experienced no change in industry-specialist and “-1” if they have changed from “industry-specialist auditor” to non-industry-specialist auditor.” This measurement is used by DeFond (1992). Further, the measurement of industry-specialist and non-industry-specialist based on the market share in the client’s industry is used by several recent and earlier studies (Beasley & Petroni, 2001; Craswell *et al.*, 1995; DeFond, 1992;

Eichenseher & Danos, 1981; Iskandar *et al.*, 2000; Krishnan *et al.*, 1996; Rhode, Whitesell & Kelsey, 1974; Sahdan, & Rasit, 2008; Schiff & Fried, 1976; Shockely & Holt, 1983; Williams, 1988; Zeff & Fossum, 1967).

#### **5.4.2.4 Auditor Independence**

The larger a specific client firm's fees are in relation to the total fees earned by the audit firm, the less willing the audit firm will be to disclose a breach for fear of losing the client (DeAngelo, 1981b; DeFond, 1992; Firth, 1985; McKeown *et al.*, 1991). DeFond (1992) documents that fee data are difficult to be obtained and/or not available because of its proprietary nature. Some research studies on audit fees have obtained audit fee information directly from clients (Palmrose, 1982; Simunic, 1980; Wallace, 1984). However, they received low response rates from their questionnaires (approximately 33%). In GCC setting, the same circumstances exist because companies operating in GCC are not required by law to mandatory disclose their audit fees. Therefore, DeFond (1992) and Chan *et al.* (2007) measure the independence of the audit firms as the difference between the ratio of the switching client firm's revenues<sup>13</sup> to the total revenues of the clients of the old auditor, minus the same ratio for the new auditor. This ratio is bounded by "1" and "-1," with positive numbers indicating a switch to a more independent audit firm.

This study adopts the same measurement of DeFond (1992) and Chan *et al.* (2007) since it has been thought to be a better proxy for audit quality in the environment where audit

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<sup>13</sup> Revenues are used instead of assets because assets have been used in the measurement of auditor size.



fees are not disclosed. Auditor independence is computed as the difference between the ratio of the switching client firm's revenues to the total revenues of the clients of the old auditor, minus the same ratio for the new auditor. This ratio is bounded by "1" and "-1," with positive numbers indicating a switch to a more independent audit firm. More important, audit firm size based on companies' sales has been used as a good quality surrogate because it is suggested that companies' sales are associated with quasi-rents (Chan *et al.*, 2007; DeFond, 1992; Francis & Wilson, 1988; Johnson & Lys, 1990).

#### **5.4.3 Board of Directors and Audit committee's effectiveness scores**

The optimal combination of corporate governance mechanisms is considered better to reduce the agency cost and protect the interest of all shareholders because effectiveness of corporate governance achieve via different channels and particular mechanism's effectiveness depends on the effectiveness of others (Cai *et al.*, 2009; Davis & Useem, 2002; Rediker & Seth, 1995). In addition, Ward *et al.* (2009) have argued that it is best to look at corporate mechanisms as a bundle of mechanisms to protect shareholder interests and not in isolation from each other; this is because these governance mechanisms act in a complementary or substitutable fashion.

Moreover, they have argued that the reason explaining why previous studies provided somewhat mixed result is that they have looked at governance mechanisms in isolation from each other and how each mechanism can address agency problems, so they ignored the idea that effectiveness of a single mechanism depends on the other mechanisms. In addition, Agrawal and Knoeber (1996) argue that the results on the effect of single

mechanisms might be misleading by showing that the effect of some single mechanisms on firm performance disappeared in the combined model. In the same line, it gives a stronger effect of measurement when investigating the overall corporate governance mechanisms than just examining them individually (O'Sullivan *et al.*, 2008).

Managers should be regarded as a “bundle of attributes” (Carpente *et al.*, 2004; Kor, 2003) and the effects of their background characteristics investigating simultaneously rather than studying single attributes or multiple characteristics independently. Empirically, Brown & Caylor (2006), Cassel *et al.* (2012), Farook and Lanis (2007), Goh (2009), Gompers, Ishii and Metrick (2001), Hanlon, Rajgopal and Shevlin (2003) and Singh *et al.* (2008) combine a number of variables proxying for governance factors to produce a composite score of corporate governance. Applying the same reasoning, this study examines whether board of directors characteristics as a whole and audit committee characteristics as a whole, in a manner to capture their aggregated association within a firm, are associated with decisions of auditor change and a new auditor selection. Specifically, this study develops a board of directors' effectiveness score (BDE\_SCORE) and an audit committee's effectiveness score (ACE\_SCORE).

In terms of the board of directors' effectiveness score (BDE\_Score), the score is a composite measure that sums the value of the seven dichotomous characteristics of the board to create a firm-specific summary measure of its board of directors effectiveness that takes a score bounding by 0-1, revealing that a higher score is an indicator of a higher effectiveness of the board of directors. The seven binary characteristics that are included in this measurement are board independence, board financial expertise, board

size, board meetings, CEO duality, board nationality and board international experience, ranging from 0 to 7.

With regard to the audit committee's effectiveness score (ACE\_SCORE), the score is a composite measure that sums the value of the six dichotomous characteristics of the audit committee to create a firm-specific summary measure of its audit committee effectiveness that takes a score bounding by 0-1, revealing that a higher score is an indicator of a higher effectiveness of the audit committee. The six binary characteristics that are included in this measurement are audit committee independence, audit committee size, audit committee financial expertise, audit committee meetings, audit committee nationality and audit committee international experience, ranging from 0 to 6. The following describes the process used to dichotomize the seven characteristics of board of directors and the six characteristics of audit committee for the sample firms.

#### **5.4.3.1 Board of Directors' Effectiveness Score**

##### **5.4.3.1.1 Board of Directors Independence**

Board of directors independence is measured as the proportion of outside directors on the board who are not on the audit committee. This measurement is previously used by the Beasley and Petroni (2001), Cassell *et al.* (2012), Chen and Zhou (2007) and Lee *et al.* (2004). Cassell *et al.* (2012) indicate that independent directors should be better monitors of management than non-independent directors. Hay and Knechel (2004) argue that independent board members will be more supportive of the external audit function because they seek to reduce their responsibility and liability and because they

do not bear the cost of the audit. For the purposes of constructing BDE\_SCORE, board of directors independence is coded “1” if the proportion of outside directors on the board is equal or higher than the sample median, and “0” otherwise.

An independent director is defined in this study as one who is not a current employee of the firm, former officer or employee of the firm or related entity, a relative of management, professional advisor to the firm, officer of significant suppliers or customers of the firm, interlocking director, and/or one who has no significant transactions with the firm (Carcello & Neal, 2003; Robinson & Owens-Jackson, 2009). This definition is generally similar and comprehensive to that stated by GCC codes of corporate governances and that disclosed by GCC companies’ annual reports.

#### **5.4.3.1.2 Board of Directors Size**

Board size is a proxy for the board power. Board size is measured as the number of board members who are not on the audit committee. This measurement is previously used by prior studies such as Chen and Zhou (2007) and Siala *et al.* (2009). For the purposes of constructing BDE\_SCORE, board size is coded “1” if the number of members on the board is less than the sample median and “0” otherwise.

#### **5.4.3.1.3 Board of Directors Financial Expertise**

Recent studies examining corporate governance in an audit context have found that the financial expertise of board of directors do indeed proxy for effective monitoring

(Carcello & Neal, 2003; Lee *et al.*, 2004). Board of directors financial expertise is measured as the proportion of non-audit committee board members who are financial experts in accounting or in finance.<sup>14</sup>This measurement is previously used by prior recent and earlier studies (Agrawal & Chadha, 2005; Lee *et al.*, 2004; Siala *et al.*, 2009). For the purposes of constructing BDE\_SCORE, board of directors financial expertise is coded “1” if the proportion of financial experts on the board is equal or higher than the sample median and “0” otherwise.

#### **5.4.3.1.4 Board of Directors Meetings**

The meetings of the board includes factors such as the number of board meetings and the behavior of individual board members surrounding such meetings (preparation before meetings, attentiveness and participation during meetings, and post-meeting follow-up). The only one of these factors that is publicly observable is the number of board meetings (Carcello *et al.*, 2002).

Further, recent studies examining corporate governance in the audit context have found that the number of meetings of board of directors do indeed proxy for effective monitoring (Abbott *et al.*, 2003; Lee *et al.*, 2004) because the board of directors plays an important advisory role to management during the meetings (Adams & Ferreira, 2007) and the board of directors also accesses information during the meetings that helps them to perform monitoring role more effectively (Adams & Ferreira, 2011). In this study,

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<sup>14</sup> The biographical data disclosed in the annual report for each director was perused to identify those with accounting and finance degrees and/or with professional accounting qualifications.

board of directors meeting is measured as the number of meetings held each year by the board. This measurement is previously used by Lee *et al.* (2004). For the purposes of constructing BDE\_SCORE, board of directors meeting is coded “1” if the number of meetingheld by the board during the year is equal or higher than the sample median, and “0” otherwise.

#### **5.4.3.1.5 CEO Duality**

CEO is used as a proxy for management power because such individuals are likely to be full-time executives. In contrast, a chairman might be a non-executive member of the Board CEOs work in a position to select an auditor (Firth, 2002; Hudaib & Cooke, 2005; Schwartz & Menon, 1985). A CEO duality/power is measured dichotomously by prior studies such as Cassell *et al.* (2012), Siala *et al.* (2009), and Lee *et al.* (2004). For the purposes of constructing BDE\_SCORE, this characteristic is coded “1” if the CEO is not the chairperson of the board, and “0” otherwise.

#### **5.4.3.1.6 Board of Directors Nationality**

It is well established from the previous discussion that nationality as a cultural dimension may influence the auditing profession practices. The existence of several types of nationalities in the market will lead to rational variations in agency costs and selecting the level of audit quality. This is being the case because of the variations in the management styles such as risk preferences and monitoring mechanisms and/or investment goals (Eichenseher, 1995; Muzaffar, 1989). Nationality was recorded as the

country of origin of board of directors who are not on the audit committee as stated in the annual reports. The degree of nationality heterogeneity on the board of directors is calculated using the proportion of foreign directors who are not on the audit committee. For the purposes of constructing BDE\_SCORE, the heterogeneity of board of directors nationality is coded “1” if the proportion of the foreign board of directors is equal or higher than the sample median, and “0” otherwise.

Table 5.1  
*Constructing Board of directors’ Effectiveness Score*

Board of directors’ Effectiveness Score (BDE_SCORE)	BDE is bounded by “1-0,” with a higher score indicating a higher effectiveness of the board.
BD _ Independence	Board of directors independence is coded “1” if the proportion of outside directors on the board is equal or higher than the sample median, and “0” otherwise (agency Theory and resource-dependence theory).
BD _ Fin.Expertise	Board of directors financial expertise is coded “1” if the proportion of financial experts on the board is equal or higher than the sample median, and “0” otherwise (agency Theory).
BD _ Size	Board size is coded “1” if the number of members on the board is less than the sample median, and “0” otherwise (agency Theory).
BD _ Meetings	Board of directors meeting is coded “1” if the number of meetings held by the board during the year is equal or higher than the sample median, and “0” otherwise (agency Theory).
CEO _ Duality	CEO duality is coded “1” if the CEO is not the chairperson of the board, and “0” otherwise (agency Theory).
BD _ Heterogeneity	The heterogeneity of board of directors nationality is coded “1” if the proportion of foreign members on the board is equal or higher than the sample median, and “0” otherwise (managerial grid theory and attraction-selection-attrition framework).
BD _ Int.Experience	Board of directors international experience is coded “1” if the proportion of the board of directors with international work experience is equal or higher than the sample median, and “0” otherwise (managerial grid theory and attraction-selection-attrition framework).

#### **5.4.3.1.7 Board of Directors International Experience**

International experience of board of directors as a cultural dimension may influence the auditing profession practices. The existence of board members with international experience may lead to rational variations in agency costs and selecting the level of audit quality. This is being the case because of the variations in the management styles such as risk preferences and monitoring mechanisms and/or investment goals (Eichenseher, 1995; Muzaffar, 1989). Board of directors international experience is measured as the proportion of board members who are not on the audit committee with international work (assignment) experience from outside their country of origin. For the purposes of constructing *BDE\_SCORE*, board of directors international experience is coded “1” if the proportion of the board of directors with international work experience is equal or higher than the sample median, and “0” otherwise. Table 5.1 shows the method used to construct the board of directors’ effectiveness score *BDE\_SCORE*.

#### **5.4.3.2 Audit committee’s effectiveness score**

##### **5.4.3.2.1 Audit Committee Independence**

Audit committee composition is important because a lack of independence could negatively affect the committee’s ability to monitor management effectively (Archambeault & DeZoort, 2001). Audit committee independence is measured as the percentage of independent members on the audit committee (Abbott & Parker, 2001; Archambeault & DeZoort, 2001; Chen & Zhou, 2007; Robinson & Owens-Jackson, 2009). An independent audit committee member is defined as one who is not a current



employee of the firm, former officer or employee of the firm or related entity, a relative of management, professional advisor to the firm, or officer of significant suppliers or customers of the firm, interlocking director, and/ or one who has no significant transactions with the firm (Carcello & Neal, 2003; Robinson & Owens-Jackson, 2009).

Further, grey area directors are considered insiders who lack independence. Specifically, non-employee audit committee members are considered ‘grey’ if they have a relation with management that potentially impairs their independence. Examples of such relationships include having family and/or significant business relationships with management, acting as a paid consultant to the company, and being a retiree of the company (Archambeault & DeZoort, 2001; Beasley, 1996; Vicknair *et al.*, 1993).<sup>15</sup>For the purposes of constructing ACE\_SCORE, audit committee independence is coded “1” if the proportion of outside members on the committee is equal or higher than the sample median, and “0” otherwise.

#### **5.4.3.2.2 Audit Committee Meetings**

In prior studies, audit committee meeting has been operationalized by the number of committee meetings held during the financial year, with the expectation that, the more often a committee meets, the more likely it is to carry out its duties. This proxy is used because it is difficult to observe the extent of the commitment made by individual audit committee members, the number of times they meet during a year is potentially a

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<sup>15</sup> Goodwin-Stewart and Kent (2006) indicate that the audit committee independence may include non-executives who have other relationships with the company because it is objectively difficult to determine the existence of these relationships from publicly available information.

measure of their meetings (Levitt, 1998). This information is disclosed in the directors' report or the corporate governance statement in the annual report (Abbott *et al.*, 2004; Abbott *et al.*, 2003; Carcello & Neal, 1998; Chtourou *et al.*, 2001; Davidson *et al.*, 2004; DeZoort *et al.*, 2002; Goodwin-Stewart & Kent, 2006; Levitt, 1998; Menon & Williams, 1994; Xie *et al.*, 2003). Audit committee meeting is measured as the number of committee meetings held during the financial year (Archambeault & DeZoort, 2001; Chen & Zhou, 2007; Robinson & Owens-Jackson, 2009). For the purposes of constructing ACE\_SCORE, audit committee meeting is coded "1" if the meeting numbers held by the members during the year is equal or higher than the sample median, and "0" otherwise.

#### **5.4.3.2.3 Audit Committee Financial Expertise**

The recent studies examining corporate governance in the audit context have found that the financial expertise of its members (Carcello & Neal, 2003; Lee *et al.*, 2004) do indeed proxy for effective monitoring. Robinson and Owens-Jackson (2009) consider financial experts of the audit committee members are those who have experience as either a CPA or CFO. In addition, Archambeault and DeZoort (2001) indicate that audit committee members with experience in finance, accounting or auditing are considered experts.

This study measures audit committee expertise as the proportion of audit committee members with an accounting or finance either qualifications or experiences (Archambeault & DeZoort, 2001; Carcello & Neal, 2003; Chen & Zhou, 2007; Lee *et al.*, 2004; Robinson & Owens-Jackson, 2009). This information is disclosed in the

directors' report or the corporate governance statement in the annual report.<sup>16</sup>For the purposes of constructing ACE\_SCORE, audit committee financial expertise is coded “1” if the proportion of financial experts on the committee is equal or higher than the sample median, and “0” otherwise.

#### **5.4.3.2.4 Audit Committee Size**

The size of the audit committee does indeed proxy for its effectiveness (Kalbers & Fogarty, 1993). It is argued that since audit committee is an expensive monitoring mechanism and large size of the committee indicates to greater resources spent on this mechanism, it is expected that large size audit committee are more likely to improve the audit function (Pincus *et al.*, 1989). Following Archambeault and DeZoort (2001) and Chen and Zhou (2007), audit committee size is measured as the number of directors on the audit committee. For the purposes of constructing ACE\_SCORE, audit committee size is coded “1” if the number of members on the audit committee is equal or higher than the sample median, and “0” otherwise.

#### **5.4.3.2.5 Audit Committee Nationality**

It is well established from the previous discussion that nationality as a cultural dimension may influence the auditing profession practices. The existence of several types of nationalities on the audit committee may lead to reasonable distinction in

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<sup>16</sup> The biographical data disclosed in the annual report for each director was perused to identify those with accounting and finance qualifications and/or experience.

agency costs and the audit quality selection. This is being the case because of the variations in the management styles such as risk preferences and monitoring mechanisms and/or investment goals (Eichenseher, 1995; Muzaffar, 1989). Nationality was recorded as the country of origin of members on the audit committee as stated in the annual reports. The degree of nationality heterogeneity on audit committee is calculated using the proportion of foreign members. For the purposes of constructing ACE\_SCORE, the heterogeneity of audit committee nationality is coded “1” if the proportion of the foreign members is equal or higher than the sample median, and “0” otherwise.

Table 5.2  
*Constructing Audit committee's effectiveness score*

Audit Committee's Effectiveness Score (ACE_SCORE)	ACE is bounded by “1-0,” with a higher score indicating a higher effectiveness of the audit committee.
AC _ Independence	Audit committee independence is coded “1” if the proportion of outside directors on the committee is equal or higher than the sample median, and “0” otherwise (agency theory).
AC _ Fin.Expertise	Audit committee financial expertise is coded “1” if the proportion of financial experts on the committee is equal or higher than the sample median, and “0” otherwise (agency theory).
AC _ Size	Audit committee size is coded “1” if the number of members on the committee is higher than the sample median, and “0” otherwise (agency theory).
AC _ Meetings	Audit committee meeting is coded “1” if the number of meetings held by the committee during the year is equal or higher than the sample median, and “0” otherwise (agency theory).
AC _ Nationality	The heterogeneity of the audit committee members' nationalities is coded “1” if the proportion of foreign members on the committee is equal or higher than the sample median, and “0” otherwise (managerial grid theory and attraction-selection-attrition framework).
AC _ Int.Experience	Audit committee international experience is coded “1” if the proportion of the members with international work experience is equal or higher than the sample median, and “0” otherwise (managerial grid theory and attraction-selection-attrition framework).

#### **5.4.3.2.6 Audit Committee International Experience**

International experience of audit committee as a cultural dimension may influence the auditing profession practices. The existence of audit committee members with international experience may lead to rational distinction in agency costs and audit quality selection. This is being the case because of the variations in the management styles such as risk preferences and monitoring mechanisms and/or investment goals (Eichenseher, 1995; Muzaffar, 1989). Audit committee international experience is measured as the proportion of audit committee members with international work (assignment) experience from outside their country of origin. For the purposes of constructing *ACE\_SCORE*, audit committee international experience is coded “1” if the proportion of the audit committee with international work experience is equal or higher than the sample median, and “0” otherwise. Table 5.2 depicts the method used to construct the audit committee’s effectiveness score *ACE\_SCORE*.

#### **5.4.4 Ownership Structure**

In the GCC, it is commonly that there is no information disclosed about the number of shareholders, but there is information about the proportion of shares owned by the dominant shareholders as GCC stock exchanges require each individual, a corporation or the government that owns 5% or more to disclose their ownership (Saudi Arabia Code of CG, Bahrain Code of CG and UAE Code of Corporate Governance; Al-Shammari, 2009). As it will be shown in the next chapters that the highest number of ownership type is the domestic corporate shareholder who dominates the majority of the sample

companies in the GCC [Model 1:  $t_{-I} & t_I = 118(69\%)$ ; Model 2:  $t_{-I} = 67(64\%)$ ,  $t_I = 72(72\%)$ ]. This goes in line with what has been found by Claessens *et al.* (2000) that domestic corporations are among the largest group of blockholders in many emerging markets. The second highest dominant ownership in number is the family shareholders [Model 1:  $t_{-I} & t_I = 85(50\%)$ , Model 2:  $t_{-I} = 51(49\%)$ ;  $t_I = 49(45\%)$ ]. Government and its agencies' ownership is ranked as the third dominant group in GCC market [Model 1:  $t_{-I} & t_I = 58(34\%)$ , Model 2:  $t_{-I} = 37(36\%)$ ;  $t_I = 38(35\%)$ ].

In this study, the three dominant group's ownership is measured as the percentage of ordinary shares held by substantial shareholders (that is, shareholdings of 5% or more), namely; government and its agencies, family and domestic corporate ownership. Government ownership is defined as those companies in which some shares are owned by the government (Fang *et al.*, 2004). Ramirez and Ling (2003) classify a company as GLC if the government (via its investment companies) is one of the substantial shareholders in the company. In case of the GCC, its narrowest definition refers to companies directly held by the government and its agencies through which the government has a political intervention and influence over corporate decisions in a manner that it creates a political stability in the GCC. Family ownership or family controlled is defined as a control by a family, an individual, or an unlisted company (Maury, 2006). Domestic corporate ownership is defined as domestic corporations (Agrawal & Knoeber, 1996; Al-Hussain, 2009; Alsaeed, 2006; Al-Shammari, 2008; Chan *et al.*, 2007; Eng & Mark, 2003; Guedhami *et al.*, 2009; Harjoto & Jo, 2008; Mitton, 2002; Singh & Davidson, 2003).

## **5.4.5 Audit-Specific Characteristic**

### **5.4.5.1 Audit Fee**

A substantial amount of previous studies on auditor choice excluded the variable of audit fee from their models due to the fact that audit fee data are difficult to be obtained because of its proprietary nature. Prior research (Palmrose, 1986; Simunic, 1980) indicates that company size (both in terms of assets and revenues) is highly correlated with audit fees. Some research studies on audit fees have obtained audit fee information directly from clients (Palmrose, 1982; Simunic, 1980; Wallace, 1984). However, they received low response rates from their questionnaires. In the GCC, companies are not required by law to mandatory disclose their audit fees. DeFond (1992) reports that, because of the difficulty in obtaining audit fee data, it is appropriate to estimate the size of the company relative to the audit firm's total client base using data on company revenues. Following the work of DeFond (1992), this study adopts a similar measurement in estimating audit fees.

## **5.4.6 Firm-Specific Characteristics**

### **5.4.6.1 Firm Size**

A substantial amount of the previous literature has documented that the variation in firm size is expected to produce a variation in agency costs that results in an increasing in the number of agency relationships. So that, there would be an increase in the remoteness of the principals and a decrease in their ability to observe the actions of agents. In particular, client size is significantly related to audit quality (Chan *et al.*, 2007; DeFond,

1992). It is worth mentioning that there is a consensus to some extent regarding the best measurement of firm size as a natural logarithm of the total assets (e.g., Carcello & Neal, 2003; Cassell *et al.*, 2012; Gudhami *et al.*, 2009; Hope *et al.*, 2008; Lee *et al.*, 2004; Lin & Liu, 2009; Robinson & Owens-Jackson, 2009; Siala *et al.*, 2009). Following the recurring presence in the literature of auditor choice, the natural logarithm of total assets is considered an appropriate measurement of firm size.

#### **5.4.6.2 Leverage**

Agency theory suggests that as leverage increases, the agency tension also increases (Jensen & Meckling, 1976). Several studies consider total debt to total assets as an appropriate measurement for capturing the potential wealth transfers (i.e., agency costs). In particular, this measurement occurs frequently in the literature of auditor choice (e.g., Abbott & Parker, 2000; Gudhami *et al.*, 2009; Hope *et al.*, 2008; Knechel *et al.*, 2008; Lee *et al.*, 2004; Lin & Liu, 2009; Wange *et al.*, 2006; Woo & Koh, 2001). As a result, this study follows the previously mentioned work in adopting the measurement of the leverage.

#### **5.4.6.3 Firm Performance**

Prior literature on auditor choice has not become into a consensus regarding the best predictor of financial performance (Williams, 1988). A recurring presence in the literature of auditor choice, return on assets “ROA” is considered an appropriate proxy for firm performance (e.g., Abbott & Parker, 2000; Gudhami *et al.*, 2009; Johnson



&Lys, 1990; Wang *et al.*, 2006; Woo & Koh, 2001). Therefore, this study applies a similar measurement of the firm performance.

#### 5.4.6.4 Management Change

Chairperson, CEO and other board of directors members are key management positions because of the role they play in retaining or changing an auditor (e.g., Carcello & Neal, 2003; Woo & Koh, 2001). Previous studies on auditor choice most frequently use a dichotomous measurement as a predictor of the key management change (Hudaib & Cooke, 2005; Woo & Koh, 2001). The current study follows the abovementioned studies' reasoning in measuring the management change dichotomously, coded "1" if there is a change in chairperson, CEO and other board members and "0" otherwise.

Table 5.3  
Summary of the Operationalization and the Expected Sign of the Research Variables for the Auditor Change (Model 1) and the Auditor Selection (Model 2)

Variables	Acronym	Operationalization	Coefficient Predictions	
			Logit	OLS
<b>Dependent Variables</b>				
Auditor Change	CHANGE	A dummy variable indicating whether or not the auditor is changed ("1" if the auditor is changed, "0" otherwise)	d.v	n.a.
Audit Quality Score	AQ_SCORE	The principal components linear combination of the four audit firm's quality measures based on DeFond (1992)	n.a	d.v
<b>Independent Variables</b>				
Board of Directors' Effectiveness Score	BDE_SCORE	Proportion of board of directors effectiveness,	-	+
Audit committee's effectiveness score	ACE_SCORE	Proportion of audit committee effectiveness,	-	+
Government Ownership and its Agencies	GOV_OWN	Percentage of 5 or more of the ordinary shares held by the government and its agencies,	+	-

Table 5.3 (continued)  
*Summary of the Operationalization and the Expected Sign of the Research Variables for the Auditor Change (Model 1) and the Auditor Selection (Model 2)*

Variables	Acronym	Operationalization	Coefficient Predictions	
			Logit	OLS
Family Ownership	FAMILY_OWN	Percentage of 5 or more of the ordinary shares held by a family,	-	+
Domestic Corporate Ownership	DOMESTIC_OWN	Percentage of 5 or more of the ordinary shares held by domestic corporations,	-	+
Audit Fees	FEE	Proportion of firm's revenues to audit firm's total revenues,	+	+
Firm Size	LASSET	Log <sub>10</sub> of the total assets,	+	+
Firm Performance	ROA	Return on assets,	-	+
Leverage	LEV	Total debt to total assets,	+	+
Management Change	MANG_CHAN	Dummy variable, coded "1" if there is a change in chairperson, CEO and other board members and "0" otherwise,	+	+
Auditor Size	AUD_SIZE	Total client assets audited by the old auditor subtracted from the total client assets audited by the new auditor and this difference is divided by the larger of the old or new audit firm total client assets,	n.a.	n.a.
Brand-Name Auditor	AUD_BRAND	The change in name-brand reputation is computed by assigning a value of "2" to Big 4 firms, "1" to second tier firms and "0" to local firms (those that do not fit into the other categories). The value of the audit firm prior to the switch then is subtracted from the value of the firm subsequent to the switch to yield a rank-ordered variable taking on one of five values (-2, -1, 0, 1, 2). Positive numbers indicate "upgrade;" an increase in name-brand reputation while negative numbers indicate "downgrade;" a decrease, and	n.a.	n.a.
Industry-specialist Auditor	AUD_SPC	Industry-specialist auditor variable classifies audit firms as an "industry-specialist auditor" if its market share in the client's industry is 10% or greater and "non-industry-specialist auditor." Companies are then coded "1" if they have changed from "non-industry-specialist auditor" to an "industry-specialist auditor,"	n.a.	n.a.

Table 5.3 (continued)  
*Summary of the Operationalization and the Expected Sign of the Research Variables for the Auditor Change (Model 1) and the Auditor Selection (Model 2)*

Variables	Acronym	Operationalization	Coefficient Predictions	
			Logit	OLS
Auditor Independence	AUD_INDE	<p>“0” if they have experienced no change in industry-specialist, and “-1” if they have changed from “non-industry-specialist auditor” to industry-specialist auditor,”</p> <p>The difference between the ratio of the switching client firm’s revenues to the total revenues of the clients of the old auditor, minus the same ratio for the new auditor. This ratio is bounded by “1” and “-1,” with positive numbers indicating a switch to a more independent audit firm.</p>	n.a.	n.a.

Note: d.v – dependent variable; n.a. – not applicable

## 5.5 Specification of the Models

Frameworks of agency theory, managerial grid theory, attraction-selection-attrition, and information suppression hypothesis are used to develop a model of auditor change (Model 1) and a model of auditor selection (Model 2), that is, the likelihood a company uses a quality-differentiated auditor. The variables proposed for inclusion in the model capture differences in the costs of agency relationships. In each case, when the agency relationship involves higher costs (excluding auditing), the services of quality-differentiated auditors are likely to be of the greatest benefit.

### 5.5.1 Auditor Change Framework (Model 1)

In the auditor change framework (Model 1), the dependent variable is a dichotomous, nonmetric scale, measurement (either there is a change or no change in an audit firm). A

change in audit firm is assigned a value of one and a no-change in the audit firm is given a value of zero. This measurement has been previously used by Robinson and Owens-Jackson (2009), and Woo and Koh (2001). To estimate this model, Multivariate Analysis is applied using Logistic regression model because the dependent variable is a binary nature. The *logit analysis* is estimated using cross-sectional data for a period of three years spanning one year before the auditor change and one year after the auditor change. The functional equation of logistic regression model is utilized to determine the extent of the association of each of the independent variables with the propensity of an auditor change:

$$\text{Prob (CHANGE = 1)} = \beta_0 + \beta_1 \text{BDE\_SCORE} + \beta_2 \text{ACE\_SCORE} + \beta_3 \text{GOV\_OWN} + \beta_4 \text{FAMILY\_OWN} + \beta_5 \text{DOMESTIC\_OWN} + \beta_6 \text{FEE} + \beta_7 \text{LASSET} + \beta_8 \text{LEV} + \beta_9 \text{ROA} + \beta_{10} \text{MGT\_CHAN} + e \dots\dots\dots(1)$$

Where the dependent variable is:

Prob (CHANGE =1) = the estimated conditional probability of auditor change is a function of firm-related variables, board of directors' effectiveness score, ownership structure, audit committee effectiveness's score, audit-related variables, and auditor-related variables,

Where the independent variables are:

- BDE\_SCORE = proportion of board of directors effectiveness,
- ACE\_SCORE = proportion of audit committee effectiveness,
- GOV\_OWN = percentage of 5 or more of the ordinary shares held by the government and its agencies,
- FAMILY\_OWN = percentage of 5 or more of the ordinary shares held by a family,
- DOMESTIC\_OWN = percentage of 5 or more of the ordinary shares held by domestic corporations,

FEE	= proportion of firm's revenues to audit firm's total revenues,
LASSET	= $\log_{10}$ of the total assets,
LEV	= total debt to total assets,
ROA	= return on assets,
MANG_CHAN	= dummy variable, coded "1" if there is a change in chairperson, CEO and other board members and "0" otherwise,
e	= Error term.

Since logistic regression is used to test the hypotheses, outliers are detected and handled, assumptions of multicollinearity and model specification tests such as *Linktest* and *Box-Tidwell* are also conducted.<sup>17</sup>

### 5.5.2 Auditor Selection Framework (Model 2)

This study adopts and modifies DeFond's (1992) model of audit quality. DeFond (1992) reports that auditor size, brand name, expertise, and independence may be used in combination to capture the same underlying construct—the auditor's ability to alleviate agency conflicts. These variables are expected to be better measures of audit quality when considering as a group and not individually. For the reasons of performing hypotheses' tests, if each of these variables is a noisy measure of audit quality, combining them should increase the power of the tests by reducing noise in the dependent variable.

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<sup>17</sup> Hair *et al.* (2010) report that Logistic regression model does not require the assumption of multivariate normality.

The technique of Principal Component Analysis is used in this study to combine the four audit quality surrogates. This is achieved by applying an eigenvalue analysis on the correlation matrix of the variables of interest to determine the linear combination of the variables that will account for the maximum amount of variance. The common factor is used in the hypotheses tests as a measure of the auditor's ability to alleviate agency conflicts. To estimate this model, Multivariate Analysis is applied using Ordinary-Least Square (OLS regression) which is estimated using cross-sectional data for a period of three years spanning one year before the auditor change through one year after the auditor change. The functional equation of OLS model is utilized to determine the extent of the association of each of the independent variables with the demand for audit quality:

$$AQ\_SCORE = \beta_0 + \beta_1 BDE\_SCORE + \beta_2 ACE\_SCORE + \beta_3 GOV\_OWN + \beta_4 FAMILY\_OWN + \beta_5 DOMESTIC\_OWN + \beta_6 FEE + \beta_7 LASSET + \beta_8 LEV + \beta_9 ROA + \beta_{10} MGT\_CHAN + e \dots\dots\dots(2)$$

Where the dependent variable is:

AQ\_SCORE = the principal components linear combination of the four audit firm's quality measures based on DeFond (1992),

Where the independent variables are:

- BDE\_SCORE = proportion of board of directors effectiveness,
- ACE\_SCORE = proportion of audit committee effectiveness,
- GOV\_OWN = percentage of 5 or more of the ordinary shares held by the government and its agencies,
- FAMILY\_OWN = percentage of 5 or more of the ordinary shares held by a family,
- DOMESTIC\_OWN = percentage of 5 or more of the ordinary shares held by domestic

	corporations,
FEE	= proportion of firm's revenues to audit firm's total revenues,
LASSET	= $\log_{10}$ of the total assets,
LEV	= total debt to total assets,
ROA	= return on assets,
MANG_CHAN	= dummy variable, coded "1" if there is a change in chairperson, CEO and other board members and "0" otherwise,
e	Error term.

Since OLS regression is used to test the hypotheses, outliers are detected and handled, assumptions of multicollinearity, normality, heteroscedasticity, linearity, autocorrelation and model specification tests such as *Linktest* and *Ramsey* test are also evaluated.

## 5.6 Data Collection

### 5.6.1 Sample Selection

For the study, the population of interest comprises all non-financial companies listed on the Stock Exchanges of the five members of the Gulf Co-Operation Council (GCC) with auditor switches during the period from 2006 to 2009. This selection is the most recent test period for which data were available. Further, the boom of the GCC clearly emerged in early 2005 (Chahine & Tohme, 2009). A span of four-year period was employed because it was assumed to be superior to a shorter period, which might be more susceptible to unusual events. A period longer than four years, however, would extend the company comparisons to a time too long after the auditor change event to be of interest. Another reason for using a four-year period is that this study is restricted by

the data availability. The information has been gathered as of two points in time as showed previously by section 5.2:

1. The first fiscal year-end “ $t_1$ ” (before an auditor change/a new auditor selection occurred):<sup>18</sup>to correspond approximately to the year before the auditor change or the new auditor selection.
2. The third year-end “ $t_1$ ” (after the auditor change/new auditor selection occurred): to correspond approximately to the year after the auditor change or the new auditor selection.

Further, this study targets companies that have not changed their auditors in the auditor change framework (Model 1) as they did not change their auditors between 2006 and 2009.<sup>19,20</sup>

### **5.6.2 Procedures**

A cross-sectional review of audit reports of a sample of companies listed on the stock exchanges of the five member states of the Gulf Co-operation Council countries over periods from 2005 to 2010 was undertaken. For the auditor change framework (Model 1) and the auditor selection model (Model 2), the data selection involved two-step

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<sup>18</sup> Auditor change and a new auditor selection are defined as a voluntary change in the audit firm specified in the auditee’s annual report between 2006 and 2009. And, then any year is detected as an auditor change year, the data is obtained for one year before the change and one year after the change. For instance, if the auditor change is occurred in 2009, the data will be collected for 2008 as the pre-auditor change year and for 2010 as the post-auditor change year.

<sup>19</sup> DeFond (1992) indicates that the non-auditor-change companies were added to assure that there is no bias in the test results due to truncation of the middle range of the distribution of changes in quality.

<sup>20</sup> Previous studies have shown that companies that switch auditors are different from the population of companies that do not switch auditors. Archambeault & DeZoort (2001) have indicated that this methodology is designed to create a no switch group that mirrors the switch group as closely as possible.



procedures. First, a sample was chosen of the financial statements of the all listed companies that had reported a change in their auditor and new auditor selections (a change in their audit quality), disseminated in the Gulf Co-Operation Council countries' stock exchanges from 2006 to 2009. Since there are not any databases available about auditor changes in the GCC, the sample chosen under the first step was hand-collected by reviewing the financial statements of each listed company for the four years. This step has been applied to make sure that the sample chosen included a reasonable number of the companies that actually experienced a change in their auditor quality. Companies found in this step represent the auditor-change companies for the auditor change framework (Model 1) and they represent the whole sample for the auditor selection framework (Model 2).

Next, this step is only applicable for the auditor change framework (Model 1). The remaining sample of the all listed companies' financial statements disclosed in the Gulf Co-Operation Council countries' stock exchanges that did not involve new auditor selections (no change in their audit quality) are chosen to represent the non-auditor change companies included in the auditor change framework (Model 1).

## **5.7 Summary and Conclusion**

This chapter outlines four main issues. In the first part of this chapter, the theoretical framework of this study has been discussed. It contains two models. The first model is called the auditor change framework (Model 1) which reports the association of auditor change as a dependent variable with corporate governance mechanisms, audit-specific

characteristic and firm-specific characteristics. And, the second model is called the auditor selection framework (Model 2) that documents the relationship between audit quality score as a dependent variable with corporate governance mechanisms, audit-specific characteristic and firm-specific characteristics. The second part of this chapter highlights the hypotheses development and the measurements of the dependent and independent variables. In the third part of this chapter, the auditor change framework (Model 1) and the auditor selection framework (Model 2) have been specified followed by the data collection procedures and sampling.

## **CHAPTER SIX**

### **EMPIRICAL RESULTS AND DISCUSSIONS OF AUDITOR CHANGE**

#### **FRAMEWORK (MODEL 1)**

##### **6.1 Introduction**

This chapter reports and discusses the findings of the auditor change framework (Model 1). In particular, this chapter seeks to provide answers to the following research question: To what extent do board of directors effectiveness, audit committee effectiveness, ownership structure, audit-specific characteristic, and firm-specific characteristics influence the decision of auditor change in GCC countries?

This chapter is organized as follows. Section 6.2 presents a description and statistics of the sample and data collection process. It is followed by the descriptive statistics and the univariate analyses of the continuous and dichotomous variables used in the regression tests in section 6.3. Section 6.4 reports the regression diagnostics tests that have been conducted to verify that the assumptions of the logistic regressions are met and to avoid misleading results. Section 6.5 reports the results of the multivariate analysis of the models tested. To ascertain the credibility of the initial analysis, Section 6.6 presents the results of several additional tests that were conducted to determine the sensitivity and the robustness of the regression analysis earlier. The chapter ends with Section 6.7 – summary and conclusion.

## 6.2 Sample Description, Sample Statistics and Data Collection

The sample of the auditor change model comprises all non-financial companies listed on the Stock Exchanges of the five member states of the Gulf Co-Operation Council (GCC) countries with auditor changes from 2006 to 2009 as mentioned earlier in chapter 5.<sup>21</sup> All data that are denominated in several currencies of the five members of the GCC are translated into US dollar equivalents for the purpose of the study.<sup>22</sup> To reduce noise and avoid the need to proxy for non-agency cost variables, several non-agency cost motivated variables that lead to the cases of auditor changes are excluded as follows. *First*, companies that have experienced a bankruptcy (DeFond, 1992; Lee, Mande & Ortman, 2004; Menon & Williams, 2008; Carcello & Neal, 2003). *Second*, companies that have selected a new auditor twice or more during the period considered in this study are eliminated from the sample (DeFond, 1992; Khalilet al., 2010; Chan et al., 2007). *Third*, companies that own subsidiaries of other companies of 20% or greater are also excluded from the sample in the current study (DeFond, 1992; Johnson & Lys, 1990). *Forth*, companies that change their auditors because of merging at any time during the period considered in this study are excluded (Johnson & Lys, 1990; Lennox, 2000; Khalilet al., 2010). *Fifth*, companies that have received adverse or disclaimer opinions at any time during the period considered in this study are eliminated (DeFond, 1992). *Sixth*, companies that have changed their auditors because of a mandatory rotation policy (DeBerg et al., 1991). *Seventh*, companies that are engaged in banking,

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<sup>21</sup> To assure a reasonably large amount of auditor change cases, all firms listed in the five GCC countries that change audit firm brand name (measured as Big 4, second tier or local) are gathered.

<sup>22</sup> One of the problems associated with combing observations on financial statements items from individual countries into one data set is differing monetary units. To address this problem, we converted all monetary figures to US dollars using the World Bank official exchange rate, available at <http://data.worldbank.org/indicator/PA.NUS.FCRF>

insurance or diversified financial services are excluded (e.g., Hudiab & Cooke, 2005; Chan *et al.*, 2007; Jackson, Moldrich & Roebuck, 2008; Desenderet *et al.*, 2009; Carcello & Neal, 2003). And, *finally*, companies that their auditors resign are also eliminated (Carcello & Neal, 2003; Robinson & Jackson, 2009).

Applying the above criteria, excluding non-auditor change companies, and also eliminating companies with incomplete data,<sup>23</sup> the sample size was reduced to 109 auditor-change companies. After the screening process for the two-year period; before ( $t_{-1}$ ) and after ( $t_1$ ) the auditor change, no multivariate outliers are reported for the pre-auditor change model. While for the post-auditor change model, one case has been detected as an outlier. Thus, a final sample of 109 auditor-change companies were identified to be eligible for inclusion in the analysis of pre-auditor-change model ( $t_{-1}$ ) and 108 auditor-change companies to be included in the post-auditor-change model ( $t_1$ ).

Table 6.1  
*Sample Selection Process*

<b>Sample Attributes</b>	<b>Saudi Arabia</b>	<b>Oman</b>	<b>Qatar</b>	<b>Bahrain</b>	<b>Abu Dhabi</b>	<b>Dubai</b>	<b>Total</b>
Total listed companies	149	119	44	45	63	62	<b>482</b>
Incomplete Data	(18)	(16)	(11)	(5)	(17)	(6)	<b>(73)</b>
A mandatory Rotation Policy	0	(24)	(4)	0	0	0	<b>(28)</b>
Twice or more auditor changes	(18)	(5)	(5)	0	0	(2)	<b>(30)</b>
Banks and Financial Services	(11)	(28)	(7)	(23)	(14)	(23)	<b>(106)</b>
Insurance Companies	(31)	(2)	(6)	(6)	(15)	(12)	<b>(72)</b>
Non-auditor Changers	(25)	(2)	(5)	(9)	(10)	(13)	<b>(64)</b>
Remaining number of subjects selected for testing (auditor changers)							<b>109</b>

From Table 6.1, it is noted that the frequency of voluntary auditor changes among listed companies in the GCC is high (109 cases [23%] from 2006 to 2009) compared with

<sup>23</sup> Incomplete data documented in the GCC settings are cases of the following: (1) Missing annual reports of the considered periods of the study. (2) Newly listed companies. (3) Companies under suspension. (4) Annual reports missing of corporate governance information. And (5) Companies with no official websites.

previous studies. For example, Woo and Koh (2001) have reported that the percentage of auditor-change firms ranges from 0.97% (in 1995) to 4.21% (in 1990). While in UK, Beattie and Fearnley (1995) have reported that a total of 341 companies out of 2079 listed companies (16.4%) changed their auditors at least once during the period 1987 to 1991. It is also well-recognized that the frequency of a mandatory rotation among listed companies in the GCC is very low (28 cases [20%] out of the total auditor changes from 2006 to 2009). In this regard, only Omani and Qatari codes of corporate governance state that a mandatory rotation policy should be applied every four and three years, respectively. Bahraini code of corporate governance indicates that the company shall disclose items related to reasons for any changing and reappointing of auditors. Therefore, it could be inferred and explained from the structure of the codes of corporate governances in GCC countries that there is an obvious indication of weak levels of enforcement and a dominance of three groups of shareholders, namely; government and its agencies, family, and domestic corporations in which these dominant groups are a result of the weakness of investor protection and the absence of well-developed markets for sound management practices and corporate control (Chahine & Tohme, 2009; Harabi, 2007; Hawkamah and IFC, 2008; Omran *et al.*, 2008; Saidi & Kumar, 2007).

Further, the bureaucratic legacy of colonial status and the Bedouin orientations are usually the most recognized characteristics of the management styles in Arab countries. Furthermore, Arab managers encourage the nepotism in choosing counterparts. Therefore, there would high levels of hierarchical authority and patriarchal approach. (Ali, 1990). Appointed Arab board members whom have been selected by their relatives are more likely to have a monitoring deficiency and other corporate governance

issues(Prevost, Rao & Hossain, 2002; Lin & Liu, 2009). Under these circumstances, agency problems are more likely to arise between majority and minority shareholders which certainly lead to the high frequency of auditor changes and low frequency of auditor rotations.<sup>24</sup>

As aforementioned, the auditor-change companies ( $t_{-1}$ : 109;  $t_1$ : 108) are used in the auditor-change models ( $t_{-1}$ & $t_1$ ) had auditor changes between 2006 and 2009. Of 482 listed companies in the GCC, only 64 were identified to be non-auditor-change companies as shown above in Table 6.1.<sup>25,26,27</sup> After the screening process, final sample of 63 non-auditor-change companies were identified to be eligible for inclusion in the analysis of pre-auditor-change model ( $t_{-1}$ ) and 64 non-auditor-change companies are to be included in the post-auditor-change model ( $t_1$ ). Since the auditor-change and non-auditor change companies represent the whole sample of GCC companies, it is expected that the major systematic differences between the auditor-change and non-auditor change companies are reduced.

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<sup>24</sup>Since financial, audit regulations and corporate governance codes in GCC countries are not fully enforced in terms of auditor rotation, the auditor change cases in this study are assumed to be a free of auditor rotation, unless there is a company has disclosed the rotation of its auditor explicitly in its annual report.

<sup>25</sup> The non-matched sampling has been previously used by Archambeault and DeZoort (2001), Eichenseher and Shields (1989)

<sup>26</sup>This study was unable to use to the matching-pair sampling design due to the insufficient number of non-auditor-change companies for the control group. Therefore, with the high sample attrition due to a lack of available data for the control group, to test for robustness of the matched-pair sampling design that aims at controlling the bias in observations, the number of auditor-change companies (experimental group) was reduced to meet the number of the control group clients based on size, year and industry, where possible in the additional analysis in section 6.7.

<sup>27</sup> Sampling bias is not a problem for this study because companies selected represent the whole population.

The data collected for the auditor-change model comprises two categories: dependent and independent variables. The dependent variable in the auditor change model is a dichotomous measure based on a change or no change categories in auditor. A change in audit firm is assigned a value of “1” and a no-change in the audit firm is assigned a value of “0.” The independent variables consist of the following. (1) Corporate governance mechanisms: board of directors’ effectiveness score, audit committee’s effectiveness score, government ownership, family ownership, and domestic corporate ownership. (2) Audit-specific characteristic: audit fees. And (3) Firm-specific characteristics: firm size, firm performance, leverage and management change. The independent variables are measured over the periods before the auditor change ( $t_{-1}$ ) and after the auditor change ( $t_1$ ). The data about auditor changes for the period from 2005 to 2010, corporate governance mechanisms, audit-specific characteristics, and management change are hand-collected from the companies’ annual reports obtained from the six GCC stock exchanges, companies’ official websites, Argaam official website, Gulfbase official website, and Google. Data of firm size, firm performance, and leverage are extracted from DataStream financial database by referring to the Datastream Manual. Any missing financial data from the database are hand-collected from the respective annual reports.<sup>28</sup>

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<sup>28</sup> Two approaches are implemented in the social science to resolve research problems. These include: (1) the qualitative approach and (2) the quantitative approach. This study applies the quantitative approach that takes the characteristics of accounting research paradigm in answering the research questions highlighted by this study. All of the data in the current study are secondary in nature collected from corporate annual reports and financial database. In the accounting research paradigm, the researcher develops the research hypotheses by reviewing comprehensive academic studies and then expresses these hypotheses in a form of a mathematical model. In the next step, the researcher collects the data in a highly structured manner followed by the analysis process using the mathematical and statistical technique (Chua, 1986).



### 6.3 Descriptive Statistics and Univariate Analyses

In the auditor change framework (model 1), ten main independent variables are included and classified by auditor-change companies and by non-auditor-change companies for two-year period surrounding the auditor change;  $t_{-1}$  and  $t_1$ . Tables 6.2 and 6.3 provide descriptive statistics and univariate test results for variables measured as continuous metrics and dichotomous variables, respectively.<sup>29</sup> In each table, summary statistics for the full sample, auditor-change and non-auditor change companies are tabled in separate columns. For all continuous variables, mean, median, minimum, maximum and standard deviation are identified. For the dummy variables, the difference in proportion is determined. Statistical tests were performed to identify significant differences across groups, if any. The  $t$ -test is used to determine significant differences in the continuous variables between auditor-change and non-auditor-change companies. In the same manner, Mann-Whitney  $U$ -test was performed to test for differences in proportions of the dichotomous variables between the both groups of companies.<sup>30</sup> To derive a valid discussion and to provide a meaningful information, untransformed variables were used.

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<sup>29</sup> A possible explanation for the differences in the results of this study compared to those of the others could be attributed to the sample size that is not matched due to the insufficient sample size of non-auditor-change companies. The presence of auditor-change companies in the model constitute more than 63% of the sample. Thus, the differences in sample size between the two groups may limit the statistical results of the tests (Woo & Koh, 2001; Ahmed *et al.*, 2006). In addition, although the sample size of this study represents the whole sample because there is no random selection, it represents 34% of the whole sample. As indicated by Schwartz & Menon (1985) that this process may not be representative of the distribution of the population of all companies. Another explanation could be attributed to the time period over which the agency variables are measured; a time-sensitive measurements (DeFond, 1992). Thus, these conditions must be borne in mind in drawing inferences from empirical test results.

<sup>30</sup> Importantly,  $t$ -test requires normality of the sample means. Thus, the assumption of normality in this study is met as can be fully explained in the following chapter using the OLS. More important, the same sets of independent variables have been examined by both models of auditor change (model 1) and auditor selection (model 2).

Table 6.2

Descriptive Statistics and Univariate Test Results of Continuous Variables Classified by Auditor-Change Companies/non-Auditor-Change

Variables	Full Sample ( $t_{-1}$ : n= 172; $t_1$ : n = 172)					Auditor-Change Companies ( $t_{-1}$ : n= 109; $t_1$ : n = 108)			Non-Auditor Change Companies ( $t_{-1}$ : n= 63; $t_1$ : n = 64)			Auditor Changes vs. Non-Auditor Change	
	Mean	Median	Min	Max.	Std.Dev	Mean	Median	Std.Dev.	Mean	Median	Std.Dev.	<i>t</i> -test	
												<i>t</i> -stat	<i>P</i> -value
BDE_SCORE_ $t_{-1}$ (decimal)	0.55	0.57	0.14	0.86	0.17	0.58	0.57	0.16	0.52	0.57	0.18	2.55	<b>0.020</b>
BDE_SCORE_ $t_1$ (decimal)	0.54	0.57	0.14	0.86	0.16	0.56	0.57	0.14	0.49	0.57	0.18	2.83	<b>0.005</b>
ACE_SCORE_ $t_{-1}$ (decimal)	0.80	0.83	0.33	1.00	0.17	0.80	0.83	0.18	0.80	0.83	0.14	0.43	0.669
ACE_SCORE_ $t_1$ (decimal)	0.82	0.83	0.33	1.00	0.15	0.82	0.83	0.14	0.82	0.83	0.14	0.09	0.926
GOV_OWN_ $t_{-1}$ (%)	8.68	0.00	0.00	99.99	17.54	8.70	0.00	18.17	8.67	00.00	15.66	0.34	0.735
GOV_OWN_ $t_1$ (%)	8.57	0.00	0.00	74.30	16.82	8.52	0.00	16.47	8.52	00.00	16.47	0.32	0.745
FAMILY_OWN_ $t_{-1}$ (%)	12.12	0.00	0.00	82.77	18.63	11.42	0.00	17.60	0.003	20.4	20.65	-1.21	0.227
FAMILY_OWN_ $t_1$ (%)	11.39	0.00	0.00	82.77	17.36	13.39	0.05	19.76	13.39	5.05	19.76	-1.16	0.248
DOMESTIC_OWN_ $t_{-1}$ (%)	24.09	14.95	0.00	1.00	25.87	24.09	0.14	26.56	24.85	16.12	25.57	-0.15	0.883
DOMESTIC_OWN_ $t_1$ (%)	25.92	16.21	0.00	1.00	27.45	25.69	0.19	25.72	26.68	18.98	25.72	0.09	0.931
FEE_ $t_{-1}$ (decimal)	0.10	0.01	0.00	1.00	0.25	0.12	0.01	0.27	0.08	0.005	0.22	-0.30	0.763
FEE_ $t_1$ (decimal)	0.09	0.01	0.00	1.00	0.25	0.09	0.01	0.25	0.09	0.01	0.25	-0.26	0.798
LASSET_ $t_{-1}$ (\$ mil)	1.82	0.21	0.00	69.26	6.78	1.77	0.14	8.03	1.91	0.34	3.86	-4.01	<b>0.000</b>
LASSET_ $t_1$ (\$ mil)	2.35	0.29	0.00	78.12	5.28	2.56	0.45	5.07	2.58	0.45	5.07	-3.89	<b>0.000</b>
ROA_ $t_{-1}$	9.60	9.11	-16.93	42.46	10.01	9.21	8.69	10.89	10.27	10.23	8.31	-0.04	0.967
ROA_ $t_1$	7.90	7.92	-23.25	35.08	9.43	7.48	7.74	8.09	7.48	7.74	8.09	0.45	0.652
LEV_ $t_{-1}$	21.73	14.07	0.00	115.80	23.81	23.36	15.18	26.04	18.92	13.96	19.24	1.11	0.268
LEV_ $t_1$	20.49	12.94	0.00	113.53	21.65	19.70	14.78	19.16	19.67	14.78	19.16	0.37	0.711

Notes: Two-tailed, **bold** = Significant at 1% level, *italic* = significant at 5% level.

Table 6.2, firstly, lists the corporate governance variables; board of directors' effectiveness score (*BDE\_SCORE*), audit committee's effectiveness score (*ACE\_SCORE*), government ownership (*GOV\_OWN*), family ownership (*FAMILY\_OWN*) and domestic corporate ownership (*DOMESTIC\_OWN*) for the two-year period surrounding the auditor change;  $t_{-1}$  and  $t_1$ . Comparing the means of *BDE\_SCORE* for auditor-change companies with that of non-auditor-change companies show a statistically significant difference at 1% level for the two-year period;  $t_{-1}$  ( $t = 2.55; p = .02$ ) and  $t_1$  ( $t = 2.83; p = .005$ ). The *BDE\_SCORE*s of auditor-change companies are 1.115 and 1.143 times greater than those of non-auditor-change companies in years  $t_{-1}$  and  $t_1$ , respectively. The significant differences occur both before and after the auditor change reveal to the fact that the management is both anticipating and reacting to agency conflict changes. As expected, the effectiveness of the board of directors contributes in the decision of auditor change. The higher the degree of the board of directors' monitoring effectiveness is, the more involvement the board becomes into the auditor change decision. The board monitoring effectiveness comprises of independent, financial and international expert directors with frequent meetings and foreign nationalities, an adequate size and absence of CEO.

This result also exhibits that the board of directors is the common apex of the decision control system. The result also suggests the importance of behavioral issues and culture of audit clients such as nationality and international experience that undoubtedly have a significant impact on auditor change. Further, combining economic theory (agency theory) and behavioral theories (managerial grid theory and attraction-selection-attrition framework) can provide more and sufficient explanations about auditor change behavior

in the GCC where culture preferences dominate the business environment and decision-making. Hence, this preliminary result provides directional support for the association between board of directors' effectiveness score and auditor change decision.

No significant differences were observed between audit committee's effectiveness score (*ACE\_SCORE*) and auditor change. The means of *ACE\_SCORE*s for auditor-change companies and non-auditor-change companies are statistically not significant for the two-year period; before ( $t_{-1}$ ) ( $t = .43$ ;  $p = .669$ ) and after ( $t_1$ ) ( $t = 0.09$ ;  $p = .926$ ) the auditor change. A possible interpretation for this result is that, in the setting of the GCC, auditor change is not one of the audit committee's primary responsibilities. In this regard, the role of audit committees in auditor choice process is very weak in the GCC (Al-Moataz & Basfar, 2010).

It is also documented that the concept of audit committees is still new in the business environment of the GCC and serious penalties for offenders of implementing code of corporate governance do not exist. In addition, the duties, objectives, independence concept and scope of audit committees are unclear. In particular, the most important function of audit committees is to only nominate the external auditor and justify the criteria used for this nomination. Further, there is a lack of academic and professional qualifications among audit committee members in a manner that it prevents them from coping with incremental developments. Furthermore, in the GCC, some companies have failed in establishing detailed guidelines that clearly identify the function of their audit

committees (Al-Qarni, 2010; SCOPA, 2004).<sup>31</sup> These empirical findings may also give support for the view that corporate governance mechanisms (audit committee vs. board of directors) are substitution, not complementary. Thus, this preliminary result does not provide directional support for the association between audit committee's effectiveness score and auditor change decision.

The comparison of group means for the government ownership *GOV\_OWN*, family ownership *FAMILY\_OWN*, and domestic corporate ownership *DOMESTIC\_OWN* reveal unsupported evidence for the association of these three dominant groups with the propensity of auditor change. The means of *GOV\_OWN*, *FAMILY\_OWN*, *DOMESTIC\_OWN* for auditor-change companies and non-auditor-change companies are statistically not significant for the two-year period; before the auditor change ( $t_{-1}$ ) (*GOV\_OWN*:  $t = .34$ ;  $p = .735$ ), (*FAMILY\_OWN*:  $t = - 1.21$ ;  $p = .227$ ), (*DOMESTIC\_OWN*:  $t = - .15$ ;  $p = .883$ ) and after the auditor change ( $t_1$ ) (*GOV\_OWN*:  $t = .32$ ;  $p = .745$ ), (*FAMILY\_OWN*:  $t = - 1.16$ ;  $p = .248$ ), (*DOMESTIC\_OWN*:  $t = .09$ ;  $p = .931$ ).

One possible explanation is that, in the setting of the GCC, these three dominant groups delegate auditor change decision to the board of directors. This result may provide support for the view that corporate governance mechanisms (ownership vs. board of directors) are substitution, not complementary. With support to this, the close alignment of owners and managers creates an entrenchment problem that makes it easier for the

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<sup>31</sup> Although the empirical evidence cited is about the case of Saudi, the same circumstances could be extended to the other GCC countries because they share similar corporate governance issues (Chahine & Tome, 2009; Mohamed *et al.*, 2009; Al-Hussaini *et al.*, 2008; Al-Muharrami *et al.*, 2006).

controlling owners' interests to internally go without any objections by the board of directors (Chau & Leung, 2006; Claessens *et al.*, 2002). In the context of the GCC, Chahine *et al.* (2009) have reported that Arab owners dominate and manage the rooms of board of directors and exercise a power on that.

Comparing the means of the audit fees (*FEE*) between auditor-change companies and non-auditor-change companies shows statically insignificant differences for the two-year period; before ( $t_{-1}$ ) ( $t = -.30$ ;  $p = .763$ ) and after ( $t_1$ ) ( $t = -.26$ ;  $p = .798$ ) the auditor change. Unexpectedly, this result exhibits unsupported evidence for the association of audit fees and the auditor change decision. One possible interpretation is that, in the setting of the GCC, audit fee is not an important determinant related to the decision of auditor change. Companies may prefer to avoid auditor change and its associated direct and indirect costs for just only economic benefits when they are compared with other considerations such as providing credible information to investors and creditors (Johnson & Lys, 1990; Schwartz & Menon, 1985) and/or gaining a greater market value than the present one (Gregory & Collier, 1996).

Another explanation is that, given the evidence of lower audit fees charged by Big 4 audit firms due to auditor scale economies (Francis, 1984; Pong & Wittengton, 1994) or no differentiation in the audit fees charged by Big 4 and non-Big 4 (Simunic, 1980) and their highly presence in GCC market (Binder, 2009), there is no much variation in the audit fees paid by both auditor and non-auditor change companies. Further, since the sample size of auditor-change companies is about 72% higher than the non-auditor change companies included in this study and the period of study spans before and after

the auditor change, these results strongly support the absence of initial audit discounting issues for auditor change (Ettredge & Greenberg, 1990).<sup>32</sup> Hence, this preliminary result provides unsupported evidence of the association between audit fees and auditor change.

Significant differences were found between the association of firm size (*LASSET*) and auditor change for the two-year period; before ( $t_{-1}$ ) ( $t = -4.01$ ;  $p = 0.000$ ) and after ( $t_1$ ) ( $t = -3.89$ ;  $p = 0.000$ ) the auditor change. The *LASSET* of non-auditor-change companies are 1.08 and 1.01 times greater than those of auditor-change companies in years  $t_{-1}$  and  $t_1$ , respectively. A possible explanation is that as firm size increases, there would be an increase in the disparity of agency problems which, consequently, makes it difficult for the owners to monitor managers' actions and also it becomes difficult for debtholders to monitor managers and owners' actions. These circumstances will encourage auditees to demand a higher audit quality (Palmrose, 1984).

This result is consistent with Haskins and Williams (1990) and Johnson and Lys (1990) Lin and Liu (2009). Therefore, this preliminary result supports the association of firm size with auditor change. In terms of the firm performance (*ROA*), comparing the means of auditor-change group with non-auditor-change group reveals a statistically insignificant association for the two-year period; before ( $t_{-1}$ ) ( $t = -.04$ ;  $p = .967$ ) and after ( $t_1$ ) ( $t = .45$ ;  $p = .652$ ) the auditor change. This result indicates that auditor change in the setting of the GCC is not driven by the firm performance. This result is consistent with Abbott and Parker (2000), Chan *et al.* (2007), Che Ahmad *et al.* (2006), Wang *et*

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<sup>32</sup> Previous empirical studies have either failed to detect price cutting (Francis, 1984; Palmrose, 1986; and Simunic, 1980) or cannot be generalized due to very small sample sizes (Baber *et al.*, 1987; and Francis and Simon, 1987).

*al.* (2008) and Woo and Koh (2001). With respect to the leverage, the comparison of group means for the leverage (*LEV*) displays a statistically insignificant difference for the two-year period; before the auditor change ( $t_{-1}$ ) ( $t = 1.11$ ;  $p = 0.268$ ) and after the auditor change ( $t_1$ ) ( $t = .37$ ;  $p = .711$ ). This result is consistent with Abbott & Parker (2000), Carey *et al.* (2000), Che Ahmad *et al.* (2006), Chan *et al.* (2007), Lin and Liu (2009) and Velury *et al.* (2003). Thus, these preliminary results provide unsupported evidence for the association of firm performance and leverage with the incidence of auditor change.

Table 6.3 presents the descriptive statistics and univariate test results for the (dummy) variables by auditor change. Like the previous *t*-test, the analysis in this table is related to the relationship between auditor-change companies and non-auditor-change companies in order to be consistent with the multivariate models. The results of the Mann\_Whitney *U*-test<sup>33</sup> for the distribution differences between auditor-change companies and non-auditor-change companies reveals that management change (*MGT\_CHANGE*) is a statistically insignificant. A comparison of group percentages for management change before the auditor change ( $t_{-1}$ ) (auditor-change group: .297; non-auditor-change companies: .703) and after the auditor change ( $t_1$ ) (auditor-change companies: .459; non-auditor-change companies: .541) is not associated with the incidence of auditor change. This result is consistent with Chow and Rice (1982), Schwartz and Menon (1985) and Williams (1988).

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<sup>33</sup> The Mann-Whitney *U*-test is used in order to compare the average ranks of management change between auditor-change companies and non-auditor-change companies. It is considered a non-parametric test that matches the *t*-test. The assumption of the *t*-test is that there is a normal distribution of the mean differences. As for the variable variance, it could be either equal or unequal. While the Mann-Whitney *U*-test assumes the two variables have the same distribution. No assumption is made regarding the shapes of the distributions of the two variables (Jaccard and Becker, 1990).



Table 6.3  
*Descriptive Statistics (Percentage) and Univariate Test Results for Dummy Variables for Auditor-Change/non-Auditor-Change Companies*

	<b>Auditor-Change Companies</b> ( <i>t</i> <sub>-1</sub> : n= 109; <i>t</i> <sub>1</sub> : n = 108)	<b>Non-Auditor Change Companies</b> ( <i>t</i> <sub>-1</sub> : n= 63; <i>t</i> <sub>1</sub> : n = 64)	<b>Mann-Whitney U-test</b>
MGT_CHANGE_ <i>t</i> <sub>-1</sub>	29.7	70.3	- .456
MGT_CHANGE_ <i>t</i> <sub>1</sub>	45.9	54.1	-.191

Notes: \*\*\*Asymptotic significant at 1% level (two-tailed); \*\*asymptotic significant at 5% level (two-tailed); \*asymptotic significant at 10% level (two-tailed).

Table 6.4 presents the descriptive statistics of the number of the dominant group ownership, namely government and its agencies, family, and domestic corporate owners.

Table 6.4  
*GCC Ownership Structure of the Sample Companies*

<b>Ownership Type</b>	<b>Government Ownership</b>		<b>Family Ownership</b>		<b>Domestic Corporate Ownership</b>		<b>Foreign-Corporate Ownership</b>	
	<i>t</i> <sub>-1</sub>	<i>t</i> <sub>1</sub>	<i>t</i> <sub>-1</sub>	<i>t</i> <sub>1</sub>	<i>t</i> <sub>-1</sub>	<i>t</i> <sub>1</sub>	<i>t</i> <sub>-1</sub>	<i>t</i> <sub>1</sub>
Number of dominant groups who own 5% or more	58 (34%)	58 (34%)	85 (50%)	85 (50%)	118 (69%)	118 (69%)	10 (0.06)	10 (0.06)
Number of companies with 0% ownership of the dominant groups	114 (66%)	114 (66%)	87 (50%)	87 (50%)	54 (31%)	54 (31%)	162 (94%)	162 (94%)
Total	172 (100%)	172 (100%)	172 (100%)	172 (100%)	172 (100%)	172 (100%)	172 (100%)	172 (100%)

Table 6.4 shows that there is no variation in the foreign-controlled ownership which justifies the reason of excluding such type of the ownership from Model 1. In this regard, it is indicated that international investors, who take corporate governance very seriously, are often absent from GCC markets because of the lack of sound corporate governance frameworks (INSEAD, The Business School for the World, 2010). The surveys conducted by AL Majlis, The GCC Board Directors Institute in 2009 has found that, in general, the current corporate governance frameworks of GCC countries do not

meet the threshold sought by international investors (AL Majlis, The GCC Board Directors Institute, 2009). This bodes well for improvements in both the culture of investment and the degree of international confidence in these respective economies.

The highest number of ownership type is the domestic corporate shareholders who dominate the majority of the companies in the GCC ( $t_{-1}$ : 118 (69%);  $t_1$ : 118 (69%). This goes in line with what has been found by Claessens *et al.* (2000) that domestic corporate are among the largest group of blockholders in many emerging markets. The second highest dominant ownership in number is the family shareholders ( $t_{-1}$ : 85 (50%);  $t_1$ : 85 (50%). Government ownership is ranked as the third dominant group ( $t_{-1}$ : 58 (34%);  $t_1$ : 58 (34%).

However, the descriptive analysis is considered somewhat a limit analysis because it does not consider the interrelationships among independent variables.

#### **6.4 Diagnostic Tests**

To successfully conduct the logistic regression analyses, regression diagnostic tests were checked for all variables in order to verify that assumptions of logistic regressions are met and to avoid misleading results. The logistic regression diagnostics, in this study, include: sample size assumption, tests of outliers or influential observations (pre-estimation procedure), tests of multicollinearity, and model specification tests (post-estimation procedures) (Hair *et al.*, 2010; Menard, 2002).

#### **6.4.1 Sample Size Assumption**

Pallant (2010) classifies sample size as a logistic regression assumption. The proportion is considered adequate to run the test as at least 10 observations are required for each independent variable. The sample size should be large if the number of predictor variables in the model is large. In this study, the sample size is 172 companies for the pre-auditor change model and 172 for the post-auditor change model with an average of 17.2 for each independent variable in the both models.

#### **6.4.2 Tests to Detect Outliers**

Outliers are observations that have extreme values which are substantially different from other observations. Several methods are available to check these outliers. This study uses the Mahalanobis  $D^2$  measure, a multivariate assessment of each observation across a set of variables. This method measures each observation's distance in multidimensional space from the mean center of all observations, providing a single value for each observation no matter how many variables are considered. Higher  $D^2$  values represent observations farther removed from the general distribution of observations in this multidimensional space (Hair *et al.*, 2010).

By referring to the Chi-Square table, any cases with a Mahalanobis Distance of more than  $X^2(10, 0.001) = 29.59$  are considered multivariate outliers, and then the observation is deleted from the dataset because they distort getting robust results. In this study, in the model of pre-auditor change ( $t-1$ ), one company has been detected as a multivariate

outlier. This outlier was the result of a client that had a high family ownership (94%) compared with the whole sample. In respect to the post-auditor-change model, one company has also been reported as a multivariate outlier. This outlier was the result of a client that had a small loss compared with the whole sample (- 6.19).<sup>34</sup>

### **6.4.3 Tests of Multicollinearity**

Multicollinearity refers to the inter-correlation exists among the independent variables. There should be no perfect linear relationship between two or more of the independent variables. Multicollinearity can have two types of impact: impacts on estimation and impacts on explanation. In terms of the estimation impact, multicollinearity can have substantive effects not only on the predictive ability of regression model, but also on the estimation of the regression coefficients and their statistical significance tests. With regard to the explanation impact, the effects on explanation primarily concern the ability of the regression procedure and the researcher to represent and understand the effects of each independent variable in the regression variant (Hair *et al.*, 2010). Several examinations have been identified to check for the possible existence of multicollinearity. These include the correlation matrix, tolerance (1/VIF) and variance inflation factor (VIF).

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<sup>34</sup> Pallant (2010) document cases with standardized residual of more than 3.3 or less than -3.3 as outliers. In this study, after applying Mahalanobis  $D^2$  measure to detect outliers, the maximum standard residual is ( $t_{.1}$ : 0.986;  $t_1$ : 0.982) and the minimum is ( $t_{.1}$ : 0.160;  $t_1$ : 0.077) This indicates that no outliers have been detected. Further, Cook's distance is used to detect highly influential observations. Based on the Cook's cut-off value  $Di > 1$  ( $t_{.1}$ : 0.986;  $t_1$ : 980), no influential observations have been detected.

In terms of the correlation matrix, this test is considered the simplest and most obvious means of detecting multicollinearity through which all the independent variables are scanned to make sure that there is no presence of high correlations (generally .90 and higher) which is the first indication of a substantial collinearity (Hair *et al.*, 2010; Pallant, 2010). In this study, the correlation matrixes confirm that no multicollinearity exists among the variables in the both models, pre-auditor change ( $t_{-1}$ ) and post-auditor change ( $t_1$ ), as none of the variables correlates above 0.90. All the variables have a correlation of equal to or less than .285 in  $t_{-1}$  and .357 in  $t_1$  as shown in Table 6.5.

Table 6.5  
Correlation Matrix of Independent Variables for the Two-year Period ( $t_{-1}$  &  $t_1$ )

	BDE_SCORE	ACE_SCORE	GOV_OWN	FAMILY_OWN	DOMESTIC_OWN	FEE	LASSET	ROA	LEV	MGT_CHANGE
<b>Panel A: Year <math>t_{-1}</math></b>										
BDE_SCORE	1									
ACE_SCORE	.156*	1								
GOV_OWN	.073	.072	1							
FAMILY_OWN	-.117	-.008	-.280**	1						
DOMESTIC_OWN	.256**	.075	-.260**	-.0194*	1					
FEE	-.029	.032	.060	.033	-.156*	1				
LASSET	-.169*	-.128	.285**	-.277**	-.135	.100	1			
ROA	-.075	-.070	.128	.009	-.002	.009	.146	1		
LEV	.146	.017	-.171	.220**	.104	-.121	-.078	-.332**	1	
MGT_CHANGE	.254**	-.063	.017	-.036	.177*	-.069	.012	-.004	.110	1
<b>Panel B: Year <math>t_1</math></b>										
BDE_SCORE	1									
ACE_SCORE	.007	1								
GOV_OWN	.078	.167*	1							
FAMILY_OWN	-.074	-.038	-.297	1						
DOMESTIC_OWN	.178*	.004	-.263**	-.219**	1					
FEE	-.052	-.131	.010	.057	-.213**	1				
LASSET	-.095	-.182*	.268**	-.215**	-.172*	.212**	1			
ROA	-.101	-.020	.155*	.161*	-.049	.064	-.033	1		
LEV	.133	-.023	-.155*	.113	.108	-.152*	.081	-.357**	1	
MGT_CHANGE	-.036	-.032	.003	.126	-.044	.033	-.019	-.051	.000	1

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

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

With regard to the tolerance and VIF, they are the most common measures expressing the degree to which each independent variable is explained by the set of other independent variables. They assess both pairwise and multiple variables collinearity. In general, the accepted degrees of multicollinearity are values up to .10 for tolerance which equals to a VIF of 10 (Hair *et al.*, 2010; Pallant, 2010). Results as shown in Table 6.6 portray that multicollinearity is not a problem in this study for the two-year periods; before and after the auditor change ( $t_{-1}$  &  $t_1$ ).

Table 6.6  
*Multicollinearity Statistics of Assessing VIF and Tolerance Values*

Independent Variables	Collinearity Statistics			
	Variance Inflation Factor VIF		Tolerance Value (1/VIF)	
	$t_{-1}$	$t_1$	$t_{-1}$	$t_1$
BDE_SCORE	1.249	1.100	.801	.909
ACE_SCORE	1.069	1.108	.936	.903
GOV_OWN	1.342	1.485	.745	.674
FAMILY_OWN	1.376	1.437	.727	.696
DOMESTIC_OWN	1.340	1.345	.746	.743
FEE	1.055	1.140	.948	.877
LASSET	1.275	1.311	.784	.763
ROA	1.192	1.285	.839	.778
LEV	1.285	1.297	.778	.771
MGT_CHANGE	1.113	1.031	.899	.970

#### 6.4.4 Model Specification Tests

Testing for omitted variables bias and link function in logistic regression is of importance because this issue is related to the assumption that the error-term and the independent variables in the model are not correlated. In the model specification error, the model has been wrongly estimated (Gujarati, 2003). The normal error encounters in

model specification error is omission of relevant variables, inclusion of unnecessary variables and link function (Hair *et al.*, 2010). To make sure that specification errors in terms of omitted relevant variables and link function are not a problem in this study, a STATA command called *linktest* was run after every regression ( $t_{-1}$  &  $t_1$ ).

In particular, as the model is properly specified, additional statistically significant predictors cannot be found except by chance. *Linktest* uses the linear predicted value (*variable\_hat*) and the linear predicted value squared (*variable\_hatsq*) as predictors in order to structure the model. The *p*-value of the *variable\_hat* should be a statistically significant predictor, since it is the predicted value from the model. In this study, the *p*-value for the *variable\_hat* for the both models before ( $t_{-1}$ ) and after ( $t_1$ ) the auditor change are 0.007 and 0.000, respectively. The most important indication of the correctly specified model is the *variable\_hatsq* which should not have much predictive power except by chance. In this study, the *p*-value for the *variable\_hatsq* for the both models before ( $t_{-1}$ ) and after ( $t_1$ ) the auditor change are 0.180 and 0.480, respectively. Therefore, specification errors with regard to omitted variables or link function are not problems for this study.

Further, testing for the assumption of the linearity is also of importance and it is related to the specification error in the logistic regression. It is well established that correlations represent only the linear association between variables. As a result, nonlinear effects will not be represented in the correlation value. Therefore, all relationships have to be examined to determine any departures from linearity that may affect the correlation (Menard, 2002; Hair *et al.*, 2010). Menard (2002) suggests a Box-Tidwell test for

checking any violations to the linearity assumption. This test is available within STATA by using a command called “*boxtid*.” In this study, the results of the Box-Tedwill test show that a number of independent variables in model ( $t_{-1}$ ) and a one independent variable in model ( $t_1$ ) do not meet the linearity assumption and may cause problems with the interpretation of the results. In particular, due the slight violation caused to the linearity assumption, the degree of the association of the independent variables will be underestimated and there will a lack of power (Type II errors, thinking there is no association when there actually is).

However, according to the recommendations of Greene (2003), a robust variance estimator can be used, amongst others, to the linearity assumption. In this study, the results of the robust logistic regression have shown no statistically difference from the results of the original logistic regressions for the both models ( $t_{-1}$  &  $t_1$ ). Hence, it can be concluded that, in this study, the violation of the linearity assumption has a little practical effect on the analysis.

## **6.5 Multivariate Results**

Multivariate logistic regression<sup>35</sup> was used to evaluate the level of effect of the hypothesized variables on the decision of auditor change versus non-auditor-change using STATA. Table 6.7 reports the estimated model coefficients, the associated significance test results and holdout accuracy rates for the both models; before ( $t_{-1}$ ) and

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<sup>35</sup> Logistic regression is used to test the model which predicts categorical outcomes with two or more categories. The predictor variables can be either categorical or continuous, or a mix of both in the one model (Pallant, 2010).



after ( $t_1$ ) the auditor change. The  $p$ -values associated the chi-square with 10 degrees of freedom are statistically significant at 1% level for the both models ( $t_{-1}$ :  $p = 0.000$ ;  $t_1$ :  $p = 0.000$ ), indicating a good fit.<sup>36</sup> In addition, Tabachnick and Fidell (2007) suggest that the successful of the model can be assessed by evaluating its ability to predict correctly the outcomes category for cases for which the outcome is known. The overall classification accuracy and the classification accuracy of the individual preference (changed versus non-change) signify the proportion of preferences correctly expected by the logistic regression. In a perfect model, the overall percent correct will be 100%.

However, this table is not recommended to be used as a goodness-of-fit because it ignores actual predicted probabilities and use dichotomized predictions based on a cut-off which makes the result vary markedly by sample for the same logistic model. The logit models correctly classify 65.12% (i.e., 112) of the 172 companies in the pre-auditor-change model ( $t_{-1}$ ) and 67.44% (i.e., 116) of the 172 companies in the post-auditor-change model ( $t_1$ ). This overall holdout accuracy rate is in line with what has been found by the previous empirical studies in auditor choice (66.13%: Williams, 1988; 54.17%: Choo & Koh, 1989; 67.59%: Woo & Koh, 2001). Due to the shortcoming of the classification table, Pallant (2010) suggests that the Hosmer-Lemeshow Goodness-of-Fit test is used to test the goodness fit of the model.

Table 6.7 portrays the Hosmer-Lemeshow's Goodness-of-Fit Test. This statistical test measures the correspondence of the actual and predicted values of the dependent

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<sup>36</sup> The model  $\chi^2$  is a likelihood ratio test through which the differences between the error not knowing the independents and the error when the independents are included in the model are identified.

variable where the cases are first divided into approximately 10 equal classes. Then, a comparison is conducted between the number of actual and predicted events in each class with the chi-square statistic. In particular, a comprehensive measure of predictive accuracy is designed by this test which is based on the actual prediction of the dependent variable. Therefore, better model fit is indicated by a smaller difference in the observed and predicted classification. If the Hosmer-Lemeshow Goodness-of-Fit test statistic is .05 or less, the hypothesis that there is a difference in the observed and predicted classification is accepted (Hair *et al.*, 2010; Pallant, 2007). In this study, the Hosmer-Lemeshow test statistics are greater than .05 for the both models before ( $t_{-1}$ : 0.399) and after ( $t_1$ : 0.343) the auditor change, indicating that both models' fit is acceptable.

Furthermore, there are several different “ $R^2$ -like” measures have been developed to identify overall model fit. A pseudo  $R^2$  value is measured for the logistic regression to indicate the similar  $R^2$  value in the multiple regressions. The logit  $R^2$  value, same as the  $R^2$  in the multiple regressions, ranges from 0.0 to 1.00 (Hair *et al.*, 2010; Pallant, 2010). The increase in the model fit decreases the  $-2LL$  up to a perfect value of 0.00 and increases the  $R^2_{\text{LOGIT}}$  up to a perfect value of 1.0. In particular, the pseudo  $R^2$  is a default output in STATA and is based on McFadden's  $R^2$  (Hair *et al.*, 2010). In this study, the  $R^2_{\text{LOGIT}}$  values for the pre-auditor-change model and for the post-auditor change model are 0.134 and 0.142, respectively, implying reasonably explanatory models and comparable to pseudo- $R^2$  in other studies of auditor choice (0.11: Beasley & Petron, 2001; 0.12 - 0.15: Che Ahmed *et al.*, 2006; 0.086 – 0.0956: Fargher *et al.*, 2001; 0.088 – 0.093: Hope *et al.*, 2008; 0.061 – 0.127: Knechel *et al.*, 2008; 0.10: Roberts *et al.*, 1990; 0.08: Wang *et al.*, 2008).

There are two other measures that are designed similar to the pseudo  $R^2$  and are generally classified as pseudo  $R^2$  measures. These include Cox and Snell  $R^2$  measure and Nagelkerke  $R^2$  measure. In terms of Cox and Snell  $R^2$ , the higher values the greater the model fit. However, this measure is restricted by its inability to reach the maximum value of 1. Consequently, Nagelkerke has proposed a modification measure that ranges from 0 to 1. In particular, the value of 1 for the both measures indicates a perfect model fit (Hair *et al.*, 2010). In this study, the Cox and Snell  $R^2$  values for the pre-auditor-change model is 0.161 and for the post-auditor-change model is 0.171. These values are comparable to those found by previous studies (0.201: Hay & Davis, 2004) The Nagelkerke  $R^2$  values for the pre-auditor-change model is 0.221 and for the post-auditor-change model is 0.233. These values are comparable to the Nagelkerke  $R^2$  value reported by the extant literature in the auditor choice (0.209: Hay & Davis, 2004). To sum up, the above measures indicate that the pre-auditor change model ( $t_{-1}$ ) and the post-auditor-change model ( $t_1$ ) are able to differentiate the companies that have changed their auditors from companies that have not in comparable comparisons, suggesting that events occurring in a time period both before and after the auditor change can explain the behavior of auditor change.

Finally, the chi-square ( $X^2$ ) from the likelihood ratio in logistic regression used as a significance test for logistic model. It measures the improvement in fit after the inclusion of independent variables in the model (Hair *et al.*, 2010). A model is described as a well-fitting model if the chi-square is significant at the 5% level or better. In this study, the likelihood ratios are ( $t_{-1}$ : 30.26;  $t_1$ : 32.31) and the  $p$ -values of chi-square test are significant at 1% level for the both models ( $t_{-1}$  &  $t_1$ ) suggesting a good fit of the model.

In addition, the  $z$ Statistic and  $p$ -value are used to assess the significance of each predictor's regression coefficient probability that a particular  $z$  test statistic is as extreme as, or more so, than what has been observed under the null hypothesis which is defined by  $P > |z|$ .

Across the pre-auditor-change model (ex-ante:  $t_{-1}$ ) and the post-auditor-change model (ex-post:  $t_1$ ), two of the five corporate governance mechanisms, namely; board of directors effectiveness (*BDE\_SCORE*) ( $t_{-1}$ :  $p$ -value = 0.089;  $t_1$ :  $p$ -value = 0.020) and family ownership (*FAMILY\_OWN*) ( $t_{-1}$ :  $p$ -value = 0.025;  $t_1$ :  $p$ -value = 0.012), were consistently significantly associated with auditor change. This indicates that client firms in the GCC change their auditors in reaction to and in anticipation for changes in the characteristics of the board of directors effectiveness and the family ownership.

The remaining corporate governance mechanisms were insignificant in both the ex-ante and ex-post models. These variables include audit committee effectiveness (*ACE\_SCORE*), government ownership (*GOV\_OWN*), and domestic corporate ownership (*DOMESTIC\_OWN*). As for the audit-specific characteristic, audit fees (*FEE*), it was found to have no association with the decision of auditor change in the both periods ( $t_{-1}$  &  $t_1$ ). With respect to the firm-specific characteristics, out of the four variables, two characteristics, namely; firm size (*LASSET*) ( $t_{-1}$ :  $p$ -value = 0.000;  $t_1$ :  $p$ -value = 0.000) and leverage (*LEV*) ( $t_{-1}$ :  $p$ -value = 0.055;  $t_1$ :  $p$ -value = 0.079) were consistently significantly associated with the incidence of auditor change. This suggests that client firms in the GCC change their auditors in reaction to and in anticipation for changes in the firm size and leverage. The remaining firm-specific characteristics, ROA

and management change (*MGT\_CHANGE*), were found to have no association with auditor change decision in the both periods ( $t_{-1}$  &  $t_1$ ).

The largest  $z$ -statistics in the ex-ante model ( $t_{-1}$ ) are -4.13 ( $p$ -value < .0001), -2.23 ( $p$ -value < .05), 1.92 ( $p$ -value = .05) and 1.70 ( $p$ -value < .10) which are for firm size, family ownership, leverage and board of directors effectiveness, respectively. These variables are significant in the period preceding the auditor change which is consistent with GCC client firms changing their auditors in reaction to changes in these variables. And, for the ex-post model ( $t_1$ ), the largest  $z$ -statistics are -4.10 ( $p$ -value < .0001), -2.50 ( $p$ -value = .01), 2.33 ( $p$ -value < .05) and 1.76 ( $p$ -value < .10) which are for firm size, family ownership, board of directors effectiveness and leverage, respectively.

These variables are significant in the period subsequent to auditor change which is consistent with GCC client firms changing their auditors in anticipation of changes in these variables. This indicates that the four variables have a comparable degree of importance in the model of auditor change. In particular, they make the strongest unique contribution in explaining the incidence of auditor change. Therefore, the hypothesis that there is a significant effect of corporate governance mechanisms and firm-specific characteristics on the probability of auditor change in the preceding and subsequent years of auditor change is accepted.

### 6.5.1 Corporate Governance Mechanisms

The sign of the coefficient of the *BDE\_SCORE* is in the opposite direction (i.e., positive) for ex-ante ( $t_{-1}$ ) and ex-post ( $t_1$ ) models, giving unsupported evidence for hypothesis  $H_{1a}$  that conjectures the higher the degree of the board of directors effectiveness, the lower the probability of auditor changes. In particular, this result is consistent with GCC client firms changing their auditors in reaction to and in anticipation of changes in the effectiveness of the board of directors. Auditor change occurs in the GCC in anticipation of changes ( $t_{-1}$ ) in the board of directors effectiveness more than in reaction to changes ( $t_1$ ) in the board of directors effectiveness. This finding is reflected in the descriptive statistics (see Table 6.2).

The result could indicate to the importance of behavioral issues and culture of board of directors in corporate governance that inevitably have substantial impacts on the development of financial markets that fosters independent auditing (Haniffa & Hudaib, 2006; Ali, 1995; Woodworth & Said, 1996) in a manner that the higher the board of directors effectiveness, the higher they become unsatisfied with the previous auditors' services. So that they change either to a higher audit quality or they remain with the same audit quality level as 62% of the sample size remained with the same audit quality level and 20% changed to a higher audit quality level. If this is the case, the result could lead to accept the prediction of integrating economic theory (agency theory) and behavioral theories (managerial grid theory and attraction-selection-attrition) as a better proxy for the board of directors effectiveness perceived by client firms to reduce the agency conflicts by enhancing the effectiveness of monitoring function and providing

advice (Agrawal & Knoeber, 1996; Cai *et al.*, 2009; Davis & Useem, 2002; O’Sullivan *et al.*, 2008; Rediker & Seth, 1995; Ward *et al.*, 2009). Therefore, this result gives support to the argument of Beattie and Fearnley (1988) that auditor change is based heavily on the economic theory (agency theory) ignoring the behavioral issues of audit clients which, consequently, a partial explanation is only provided concerning audit change behavior.

Table 6.7  
*Logit Analysis Result–Auditor change (Model 1)*

Variables	Expected Sign	Pre-Auditor-Change Model 1 <sub>a</sub> ( <i>t</i> -1)			Post-Auditor-Change Model 1 <sub>b</sub> ( <i>t</i> <sub>1</sub> )			
		Coef.	<i>z</i>	<i>P</i> >   <i>z</i>	Coef.	<i>z</i>	<i>P</i> >   <i>z</i>	
<b>Corporate Governance</b>								
MechanismsBDE_SCORE	-	2.01	1.70	<b>0.089</b>	2.72	2.33	<b>0.020</b>	
ACE_SCORE	-	-0.53	-0.48	0.628	-1.14	-0.92	0.359	
GOV_OWN	+	0.17	0.64	0.520	0.12	0.44	0.657	
FAMILY_OWN	-	-2.49	-2.23	<b>0.025</b>	-3.06	-2.50	<b>0.012</b>	
DOMESTIC_OWN	-	-1.10	-1.35	0.177	-1.14	-1.50	0.134	
<b>Audit-Specific Characteristic</b>								
FEE	+	0.21	1.02	0.307	0.16	0.82	0.414	
<b>Firm-Specific Characteristics</b>								
LASSET	+	-1.10	-4.13	<b>0.000</b>	-1.08	-4.10	<b>0.000</b>	
ROA	-	0.01	0.43	0.670	0.03	1.20	0.230	
LEV	+	0.02	1.92	<b>0.055</b>	0.02	1.76	<b>0.079</b>	
MGT_CHANGE	+	-0.35	-0.88	0.378	-0.02	-0.05	0.963	
Log Likelihood			-97.013			-97.377		
Hosmer-Lemeshow			0.399			0.343		
Chi <sup>2</sup> (10)			30.26			32.31		
Prob > Chi <sup>2</sup>			0.000			0.000		
Nagelkerke <i>R</i> <sup>2</sup>			23.3			22.1		
Coxsnell <i>R</i> <sup>2</sup>			16.1			17.1		
Pseudo <i>R</i> <sup>2</sup>			13.4			14.2		
Correctly Classified (%)			65.12			67.44		
No. of Observations			172			172		

**Bold** = significance at 1%, 5% and 10%.

Another possible explanation could be related to frequent unseen events such as the need for additional services, disagreements over accounting and auditing issues, poor working

relationship with audit partner/staff, personality clashes with audit partner/staff, change of personnel on audit team assigned to company and inadequate communication between audit team and company personnel. All these issues may lead to high frequency of auditor change. In this regard, a possible interpretation for this circumstance is that the theories as associated with auditor change are still incomplete.

Another possible interpretation is that political intervention and family relationship influence the domination of concentrated ownership that can weaken the board's ability to perform its governance role by being effective in controlling, monitoring and addressing the various agency problems. So that, for a consistent element between the control of the company's board of directors and its ownership structure, the same corporate owners are often members of the board. These boards are impacted by the fact that Arab firms have been influenced by the historical and cultural heritage that have been brought into the firm the colonial status and Bedouin traditions. Therefore, there is a high degree of hierarchical authority and patriarchal method that encourages Arab managers to exhibit nepotism in selecting their counterparts (Ali, 1990; Chahine & Tohme, 2009). Similarly, Aljifri and Moustafa's (2007) empirical findings revealed that generic Arab firms do not select their board members in an optimum way which may result in lack of coordination, communication and to issues of decision making. These practices discourage internally initiated improvements of the effectiveness of corporate governance practices including the demand for high audit quality.

The next justification could be attributed to the fact that corporate governance mechanisms are a substitute to each other instead of being complementary in the context



of GCC countries. From the perspective of the substitution hypothesis, board of directors as an internal corporate governance mechanism and auditing as an external corporate governance mechanism act in a substitution. The higher the effectiveness of the board of directors, the less significance devoted to the external auditor since the majority of auditor changes have taken place among the same audit quality classification (Big 4 to/from Big 4) that dominate GCC audit market. This stems from the fact that Arab owners who are board members exhibit power on the board in carrying out their monitoring objectives. Another justification can be linked to the Arab financial markets which are characterized as under-developed as compared to the Western markets based on many key aspects including regulatory frameworks, regulatory enforcement and markets for corporate control (Chahine & Tohme, 2009).

More specifically, lack of concentration was dedicated to the auditor selection process by the codes of corporate governance in GCC firms as these codes are still a novelty and hence, their complete implementation in business markets is impossible. Their optimum practice depends on time and experience. Additionally, these attitudes and practices are promoted by GCC governments and are realized through many legislations and government decrees. GCC governments view the situation on the basis of the tribal system as invaluable for their political stability where tribal attitudes and loyalty are held in high value (Abdel-Halim & Ashour, 1995; Ali & Azim, 1996; Helms, 1991).

With regard to *FAMILY-OWN*, the sign of the coefficient is in the predicted direction (i.e., negative) in ex-ante ( $t_{-1}$ ) ( $p$ -value = 0.025) and ex-post ( $t_1$ ) ( $p$ -value = 0.012)

models, implying that the higher the percentage of family ownership, the less likely the probability of auditor change to occur. This result is in line with the view of Jensen and Meckling (1976) suggesting that an increase in the holdings of the owner-largest shareholder reduces agency costs and thus, the need to manage earnings in order to alleviate contractual constraints that, consequently, will motivate the controlling owners to improve earnings informativeness by demanding a higher quality auditor. The major shareholder would have a faith in demanding a quality auditor as a means to signal better corporate governance practices and credible financial statements to the minority shareholders and investors. This circumstance would lead to decrease the frequency of auditor change. This result is also consistent with Carey *et al.* (2000). Therefore,  $H_{4a}$  is supported. Specifically, this result indicates to the fact that client firms in the GCC change their auditors in reaction to and in anticipation of changes in the family ownership. This finding also reveals that the association among corporate governance mechanisms in making a decision related to the auditor change (family ownership vs. board of directors and audit committee effectiveness) is a substitution and not a complementary.

Unexpected,  $ACE\_SCORE$  ( $t_{-1}$ :  $p$ -value = 0.628;  $t_1$ :  $p$ -value = 0.359),  $GOV-WN$  ( $t_{-1}$ :  $p$ -value = 0.520;  $t_1$ :  $p$ -value = 0.657), and  $DOMESTIC-OWN$  ( $t_{-1}$ :  $p$ -value = 0.177;  $t_1$ :  $p$ -value = 0.134) are not significant in either period, indicating that there is no association between audit committee effectiveness, government ownership and domestic corporate ownership with auditor change. These findings are also reflected in the descriptive statistics (see Table 6.2). Thus, hypotheses  $H_{2a}$ ,  $H_{3a}$  and  $H_{5a}$  are rejected. This indicates

that corporate governance mechanisms play both functions as a substitution and a complementary in the setting of GCC countries.

In terms of audit committee and auditor change, it is documented that auditor change is not one of the audit committee's primary responsibilities in GCC context. The role played by both board of directors and audit committee in terms of making an auditor change decision is a substitutable action and not a complementary function. One interpretation as explained earlier that there is a close alignment between the company's ownership structure and the control of its board of directors. Therefore, the board of directors is the common apex of the decision control system in which auditor change is one of them. Regarding this issue, the role of audit committee in auditor choice process is slim to non-existent (Al-Moataz & Basfar, 2010).

It is also revealed that the concept of audit committee is still in its infancy in GCC business environment and serious ramifications for non-implementation of code of corporate governance are absent. Additionally, the audit committee's duties, objectives, its concept of independence and its scope are still ambiguous and its most significant function is merely the nomination of the external auditor and the justification of the criteria used for this nomination. There is also a lack of academic and professional qualifications among the members of the audit committee in a sense that it becomes a hindrance in coping with the increasing developments. In GCC countries, some firms did not succeed in laying down comprehensive guidelines identifying the audit committee's function (Al-Qarni, 2010; SCOPA, 2004). This finding clashes with the prediction of integrating economic theory and behavioral theories and it points to the

less significant behavioral problems and culture in the responsibilities of the audit committee (Ali, 1995; Haniffa & Hudaib, 2006; Woodworth & Said, 1996).

With regard to the government ownership and auditor change, the insignificant association reported is consistent with the substitution and not the complementary function of the relationship among the governance mechanism (government ownership vs. board of directors effectiveness and audit committee effectiveness). Among the many plausible explanations to this is that in GCC countries, a high degree of political stability is sought after. Hence, greater levels of transparency and public attention to auditor switches by the majority shareholders may reveal political favors of different shades of legality (Leuz & Oberholzer-Gee, 2006). Accordingly, governments take control over firms in exchange for supporters' votes, political contributions and bribes (Bushman *et al.*, 2004; La Porta *et al.*, 2002; Rajan & Zingales, 2003; Schleifer & Vishny, 1993, 1994).

Furthermore, great levels of government ownership give rise to an array of agency issues concerning ineffective corporate governance directly resulting in adverse performance of the firm and eventually, minimal demand for independent auditing to produce quality accounting information (Qi *et al.*, 2000; Wang *et al.*, 2005; Xu & Wang, 1999). These conditions stem from the non-existence of the principal, the ineffective monitoring of agents and the government's political influence upon decisions of corporate dealings. In this regard, several board members representing the government's interests are nominated and remunerated by the local government based on their administrative rankings and not their performance (Xu & Wang, 1999; Zhou & Wang, 2000), and in

turn, lackluster managerial ability to monitor management's adverse behavior. Despite the agents of governments being equipped for the task of oversight of corporate dealings, they lack a strong incentive to motivate effectively owing to the minimal impact of the companies' performance to their tenure and career prospects.

The next possible justification would be that the government investments may have certain social and economic goals that go beyond the generic profitability and, therefore, they possess governance systems distinct from ownership patterns. Government investors' aim may not be to improve the shareholders' value but instead they may have non-commercial objectives (Mak & Li, 2001) which may affect the demand for high audit quality and the frequency of auditor change. Viewed from an accounting perspective, their controlling ownership interest translates to the government-entity owners' capability of controlling the production of a firm's accounting information and its reporting patterns.

Owing to the present regulatory profit requirement for additional capital raising by listed companies, government owners have strong motivations to force managers to display positive earnings with little concern for audit quality (Chan *et al.*, 2006; DeFond, *et al.*, 2000). Additionally, contrary to other group of investors, the government holds sufficient power over the public in terms of whatever information is required from the listed companies. The absence of dependence on publicly released financial performance results decreases the government's requirement for independent auditing (Klassen, 1997). Consequently, a contrary influence would be employed to the decision of auditor change.

Concerning the domestic corporate ownership and auditor change, this group of owners applies their monitoring role to the company's management in making the auditor change decision. There are professionals and the cost of their monitoring role is significantly low. Since the case of GCC companies is that the corporate ownership is considered the highest dominant group controlling the business environment and those owners sit on the board of directors, consequently, they would influence management's decision through the effectiveness of the board of directors. This result also indicates that there is a close alignment, in GCC business environment, between the owners and the board of directors as a decision control system. In the same concern, the board has the utmost authority in making decisions (i.e., auditor change). Therefore, corporate governance mechanisms (domestic corporate ownership vs. board of directors effectiveness and audit committee effectiveness) act in a substitution and not a complementary in their relationship with the auditor change decision.

### **6.5.2 Audit-Specific Characteristic**

As for *FEE*, an insignificant result has been reported for the both periods; ex-ante and ex-post ( $t_{-1}$ :  $p$ -value = 0.307;  $t_1$ :  $p$ -value = 0.414), suggesting that there is no association between audit fees and the likelihood of auditor change. This result has also been exhibited in the descriptive statistics (see Table 2). Hence, hypothesis  $H_{6a}$  is not supported. One explanation is that the Big 4 audit firms dominate GCC market. They may have comparable reputation and they charge comparable audit fees. So that the majority of the auditor-change cases (i.e., 62%) have taken place among these audit firms. As a consequence, no significant differences have been captured among auditors

of the same class. Another possible justification lies in the setting of GCC countries where audit fee is not viewed as a significant determinant linking to the decision of auditor change. Firms may be inclined to steer away from auditor change and its related direct and indirect costs for mere economic benefits when comparing it with other considerations like the provision of credible information to investors and creditors (Johnson & Lys, 1990; Schwartz & Menon, 1985) and/or gaining a greater market value than the current value (Gregory & Collier, 1996).

Owing to the presence of changing costs, it is logical that various studies have revealed that long-term business relationships are the preference of industries with complex and tailored products or services (Cambell, 1985; Ford *et al.*, 1986; Stewart, 1998). Alternatively, in light of the lower audit fees charged by Big 4 audit firms for the auditor scale economies (Francis, 1984; Pong & Wittengton, 1994) or the lack of differentiation in the audit fees charged by Big 4 and their counterparts (Simunic, 1980) and their presence in GCC market (Binder, 2009), there is a lack of variation in the audit fees paid by auditor as well as non-auditor change companies.

### **6.5.3 Firm-specific Characteristics**

*LASSET* is significant for the both periods; before ( $t_{-1}$ :  $p$ -value = 0.00) and after ( $t_1$ :  $p$ -value = 0.00) the auditor change. The negative sign is contrary to the expectation and the conjecture of the agency theory, suggesting that the larger the firm size, the lower the probability of auditor change. Therefore, hypothesis  $H_{7a}$  is not supported. This result also implies that client firms in the GCC change their auditors in reaction to and in

anticipation of changes in firm size in a comparable manner. This result is inconsistent with the previous studies' findings (Haskins & Williams, 1990; Johnson & Lys, 1990; Woo & Koh, 2001), but is consistent with Krishnan *et al.* (1996). This result may indicate to the desire of GCC companies of retaining their auditors as they become larger due to the fact that Big 4 audit firms dominate the market. This result may also reflect the market power; the three dominant groups that are controlling the market and owning the largest companies, namely; government, family and domestic corporations. The organizational structure of these companies is designed to reflect a high degree of close alignment between the owners and the decision control system which has been supported by a less legal enforcement and high degrees of family and friendship relationships. This is an important environment for GCC countries to have a political stability. Therefore, these circumstances may be mirrored in the decision of auditor change that is based on friendship, business relationships and social networks.

Schwartz and Menon (1985) document that the test result in terms of firm size and auditor change in their study may be influenced by the sample of firms included in the model which may not be representative of the size distribution of the population of all firms. With support to this, first, the current study includes only the companies that have met the criteria of auditor change and, second, only listed companies in the GCC are included which represent large and the largest of medium-sized companies. Therefore, it is expected that small and medium-sized companies, in the GCC, may be more effective in making decisions (i.e., auditor change decision) out of the influence of the business and culture networks. This is particularly because they are more exposed to the market discipline.



As for the *ROA*, insignificant association has been documented for the both periods; ex-ante and ex-post ( $t_{-1}$ :  $p$ -value = 0.670;  $t_1$ :  $p$ -value = 0.230), implying that there is an insignificant impact of the level of company's performance on the incidence of auditor change. This finding is also reflected in the descriptive statistics (see Table 2). This result does not support the prediction of the agency theory and information suppression hypothesis, but, empirically, it is consistent with Lee *et al.* (2004), Williams (1988) and Woo and Koh (2001). Hence, hypothesis  $H_{8a}$  is rejected. This result may be interpreted by the perceived audit quality by the different variety of companies in terms of profits achieved (Aljifri, 2008; Aljifri & Moustafa, 2007). Another interpretation is that healthy companies are less likely to change auditors because there would be no pressure stemming from the financial distress that can put a strain on auditor-client relations producing irreconcilable differences (Schwartz & Menon, 1985). In this study, the mean (median) of *ROA* for the fully sample included in the auditor change model is 9.60 (9.11) for the ex-ante period and 7.90 (7.92) for the ex-post period, indicating that GCC companies concerning performance are healthy.

In addition, Schwartz and Menon (1985) have indicated that there is a positive association between the changes in the companies' financial conditions and the changes in the auditing packages demanded. In the setting of the GCC, no substantial changes have been reported in the financial conditions by the GCC companies ( $t_{-1}$ : 18%;  $t_1$ : 13%). Furthermore, complex business uncertainties have not been reflected in GCC companies' financial conditions such as receiving qualified audit opinion. As a consequence, financial performance of GCC companies may not lead to the probability of auditor change. These circumstances are born out of the insurance hypothesis.

With regard to the *LEV*, a significant effect on the auditor change has been reported for the both periods; ex-ante and ex-post ( $t_{-1}$ :  $p$ -value = 0.055;  $t_1$ :  $p$ -value = 0.079). The sign of the coefficient (+) indicates that a higher level of leverage is associated with a higher probability of auditor change. This result is in line with the prediction of the agency theory and, empirically, consistent with DeFond (1992), Eichenseher and Shields (1989) and Woo and Koh (2001). Therefore, hypothesis  $H_{9a}$  is accepted. This suggests that GCC client firms change their auditors in reaction to and in anticipation of changes in the degree of leverage. As indicated by Jensen and Meckling (1976) that there would be a self-opportunity for managers and owners to transfer wealth from debtholders. Under this circumstance, the higher the amount of the debt, the equal the chance of wealth transfer. Therefore, managers and owners will be having a high degree of motivation to transfer wealth which, in turn, may lead to demand an independent auditor who is able to increase the reliability of accounting information used to verify covenant compliance. In the same vein, this result is supportive by the insurance hypothesis and signaling hypothesis. Debt-holders have an incentive to get assurance that the financial information prepared by the borrower is accurate. As the same time, the borrower will have a strongly incentive to signal the quality of his earnings and asset values by hiring a higher quality auditor. These cases may lead to an increase in the frequent of auditor change.

*MGT-CHANGE* is not significant in the hypothesized direction in either period; before ( $t_{-1}$ :  $p$ -value = 0.378) and after ( $t_1$ :  $p$ -value = 0.963) the auditor change, indicating that the incidence of auditor change in GCC countries is not driven by the management change. This result is inconsistent with the prediction of the agency theory. This finding

is also reflected in the descriptive statistics (see Table 2). Therefore, hypothesis  $H_{10a}$  is rejected. One possible explanation is that Arab management attempts to associate with the prior auditor relationship especially when the changes are taken places among the same classification of audit quality. Another interpretation is that the new management may be satisfied with the quality of past services provided by the company's auditor, as well as with the cost of the audit (Burton & Roberts, 1967; Carpenter & Strawser, 1971; Hudaib & Cooke, 2005). This result is consistent with that found by Chow & Rice (1982), Schwartz and Menon (1985) and Williams (198). This suggests that GCC companies, on average, do not select their board members optimally which may lead to lack of coordination, communication and decision making problems (Aljifri & Moustafa, 2007).

## **6.6 Summary and Conclusion**

In this chapter, the auditor change framework (Model 1) has been conducted. After introducing the chapter, section 2 describes the sample, sample statistics and the data collection. Section 3 highlights the descriptive statistics and univariate analyses. In section four, diagnostic tests of detecting outliers, multicollinearity and model specification tests have been reported. The findings of Multivariate logistic regression have been presented in section five. The regression analyses show the effect of the board of directors effectiveness and leverage on the auditor change decision is statistically significant in the predicted direction. Interestingly, the effect of the family ownership and firm size on the decision of auditor change was statistically significant in the opposite direction.

It is worth noting that the present study has reported, to some extent, different results regarding some determinants contributing to the decision of auditor change in the setting of GCC countries. Since no empirical evidence is available in this region, comparisons of the results of GCC countries are made with the international literature. These differences between the present and prior studies may result due to different causes as follows. First, differences in audit and business regulatory environments among sampled countries/cities, sampled sectors, sampled audit firms are documented (Ball & Shivakumar, 2005; Chaney *et al.*, 2004). Second, some methodological weaknesses are reported by the previous studies such as insufficient sample size (Butterworth & Houghton, 1995; Nichlos & Smith, 1983; Woo & Koh, 2001) and the population definition (Williams, 1988). Therefore, the quality of the findings reached by any study is based on the quality of the study sample. This study excludes GCC companies whom their data are not available. More important, Kuwait has been excluded from the study due to the poor corporate governance disclosure. The characteristics of the sample companies may be different from those of the excluded companies.

Moreover, the non-auditor-change companies included in the auditor change model are less in number than the auditor-change companies; ( $t_{-1}$ :  $n = 109$ ;  $t_1$ :  $n = 108$ ) and ( $t_{-1}$ :  $n = 63$ ;  $t_1$ :  $n = 64$ ). Therefore, the validity of the results depends on how extent the sample represents the population. This issue, however, is not expected to be serious as only about 73 (i.e., 15%) companies with incomplete data out of the whole population 482 companies are reported. There is no a priori expectation of any directional bias. Third, some auditor change studies have not differentiated between resignation and dismissals

(DeFond *et al.*, 1997; Dunn *et al.*, 1999; Hermanson, *et al.*, 1994; Krishnan & Krishnan, 1997; Raghunandan & Rama, 1999). Forth, some important variables are omitted from models of auditor choice studies developed to date (Beattie & Fearnley, 1998; Eichenseher & Shields, 1989; Haskins & Williams, 1990; Johnson & Lys, 1990).

Fifth, the decision of auditor change might be influenced by the economic and industrial conditions over the extended time-periods examined (Williams, 1988). Sixth, DeFond (1992) reports that, methodologically, studies that have looked at the association between agency conflicts and audit quality measured at a point in time and the choice of the measure used to proxy for audit quality. The present study is distinguished by examining the determinants of auditor change both before and after the auditor change. Significant associations occur both before and after the auditor switch, consistent with management both anticipating and reacting to agency conflict changes. This indicates that the results of studies attempting to link audit quality and agency conflicts are dependent upon the time period over which the agency variables are measured (DeFond, 1992). In this regard, Echinseher and Shields (1989) have reported that the auditor change decision may be influenced by expected future differences in agency costs due to anticipated changes in the company's capital structure. It is possible that significant corporate governance mechanisms, audit-specific characteristic and firm-specific characteristics changes could have taken place out of the period considered for this study; 2006-2009. These changes could partially explain differences between the present study's results and those of others.

## **CHAPTER SEVEN**

### **EMPIRICAL RESULTS AND DISCUSSIONS OF AUDITOR SELECTION**

#### **FRAMEWORK (MODEL 2)**

##### **7.1 Introduction**

The determinants of the first stage of auditor choice process, ‘auditor change,’ have been investigated in chapter 6. This chapter reports and discusses the findings of the second process of the determinants influencing the auditor selection. The auditor selection process involves a demand for quality-differentiated auditors. In particular, this chapter seeks to provide answers to the following research question: To what extent do board of directors effectiveness, audit committee effectiveness, ownership structure, audit-specific characteristic and firm-specific characteristics associate with the decision of auditor selection in GCC countries?

This chapter is organized as follows. Section 7.2 presents a description and statistics of the sample and data collection process. It is followed by a statistical description of the continuous and dichotomous variables used in the OLS regression tests in section 7.3. Section 7.4 reports the regression diagnostic tests that have been conducted to verify that the assumptions of OLS are met and to avoid misleading results. The multivariate analyses of the testable models are documented in section 7.5. To make sure of the credibility of the initial analysis conducted in the first chapters, several additional tests

of sensitivity and robustness are carried out in section 7.6. The chapter ends with Section 7.7—summary and conclusion.

## **7.2 Sample Description, Sample Statistics and Data Collection**

The sample of the auditor selection model comprises all non-financial companies listed on the Stock Exchanges of the five member states of the Gulf Co-Operation Council (GCC) countries with auditor changes, quality-differentiated auditors, from 2006 to 2009. The same process of selecting the auditor-change companies highlighted earlier in chapter 6; section 6.2, is used to identify the sample selection process for the auditor selection model. Applying the above criteria, excluding non-auditor change companies, and also eliminating companies with incomplete data, the sample size was reduced to 109 auditor-change companies that have been experienced a change in their audit quality. After the screening process for the two-year periods; before ( $t_{-1}$ ) and after ( $t_1$ ) the auditor selection, five cases of multivariate outliers have been detected for the pre-auditor-selection model and one case has been reported for the post-auditor-selection model. Thus, a final sample of 104 and 108 companies were identified to be eligible for inclusion in the analysis of pre-auditor-selection model ( $t_{-1}$ ) and post-auditor-selection model ( $t_1$ ), respectively.<sup>37</sup> A breakdown of the sample by year using the brand-name classification is shown in Table 7.1.

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<sup>37</sup> This study makes an attempt to obtain a reasonably large amount of variance in the dependent variables. In this regard, data are gathered on all the firms listed in the five GCC countries that changed audit firm brand-name (as measured by classification as Big 4, second tier or local) that fit the above criteria. This is because it is expected that brand-name differences are correlated with size differences. But, the independence and expertise variables are difficult to compute prior to actual sample selection. Therefore, no attempt has been made to assure variance in these categories.

Table 7.1  
*Summary of Auditor Change Types (Big 4/Second Tier/Local – Classifications\*)*

	Upgrade Change		Par Change	Downgrade Change		Total
	+2	+1	0	-1	-2	
2006	0 (0%)	0 (0%)	3 (4%)	1 (6%)	0 (0%)	4 (4%)
2007	1 (100%)	5 (24%)	10 (15%)	8 (44%)	0 (0%)	24 (22%)
2008	0 (0%)	10 (48%)	30 (44%)	6 (33%)	1 (100%)	47 (43%)
2009	0 (0%)	6 (28%)	25 (37%)	3 (17%)	0 (0%)	34 (31%)
Totals	1 (1%)	21 (19%)	68 (62%)	18 (17%)	1 (1%)	109 (100%)

\*Where

+2 = from local firm to Big 4

+1 = from local audit firm to second tier audit firm, or from second tier audit firm to Big 4

0 = no change in classification

-1 = from Big 4 to second tier audit firm, or from second tier audit firm to local audit firm

+2 = from Big 4 to local audit firm

Table 7.1 provides a classification for auditor change types (Big 4/second tier/local) for the considered period from 2006 to 2009. Column 1 shows that one company (1%) had changed from local audit firm to a Big 4 audit firm during the considered period. Another 21 (19%) companies, as portrayed by column 2, had changed either from local audit firm to second tier audit firm or from second tier audit firm to Big 4. It is worth noting that about 22 (20%) of the sample companies had experienced an upgrade change in their audit quality during the considered period of study. A total of 68 (62%) companies had changed their auditors within the same classification of auditor type as shown in column 3. They had experienced par change in their audit quality in terms of brand-name. Column 4 exhibits that 18 (17%) companies had either changed from Big 4 to second tier audit firm or from second tier audit firm to local audit firm. Column 5 indicates that one company (1%) had changed from Big 4 audit firm to local audit firm. It is worth to highlight that 19 (18%) companies had experienced a downgrade change in



their audit quality. Thus, the majority of the auditor-change cases have been taken place among the Big 4 audit firms during the considered period of study which gives an indication that GCC audit market is dominated by the Big 4 audit firms.

It is also exhibited by Table 7.1 that the frequency of auditor change had occurred in 2007 (22%), 2008 (43%) and 2009 (31%). This is due to the learning by time of the significance of corporate governance and the enforcement of implementing the codes of corporate governance that have been taken place surrounding this time period. The start-up of this process begins in the 2007 reaching the peak in 2008. These circumstances were a result of establishing GCC common market in January 1<sup>st</sup>, 2008. The common market grants national treatment to all GCC firms and citizens in any other GCC country, and in doing so removes all barriers to cross country investment and services trade. Consequently, these events have rearranged the alignment of the auditor-client relationships that, in turn, has led to many auditor changes cases in 2008 (Arab Times, 2012).

### **7.3 Descriptive Statistics**

#### **7.3.1 Independent Variables**

Table 7.2 and Table 7.3 display a statistical description of the continuous and dichotomous variables used in the regressions for the two-year periods; before ( $t-1$ ) and after ( $t_1$ ) the auditor selection.

Table 7.2  
*Descriptive Statistics of Continuous Variables*

Variables	<i>(t<sub>-1</sub>: n= 104; t<sub>1</sub>: n = 108)</i>				
	Mean	Median	Min	Max.	Std.Dev
<b>Panel A: Independent Variables</b>					
BDE_SCORE_ <i>t</i> <sub>-1</sub> (decimal)	0.58	0.57	0.29	0.86	0.16
BDE_SCORE_ <i>t</i> <sub>1</sub> (decimal)	0.56	0.57	0.14	0.86	0.15
ACE_SCORE_ <i>t</i> <sub>-1</sub> (decimal)	0.81	0.83	0.33	1.00	0.18
ACE_SCORE_ <i>t</i> <sub>1</sub> (decimal)	0.82	0.83	0.33	1.00	0.16
GOV_OWN_ <i>t</i> <sub>-1</sub> (%)	7.47	00.00	00.00	74.30	15.00
GOV_OWN_ <i>t</i> <sub>1</sub> (%)	8.03	00.00	00.00	74.30	16.12
FAMILY-OWN_ <i>t</i> <sub>-1</sub> (%)	11.21	00.00	00.00	82.77	17.24
FAMILY-OWN_ <i>t</i> <sub>1</sub> (%)	10.71	00.00	00.00	82.77	16.72
DOMESTIC_OWN_ <i>t</i> <sub>-1</sub> (%)	23.47	0.140	00.00	100.00	25.54
DOMESTIC_OWN_ <i>t</i> <sub>1</sub> (%)	26.17	14.90	00.00	100.00	28.68
FEE_ <i>t</i> <sub>-1</sub> (decimal)	0.12	0.005	0.00	1.00	0.27
FEE_ <i>t</i> <sub>1</sub> (decimal)	0.09	0.004	0.00	1.00	0.25
LASSET_ <i>t</i> <sub>-1</sub> (\$ mil)	1.17	0.14	0.002	34.38	4.78
LASSET_ <i>t</i> <sub>1</sub> (\$ mil)	1.15	0.14	0.002	34.38	4.72
ROA_ <i>t</i> <sub>-1</sub>	9.91	9.20	-12.51	42.46	10.38
ROA_ <i>t</i> <sub>1</sub>	8.18	8.27	-17.44	35.08	10.22
LEV_ <i>t</i> <sub>-1</sub>	21.00	13.21	0.00	96.13	21.89
LEV_ <i>t</i> <sub>1</sub>	19.76	12.34	0.00	95.41	21.38
<b>Panel B: Dependent Variables</b>					
AUD_SIZE_ <i>t</i> <sub>-1</sub>	0.08	0.10	-0.86	1.00	0.29
AUD_SIZE_ <i>t</i> <sub>1</sub>	0.09	0.11	-0.86	1.00	0.30
AUD_INDE_ <i>t</i> <sub>-1</sub>	0.03	-0.00	-0.99	0.99	0.32
AUD_INDE_ <i>t</i> <sub>1</sub>	0.03	-0.00	-0.99	0.99	0.32
AQ_SCORE_ <i>t</i> <sub>-1</sub>	2.35	0.94	0.00	26.63	3.82
AQ_SCORE_ <i>t</i> <sub>1</sub>	2.31	0.99	0.00	26.57	3.78

As reported in Table 7.2, the mean (median) values of the effectiveness of board of directors (*BDE\_SCORE*) for the periods before (*t*<sub>-1</sub>) and after the auditor selection (*t*<sub>1</sub>) are 0.58 (0.57) and 0.56 (0.57), respectively. This suggests that, on average, there is a decrease in the degree of board effectiveness in the year subsequent to the auditor selection (*t*<sub>1</sub>) compared with the year prior to the auditor selection (*t*<sub>-1</sub>), although the median board of directors effectiveness is identical for both the pre-auditor selection year (*t*<sub>-1</sub>) and the subsequent year after the selection is made (*t*<sub>1</sub>). With respect to audit

committee effectiveness (*ACE\_SCORE*), the mean (median) values for the period prior to the auditor ( $t_{-1}$ ) and the period subsequent to the auditor selection ( $t_1$ ) are 0.81 (0.83) and 0.82 (0.83), respectively. This implies that there is an increase in the level of audit committee effectiveness in the year subsequent to the auditor selection ( $t_1$ ) compared with the pre-auditor selection year ( $t_{-1}$ ), in spite of the fact that the median audit committee effectiveness remains the same in the considered periods ( $t_{-1}$  &  $t_1$ ).

With regard to the government ownership (*GOV\_OWN*), the mean values for the year prior to the auditor selection ( $t_{-1}$ ) and for the year subsequent the auditor selection ( $t_1$ ) are 7.47% and 8.03%, respectively, with identical median values of 0.00. The minimum (maximum) values of the government ownership for the both periods before ( $t_{-1}$ ) and after the auditor selection ( $t_1$ ) are 0.00 (74.30%) and 0.00 (74.30%), respectively. These statistics suggest that there is an increase in the percentage of government owned companies in the two-year periods surrounding the auditor selection ( $t_{-1}$  &  $t_1$ ). The maximum values of the government ownership in the GCC indicate that there is a dominance presence of the government owning high percentages of companies' shares up to 74.30%. The very large difference between the mean and median of the government ownership is due to the inclusion of several client firms with very large government ownership.

In terms of the *FAMILY\_OWN*, the mean values for the both periods; before ( $t_{-1}$ ) and after ( $t_1$ ) the successor auditor selection are 11.21 and 10.71, respectively with equal median values of 0.00. The minimum (maximum) values for the both periods before ( $t_{-1}$ ) and after the successor auditor selection ( $t_1$ ) are 0.00 (82.77%) and 0.00 (82.77%),

respectively. The statistics of mean values show that there is a decrease in the proportion of family ownership in the surrounding period of auditor selection. The minimum (maximum) values exhibit that there is a high presence of family ownership among GCC companies reaching up to 82.77%. The very large difference between the mean and median of the family ownership is because of the inclusion of several client firms with very high percentages of family ownership.

With respect to the *DOMESTIC\_OWN*, the mean (median) values for the year of the predecessor auditor ( $t_{-1}$ ) and the year subsequent the successor auditor ( $t_1$ ) are 23.47% (0.14%) and 26.17% (14.90), respectively. The minimum (maximum) values of the domestic corporate ownership for the both periods; before ( $t_{-1}$ ) and after ( $t_1$ ) the successor auditor are 0.00 (1.00) and 0.00 (1.00), respectively. The statistics of the domestic corporate ownership mean (median) values portray that there is an increase tendency of the domestic corporate ownership in the years surrounding the auditor selection. There is also an indication shown by the minimum (maximum) statistics that there is a high existence of the domestic corporations owing high percentages of GCC companies. Among the three dominant groups; namely government, family and the domestic corporations, the latter group has the highest dominant presence in GCC market followed by family and, then, the government. It is also worth to note that the very large variation between the mean and median values of the domestic corporate ownership is due to the fact that there are several companies with very large domestic corporate ownership have been included in the sample. This inclusion does not result in large outliers as can be seen in the following section.

In terms of the *FEE*, the mean (median) values for the year prior to the auditor selection ( $t_{-1}$ ) and the year after the auditor selection ( $t_1$ ) are 0.12 (0.005) and 0.09 (0.004), respectively. On average, this suggests that there is a decrease tendency in the audit fees in the period surrounding the auditor selection. Inclusion of several client firms with large percentages of audit fees causes a large difference between the mean and median of the audit fees. As for *LASSET*, the mean (median) values for the both periods; the year of the predecessor ( $t_{-1}$ ) and the subsequent year of the successor ( $t_1$ ) are \$ mil 1.17 (0.14) and \$ mil 1.15 (0.14), respectively. This exhibits that the firm size in GCC countries increases in the period surrounding the auditor selection. And, the difference between the mean and median values is because of including several client firms with large sizes. As for the *ROA*, the mean (median) values for the both periods; before ( $t_{-1}$ ) and after ( $t_1$ ) the auditor selection are 9.91 (9.20) and 8.18 (8.21), respectively. There is a decrease, on average, in GCC companies' firm performance in the period surrounding the auditor selection. With respect to the *Lev*, the mean (median) values for the year of the predecessor ( $t_{-1}$ ) and the year subsequent to the successor ( $t_1$ ) are 21.00 (13.21) and 19.76 (12.34), respectively. The leverage mean indicates that there is a decrease trend in the debt level of GCC companies in the time surrounding the auditor selection.

As depicted by Table 7.3, the number of companies with *MGT\_CHANGE* is relatively small compared with non-management change companies in year  $t_{-1}$  [29 (28%)] and is closer to the half in year  $t_1$  [49 (45%)]. Comparing the management change between the year of the predecessor auditor ( $t_{-1}$ ) and the year subsequent the successor auditor ( $t_1$ ), the management change in year  $t_1$  is higher than the management changes in year  $t_{-1}$  by 41%, suggesting that the event of management change in the period subsequent to the

auditor selection can explain more about the auditor selection, quality-differentiated audits.

Table 7.3  
*Descriptive Statistics (Percentage) for Dummy Variables*

Dichotomous Variables	<i>t</i> <sub>-1</sub> : n= 104; <i>t</i> <sub>1</sub> : n = 108		Totals
	1	0	
MGT_CHANGE_ <i>t</i> <sub>-1</sub>	29 (28%)	75 (72%)	104 100%
MGT_CHANGE_ <i>t</i> <sub>1</sub>	49 (45%)	59 (55%)	108 100%

Table 7.4 presents the descriptive statistics of the number of the dominant group ownership, namely; government and its agencies, family, and domestic corporate owners.

Table 7.4  
*GCC Ownership Structure of the Sample Companies*

Ownership Type	Government Ownership		Family Ownership		Domestic Corporate Ownership		Foreign-Corporate Ownership	
	<i>t</i> <sub>-1</sub>	<i>t</i> <sub>1</sub>	<i>t</i> <sub>-1</sub>	<i>t</i> <sub>1</sub>	<i>t</i> <sub>-1</sub>	<i>t</i> <sub>1</sub>	<i>t</i> <sub>-1</sub>	<i>t</i> <sub>1</sub>
Number of dominant groups who own 5% or more	37 (36%)	38 (35%)	51 (49%)	49 (45%)	67 (64%)	72 (67%)	7 (0.07%)	5 (0.05%)
Number of companies with 0% ownership of the dominant groups	67 (64%)	70 (65%)	53 (51%)	59 (55%)	37 (36%)	36 (33%)	97 (93%)	103 (95%)
Total	104 (100%)	108 (100%)	104 (100%)	108 (100%)	104 (100%)	108 (100%)	104 (100%)	108 (100%)

Table 7.4 shows that there is no variation in the foreign-controlled ownership which justifies the reason of excluding such type of the ownership from Model 2. In this regard, it is indicated that international investors, who take corporate governance very seriously, are often absent from GCC markets because of the lack of sound corporate

governance frameworks (INSEAD, 2010). The surveys conducted by AL Majlis, The GCC Board Directors Institute in 2009 has found that, in general, the current corporate governance frameworks of GCC countries do not meet the threshold sought by international investors (AL Majlis, The GCC Board Directors Institute, 2009). This indicates for possible improvements in both the culture of investment and the degree of international confidence in these respective economies.

The highest number of ownership type is the domestic corporate shareholder who dominates the majority of the companies in GCC ( $t_{-1}$ : 67 (64%);  $t_1$ : 72 (67%). This goes in line with what has been found by Claessens *et al.* (2000) that domestic corporate are among the largest group of blockholders in many emerging markets. The second highest dominant ownership in number is the family shareholders ( $t_{-1}$ : 51 (49%);  $t_1$ : 49 (45%). Government ownership is ranked as the third dominant group in GCC market ( $t_{-1}$ : 37 (36%);  $t_1$ : 38 (35%).

### **7.3.2 Dependent Variables**

The preponderance of positive mean (median) changes in the dependent variables (name-brand, auditor size, independence, expertise and the combined measure) indicates that the general change was to larger, higher quality auditors. The difference in the mean (median) values for the dependent variables between the prior year to the auditor selection ( $t_{-1}$ ) and the subsequent year to the auditor selection ( $t_1$ ) is due to the dropping of five and one outliers, respectively. The very large difference in terms of value and sign between the mean and median of the auditor independence is because of the

inclusion of several client firms with very large auditor independence. Both models are generally constant over the two measurements dates and they show almost equivalent values for the descriptive analysis.

The Principal Component Analysis (PCA) using the varimax rotation is applied to combine the four variables, namely; brand-name auditor, auditor size, auditor independence and auditor expertise. The PCA is a factor analysis technique used to extract common factors from a set of variables. This is achieved by performing an eigenvalue analysis on the correlation matrix of the variables of interest to determine the linear combination of the variables that will account for the maximum amount of variance. The common factor is used in the hypotheses tests as a measure of the audit quality. For all the three variables (brand-name, independence and expertise), the overall values of Kaiser-Meyer-Olkin were ( $t_{-1}$ : .574) in the predecessor year and ( $t_1$ : .578) in the subsequent year to the successor, exceeding the recommended value of .50 (Hair *et al.*, 2010). The Bartlett test was highly significant in the both periods ( $t_{-1}$ :  $p = .00$ ;  $t_1$ :  $p = .00$ ). This indicates the degree of the appropriateness of the factor analysis in a manner that it provides the statistical probability that the correlation matrix has significant correlations among at least some of the variables (Hai *et al.*, 2010). These suggest that the assumptions of factor analysis were met.

The PCA revealed the presence of two factors or components loading with two eigenvalues exceeding one for the both periods ( $t_{-1}$  &  $t_1$ ). A total of three variables (brand-name, independence and expertise) were loaded on the first factor with factor loadings between .869 and .676 in the  $t_{-1}$  and between .865 and .660 in year  $t_1$ . And, the



fourth variable, auditor size, was loaded as only one variable on the second factor with factor loadings of .892 in year  $t-1$  and .882 in year  $t_1$ . It is worth noting that the first three audit quality surrogates (brand name, independence and expertise) have been combined under one component to reflect the common factor measuring the auditors' ability to alleviate agency conflicts. In the same regard, auditor size has been extracted as a second factor to act as a surrogate variable of audit quality that is representative of that factor. Economists argue that when it is difficult to measure quality of services in quality-differentiated markets, market participants have incentives to devise arrangements (surrogates for quality) that minimize such measurement costs for buyers (Barzel, 1982).

Although it is still a problematic giving a specified definition to audit quality, this result suggests that, in GCC countries, the audit quality has two primary definitions, but interlinked sources of demand for audit quality: (1) a combined measure of auditor characteristics, namely; brand-name, independence and expertise, and (2) auditor size. In terms of the first definition, the combined measure, this type of audit service represents the information demand (Dopuch and Simunic, 1982) and insurance demand (Beattie & Fearnley, 1995). The information demand signals the quality of the management's representations concerning financial performance. The insurance demand stems from investors' desire to indemnify themselves from financial losses via the auditor's professional liability exposure. Importantly, DeFond (1992) has reported that the combination measure captures the same underlying construct- the auditor's ability to alleviate agency conflicts. The combined variables are expected to be a good measure of audit quality when considering as a group and not individually in a manner that they

would increase the power of the tests by reducing noise in the dependent variable. Further, Nunnally and Bernstein (1994) argue that combining several variables provides greater construct validity and scientific generalizability in the domain as a whole relative to a single measure. This is due to the fact that these variables act in a complementary mode which might explain the conflicting results reported by the previous studies as they consider each variable in isolation from the others ignoring the point that the effectiveness of a single variable depends on the others.

As for the auditor size, this type of service reflects the agency demand which is closely related to the information demand through which auditing services is demanded to increase the credibility of the financial statements and their reliability as a monitoring device (DeFond, 1992; Francis & Wilson, 1988). This single surrogate variable, auditor size, has a factor loading that is substantially higher than all other factor loadings in the both periods ( $t_{-1}$  &  $t_1$ ), but, as shown by the anti-image matrices, the MSA value is lesser than 0.5, supporting its deletion from the analysis in year  $t_{-1}$ . Using this single variable as a representative of the audit quality may cause some problems (Hair *et al.*, 2010): (1) it does not address the issue of measurement error encountered when using single measures, and (2) it runs the risk of potentially misleading results by selecting only a single variable to represent a perhaps more complex results. Therefore, this variable has been excluded and the loadings of the combined measure of audit quality have been recalculated.

As shown in Table 7.5, the latent root criterion for number of factors to derive would indicate that there was one component loading to be extracted with eigenvalue more than

one for the both periods ( $t_{-1}$ : 1.83;  $t_1$ : 1.81) and with simple structure. This factor captures 61.01% and 60.39% of the total variance in the variables for the both periods before ( $t_{-1}$ ) and after ( $t_1$ ) the auditor selection, respectively. The factor solution has explained more than half of the original variables' variance, so the communality values for the both periods ( $t_{-1}$ & $t_1$ ) are higher than 0.50. The Kaiser-Meyer-Olkin values were identical for the both periods; before ( $t_{-1}$ : .58;  $n = 104$ ) and after ( $t_1$ : .58;  $n = 108$ ) the auditor selection, exceeding the recommended value of .50.

Also, the sample size for the both periods exceeds the preferably number which is 100 or larger (Hair *et al.*, 2010). The Barlett's tests of sphericity were highly significant for the both periods ( $t_{-1}$ :  $p = .00$ ;  $t_1$ :  $p = .00$ ), supporting the factorability of the correlation matrix. In addition, an examination of the measure of sampling adequacy for each item fall in the acceptable range ( $t_{-1}$ : .55 - .62;  $t_1$ : .55 - .62) (Hair *et al.*, 2010). At this stage of statistical analysis of the PCA, the assumptions of factor analysis were met. The factor loadings are between .71 and .87 in year  $t_{-1}$  and between .70 and .87 in year  $t_1$ . These loadings were greater than .30 which is considered to meet the minimum level required (Hair *et al.*, 2010). Reliability (Cronbach's Alpha) values for this factor are .65 in year  $t_{-1}$  and .64 in year  $t_1$ . These values fall within the accepted range (Hair *et al.*, 2010). Since this factor measures the ability of auditors alleviating the agency conflicts, its original name is retained.

Table 7.5  
*Principal Component and Reliability Analyses on Audit Quality*

<b>Variables</b>	<b>Factor Loadings (<math>t_{-1}</math>)</b>	<b>Factor Loadings (<math>t_1</math>)</b>
Name-Brand Auditor	.87	.87
Auditor Independence	.75	.75
Auditor Expertise	.71	.70
Eigenvalue	1.83	1.81
% of variance	61.01	60.39
Kaiser-Meyer-Olkin (KMO)	.58	.58
Bartlett's Test of Sphericity: Approx Chi-Square	57.41	56.75
df	3	3
Sig	.00	.00
Cronbach's Alpha ( $\alpha$ )	.65	.64

It is worth to highlight that the combined measure of audit quality in DeFond (1992)'s sole study, a U.S based-research, comprises of four surrogates, namely; brand-name auditor, auditor independence, auditor size and auditor expertise. This suggests that, in the U.S setting, the audit quality as one bundle or as an aggregation measurement encompasses of these four auditor characteristics. Following DeFond (1992)'s combined measure of audit quality in GCC context, a different result has been reported. It consists of only brand-name auditor, auditor independence and auditor expertise. The difference in the structure of the combined measure of audit quality between U.S and GCC countries could be attributed to differences exist in the institutional frameworks, audit and business environments, and culture.

#### **7.4 Diagnostic Tests**

Conducting the Ordinary-Least Square OLS analyses successfully, several regression diagnostic tests have to be identified in order to confirm that the assumptions of the OLS are met and to avoid misleading results. The OLS diagnostics, in the present study,

include: tests of outliers or influential observations (pre-estimation procedure), tests of multicollinearity (post-estimation procedure), tests of normality (post-estimation procedure), tests of linearity (post-estimation procedure), tests of homoskedasticity (post-estimation procedure), tests of autocorrelation (post-estimation procedure), and model specification tests (post-estimation procedures) (Hair *et al.*, 2010; Menard, 2002).

#### **7.4.1 Tests of Outliers**

As indicated earlier in details (chapter 6, section 6.4.1) that Mahalanobis  $D^2$  measure is applied by this study to detect for the probability of outliers existence. The Chi-Square table exhibits that cases with a Mahalanobis Distance of more than  $X^2 (10, 0.001) = 29.59$  are considered outliers, and then deleted due to their influence distorting obtaining robust results. In the model of year  $t_{-1}$ , the year of the predecessor auditor, five companies have been detected as multivariate outliers. And, in the model of year  $t_1$ , the year subsequent to the successor auditor, one case has been documented as a multivariate outlier.<sup>38</sup>

#### **7.4.2 Tests of Multicollinearity**

As it has been explained earlier in details (chapter 6, section 6.4.2), this study uses the correlation matrix, variance inflation factor (VIF) and tolerance (1/VIF) as examinations identifying the possible existence of multicollinearity.

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<sup>38</sup> Pallant (2010) document cases with standardized residual of more than 3.3 or less than -3.3 as outliers. In this study, the maximum standard residual is ( $t_{-1}$ : 1.079;  $t_1$ :0.912) and the minimum is ( $t_{-1}$ : -0.007;  $t_1$ : -0.062) This indicates that no outliers have been detected.

Table 7.6:  
Correlation Matrix of Independent Variables for the Two-year Period ( $t_{-1}$  &  $t_1$ )

	BOD_SCORE	ACE_SCORE	GOV_OWN	FAMILY_OWN	DOMESTIC_OW N	FEE	LASSET	ROA	LEV	MGT_CHANGE
<b>Panel A: Year <math>t_{-1}</math></b>										
BDE_SCORE	1									
ACE_SCORE	.203*	1								
GOV_OWN	.180	.069	1							
FAMILY_OWN	-.061	.023	-.247*	1						
DOMESTIC_OWN	.276**	.085	-.226**	-.0158*	1					
FEE	-.023	-.056	.096	.076	-.259**	1				
LASSET	-.360*	-.156	.197*	-.229*	-.221*	.424**	1			
ROA	.021	-.104	.205*	.012	-.009*	.280**	.198*	1		
LEV	.089	.105	-.230*	.254**	.102	-.157	-.074	-.172	1	
MGT_CHANGE	.282**	-.076	.132	.066	.075	-.074	.030	.080	.064	1
<b>Panel B: Year <math>t_1</math></b>										
BDE_SCORE	1									
ACE_SCORE	.016	1								
GOV_OWN	.137	.163*	1							
FAMILY_OWN	-.001	-.055	-.253**	1						
DOMESTIC_OWN	.193*	.026	-.253**	-.196**	1					
FEE	-.057	-.107	-.006	-.072	-.213*	1				
LASSET	-.170	-.250**	.245*	-.215**	-.288**	.315**	1			
ROA	-.029	-.016	.195*	.028	-.050	.100	.105	1		
LEV	.127	.007	-.155*	.148	.162	-.174	.037	-.375**	1	
MGT_CHANGE	-.067	-.016	.091	.157	-.056	.097	-.047	-.003	.003	1

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

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

As shown by Table 7.6, the correlation matrixes verify that no multicollinearity exists among the variables in the both models, pre-auditor selection ( $t_{-1}$ ) and post-auditor selection ( $t_1$ ), as none of the variables correlates above 0.90. All the variables have a correlation of equal to or less than .424 in  $t_{-1}$  and .375 in  $t_1$ . With respect to the VIF and tolerance, multicollinearity is not a problem in this study for the both periods ( $t_{-1}$  &  $t_1$ ) since tolerance values are higher than .10 and VIF values are lesser than 10 (Hair *et al.*, 2010) as shown in Table 7.7.

Table 7.7  
*Multicollinearity Statistics of Assessing VIF and Tolerance Values*

Independent Variables	VIF		Tolerance (1/VIF)	
	$t_{-1}$	$t_1$	$t_{-1}$	$t_1$
BDE_SCORE	1.61	1.17	.622	.856
ACE_SCORE	1.10	1.17	.906	.853
GOV_OWN	1.43	1.54	.699	.649
FAMILY_OWN	1.31	1.37	.764	.728
DOMESTIC_OWN	1.38	1.42	.723	.704
FEE	1.46	1.22	.686	.821
LASSET	1.70	1.52	.587	.660
ROA	1.19	1.23	.837	.812
LEV	1.20	1.34	.831	.749
MGT_CHANGE	1.16	1.00	.859	.928

### 7.4.3 Tests of Normality

The assumption of normal distribution means that the residuals in the model are random, normally distributed, variables with a mean of zero. So that the differences between the model and the observed data are most frequently zero or very close to zero. This assumption is required for valid hypotheses testing. Checking the normality assumption in the multiple regressions, both the individual variables and the vairate (regression model) are tested. The normality of each individual variable is checked using the standard skewness and kurtosis values for the both periods ( $t_{-1}$  &  $t_1$ ). The variable is considered reasonably normal as the standard skewness and kurtosis is within  $\pm 1.96$  (at 0.05 significance level) and  $\pm 2.58$  (at 0.01 significance level) (Hair *et al.*, 2010). Variables that are not normal have been transformed using the power of ladders function in the STATA package due to its ability exhibiting the best formula of transformation. With respect to the regression model normality, several graphs based on the predicted

residuals were used such as the standardized normal probability plot (normal P-P plot), Box plot, Q-Q plot and histogram of residuals.<sup>39</sup>

### 7.4.3 Tests of Linearity

Linearity assumes that a linear relationship exists between the dependent variables and the independent variables through which the change in the dependent variable is associated with the independent variable. Numerically, the linearity is not a problem if the standard deviation of the dependent variable is higher than the standard deviation of the residuals (Hair *et al.*, 2010). Graphically, in a plot of the *observed versus predicted values* or a plot of *residuals versus predicted values*, the points should be symmetrically distributed around a diagonal line the former plot or a horizontal line in the latter plot. Hence, for this study, linearity assumption is met for the both periods ( $t_{-1}$  &  $t_1$ ).

### 7.4.4 Tests of Homoscedasticity

Homoscedasticity of variance means that the residual variance should be constant in a manner that residuals are dispersed randomly throughout the range of the estimated dependent. The presence of unequal variance indicates to one of the most common assumption violations in multivariate analysis known as heteroskedasticity. This problem can cause a bias value for the true variance, the OLS estimators will be

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<sup>39</sup> To obtain better results of the normality, the standardized residual of the data set is calculated to make sure that the distribution of the residuals is approximately normal by falling between  $-2$  and  $+2$  ( $t_{-1}$ : 1.079 & -1.317;  $t_1$ : 0.912 & -1.241). In addition, the standardized residuals are tested for normality using individual tests of skewness and kurtosis (S & K:  $t_{-1}$ : -0.131 & -0.200; S & K:  $t_1$ : -0.081 & -0.508), Kolmogorov-Smirnov ( $t_{-1}$ : 0.200;  $t_1$ : 0.200) and Shapiro-Wilk ( $t_{-1}$ : 0.872;  $t_1$ : 0.474).



inefficient and no longer the best linear unbiased estimator (BLUE), and may result in higher  $t$  and  $F$  values where the null hypotheses may be rejected when they should not be rejected if the problem is addressed. Several tests are available using STATA packages. Graphically, a graph of residuals versus predicted dependent values that gives no pattern values means that heteroskedasticity is not a problem. Numerically, *White General Heteroskedasticity Test*, *Breuch-Pagan/Cook-Weisberg Test* are used by this study to detect the possibility of the present of heteroskedasticity. The null hypothesis that the variance of the residuals was homogeneous was tested. If the p-value is higher than 0.05, it is an indication that the study fails to reject the hypotheses and the residual is deemed to be homogeneous. Based on the output of either the graphs or numerically tests, heteroskedasticity is not a problem for this study checked for the both periods ( $t_{-1}$  &  $t_1$ ).

#### **7.4.5 Tests of Autocorrelations**

Autocorrelation indicates to the degree of correlation exists among series of observations in time series data or in cross-sectional data. The regression model assumes that the error term relating to an observation is not influenced by the disturbance term relating to any other observation. Ideally, *Durbin-Watson* value should be approximately 2.0 when there is no autocorrelation either positive or negative serial correlation (Gujarati, 2003). The accepted  $d$ -statistic value should range from 1.5 to 2.5 in order to validate the model of not having an autocorrelation problem. In this study, *Durbin-Watson* test  $d$ -statistic values are 2.19 in year  $t_{-1}$  and 2.10 in year  $t_1$ . Therefore, based on the  $d$ -statistic values,

the residuals are reasonably independent on each other and there is no occurrence of serious autocorrelation problems.

#### **7.4.6 Model Specification Tests**

As indicated earlier (chapter 6, section 6.4.3), testing for omitted variables bias and link function in multivariate regression is of importance because including or omitting any irrelevant variable may cause model specification errors that, in turn, affects the estimation of regression coefficients. In this study, STATA commands called *Linktest* and *Ramsey* are used to detect the model specification errors. With respect to the *Linktest*, the *p*-values for the *variable\_hat* for the pre-auditor selection model ( $t_{-1}$ ) and post-auditor selection model ( $t_1$ ) were 0.00 and 0.00, respectively. The *variable\_hatsq*'s *p*-values for the pre-auditor selection model ( $t_{-1}$ ) and post-auditor selection model ( $t_1$ ) were 0.430 and 0.112, respectively. These statistics indicate that the both models ( $t_{-1}$  &  $t_1$ ) are properly specified where there are no additional significant independent variables except by chance.

In terms of *Ramsey* test, it is used to test the null hypothesis that no variable is omitted from the model. The higher the significance of the *p* value (more than 0.05), the higher the probability of no omitted variable detected in the model. Within the STATA package, there are two commands to be formed: (1) *ovtest*. This command tests for omitted structure by including powers of the predicted values. The statistical values of the *ovtest* for the pre-auditor selection model ( $t_{-1}$ ) and the post-auditor selection model ( $t_1$ ) were 0.062 and 0.127, respectively. (2) *ovtest, rhs*. This command tests for the

omitted structure by including powers of the independent variables. The statistical values of the *ovtest*, *rhs* for the pre-auditor selection model ( $t_{-1}$ ) and the post-auditor selection model ( $t_1$ ) were 0.213 and 0.453, respectively.

## 7.5 Multivariate Results

Ordinary-Least Square (OLS) was used to evaluate the level of effect of the hypothesized variables on the decision of hiring a differentiated-audit quality using STATA. Table 7.8 reports the estimated model coefficients, the associated significant test results, the adjusted  $R^2$  and the  $F$ -values for the both models; before ( $t_{-1}$ ) and after ( $t_1$ ) the auditor selection. In particular, Table 7.8 portrays the comparative results of the OLS regressions for each of the two-time periods examined ( $t_{-1}$ & $t_1$ ) using the principal components combined dependent variable of audit quality. These two periods encompasses both sides of the year of the auditor selection. The  $F$ -value for each year ( $t_{-1}$ & $t_1$ ) surrounding the auditor selection is statistically significant at the 1% level, indicating that the overall model can be interpreted. The adjusted  $R^2$  for the two-year periods; the year of the predecessor auditor ( $t_{-1}$ ) and the subsequent year to the auditor selection ( $t_1$ ) are 14.38% and 14.04%, respectively. The statistics show that the pre-auditor selection model  $t_{-1}$  has explained 14.38% of the total variance in the audit quality and the post-auditor selection model  $t_1$  has explained 14.04% of this variance. This indicates a moderately good fit and comparable to the  $R^2$  in the study of DeFond (1992) and higher than the  $R^2$  in the other studies used an individual audit quality surrogate (Abbott & Parker, 2000; Chan *et al.*, 2007). The adjusted  $R^2$ s indicate that the period of time surrounding the auditor selection ( $t_{-1}$ & $t_1$ ) provides a good explanatory power for

the auditor selection behavior which suggests that managers may react and anticipate agency conflict changes when they choose new auditors.

Table 7.8  
*OLS Analysis Results–Auditor Selection (Model 2)*

Variables	Expected Sign	Pre-Auditor-Selection Model 2 <sub>a</sub> ( $t_{-1}$ )			Post-Auditor-Selection Model 2 <sub>b</sub> ( $t_1$ )		
		Coef.	<i>t</i>	<i>P</i> >   <i>t</i>	Coef.	<i>t</i>	<i>P</i> >   <i>t</i>
<b>Corporate Governance Mechanisms</b>							
BDE_SCORE	+	-0.31	-0.43	0.666	0.73	1.16	0.247
ACE_SCORE	+	0.13	0.25	0.803	-0.04	-0.07	0.945
GOV_OWN	-	0.07	0.50	0.621	0.11	0.77	0.444
FAMILY_OWN	+	1.07	1.83	<b>0.070</b>	1.46	2.40	<b>0.018</b>
DOMESTIC_OWN	+	0.99	2.44	<b>0.017</b>	0.73	2.02	<b>0.046</b>
<b>Audit-Specific Characteristics</b>							
FEE	+	0.41	3.70	<b>0.000</b>	0.36	3.65	<b>0.000</b>
<b>Firm-Specific Characteristics</b>							
LASSET	+	0.03	0.20	0.843	0.12	0.12	0.320
ROA	+	-0.03	-3.03	<b>0.003</b>	-0.02	-2.65	<b>0.009</b>
LEV	+	-0.002	-0.44	0.664	-0.01	-1.22	0.225
MGT_CHANGE	+	0.43	2.02	<b>0.046</b>	-0.02	-0.11	0.910
Adjusted $R^2$			14.38		14.04		
Model <i>F</i> -stat.			2.73		2.75		
<i>P</i> -value			0.006		0.005		
No. of Observations			104		108		

**Bold** = significance at 1%, 5% and 10%

Surrounding the two-year periods of the study; before ( $t_{-1}$ ) and after the auditor selection ( $t_1$ ), two of the five corporate governance mechanisms, namely; family ownership *FAMILY\_OWN* ( $t_{-1}$ : *p*-value = 0.07;  $t_1$ : *p*-value = 0.018) and domestic corporate ownership *DOMESTIC\_OWN* ( $t_{-1}$ : *p*-value = 0.07;  $t_1$ : *p*-value = 0.01) were consistently significantly associated with the audit quality, suggesting that client firms in the GCC demand higher audit quality in reaction to and in anticipation for changes in family ownership and domestic corporate ownership.

The remaining corporate governance mechanisms, board of directors effectiveness *BDE\_SCORE*, audit committee effectiveness *ACE\_SCORE* and government ownership *GOV\_OWN*, were insignificant in the both periods ( $t_{-1}$  &  $t_1$ ). In terms of the audit-specific characteristic, audit fees *FEE*, a significantly positive association has been reported with audit quality ( $t_{-1}$ :  $p$ -value = 0.000;  $t_1$ :  $p$ -value = 0.000), indicating that GCC client firms demand a higher audit quality in reaction to and in anticipation for changes in the audit fees. With regard to the firm-specific characteristics, firm performance *ROA* ( $t_{-1}$ :  $p$ -value = 0.003;  $t_1$ :  $p$ -value = 0.009) and management change ( $t_{-1}$ :  $p$ -value = 0.046) were found to have a negative and positive associations with the audit quality in year  $t_{-1}$  and only firm performance has also the same direction of association in year  $t_1$ . This suggests that GCC client firms demand a higher audit quality in reaction to changes in firm performance and management change and only in anticipation for firm performance.

The largest  $t$ -statistics in the period prior to the auditor selection ( $t_{-1}$ ) were 3.70 ( $p$ -value < 0.00), -3.03 ( $p$ -value < 0.01), 2.44 ( $p$ -value < 0.05), 2.02 ( $p$ -value < 0.05), and 1.83 ( $p$ -value < 0.10) which are for audit fees, firm performance, domestic corporate ownership, management change and family ownership, respectively. Therefore, these variables are significant in the period preceding the auditor selection which means that GCC client firms demand audit quality in reaction to changes in these variables. As for the period subsequent to the auditor selection ( $t_1$ ), the largest  $t$ -statistics were 3.65 ( $p$ -value < 0.00), -2.65 ( $p$ -value < 0.01), 2.40 ( $p$ -value < 0.05) and 2.02 ( $p$ -value < 0.05) which are for audit fees, firm performance, family ownership and domestic corporate ownership,

respectively. This suggests that client firms in the GCC demand a higher audit quality in anticipation for changes in these variables.

This suggests that the five variables have a comparable degree of importance in the model of auditor selection. In particular, they make the strongest unique contribution in explaining the demand for higher audit quality. Therefore, the hypothesis that there is a significant effect of corporate governance mechanisms, audit-specific characteristic and firm-specific characteristics on the demand for audit quality in the preceding and subsequent years of auditor selection is accepted.

### **7.5.1 Corporate Governance Mechanisms**

Inconsistent with expectations, *BDE\_SCORE* ( $t_{-1}$ :  $p$ -value = 0.666;  $t_1$ :  $p$ -value = 0.247) is insignificantly related to *AQ\_SCORE* in either period, suggesting that there is no association between the effectiveness of board of directors and the demand for audit quality. Thus, hypotheses  $H_{1b}$  is rejected. The role of the effective controlling and monitoring functions of the board of directors has no impact on the demand for audit quality in GCC countries. This result does not buttress the optimum combination of the features of board of directors by employing integration of economic theory (agency theory) and behavioral theories (managerial grid theory and attraction-selection-attrition framework).

One possible explanation is that the board's ability to perform its governance role by being effective in controlling, monitoring and addressing the various agency problems is

weaken due to the dominance of concentrated ownership that are often affected by political ties and family involvement. So that, the control of the company's board of directors and its ownership structure is closely aligned as the same corporate owners occupy seats on the board. Hence, the board is vulnerable to the effects of Arab culture and historical legacies; more particularly, the bureaucracy of its colonial status and the Bedouin culture. This is evident in the hierarchical authority and patriarchal method employed by Arab managers who practice nepotism in their selection of upper-level managers (Ali, 1990; Chahine & Tohme, 2009). This type of environment is underpinned by the "hegemony theory" where the board is considered as a passive mechanism that depends on top executives for their information (Kosnik, 1987; Demb & Neubauer, 1992) or owing to their other important commitments, the members of the board are not free to effectively carry out their duties (Linnet *al.*, 2003). Along a similar line, according to Aljifri and Moustafa (2007), a typical Arab firm does not select their board members optimally which often results in lack of coordination, communication and decision making issues. These are barriers to internal improvements in the effectiveness of corporate governance practices including demanding high quality of audit.

An alternative explanation is that mechanisms of corporate governance (i.e. board vs. ownership) substitute each other in GCC countries context. For example, the board of directors' role when pitted against the role played by the ownership structure in auditor change is an action of substitution. The reason lies in the fact that Arab owners who are also board members exercise their power to indicate their monitoring objectives. Moreover, this may be related to Arab financial markets that are characterized by under

development when compared to their Western developed countries based on many aspects such as regulatory frameworks, regulatory enforcement, and markets for corporate control (Chahine & Tohme, 2009).

This is owing to the novelty of these codes of corporate governance in GCC countries and hence, its full implementation in the business markets is impossible. Their implementation takes time and experience. Additionally, the attitudes and practices encouraged by GCC governments are still confined by legislations and government decrees. GCC countries' governments view the situation in light of their tribal system and consider it invaluable for their political stability where tribal attitudes and loyalty are highly valued (Abdel-Halim & Ashour, 1995; Ali & Azim, 1996; Helms, 1991).

Unexpected,  $ACE\_SCORE(t_{-1})$ :  $p$ -value = 0.803;  $t_1$ :  $p$ -value = 0.945) has insignificant association with  $AQ\_SCORE$  in the both periods ( $t_{-1}$  &  $t_1$ ), suggesting that there is no relationship between the effectiveness of audit committee and audit quality. Thus, hypothesis  $H_{2b}$  is rejected. This result implies that one of the most effective monitoring roles of the audit committee which is selecting a higher audit quality is deteriorated. This finding is inconsistent with the rationale advocating the optimal combination of audit committee characteristics through the integration of economic theory and behavioral theories (Cai *et al.*, 2009; Davis & Useem, 2002; Rediker & Seth, 1995).

A justification may well lie in the audit committee's newness in GCC business environment and the absent of serious penalties for non-implementation of the codes. Additionally, the audit committee's duties, objectives, their concept of independence and



scope are still ambiguous. More specifically, the most significant function of audit committee is merely the nomination of the external auditor and the justification of the criteria used for the same. In this regard, there is still lack of academic and professional qualifications among the members of the committee in a sense that it hinders them from keeping abreast with increasing developments. Also, in the GCC, some firms are unable to establish detailed rules and regulations identifying the audit committee's function (Al-Qarni, 2010; SCOPA, 2004). Another explanation for the lack of association between audit committee and audit quality is the reflection of support for the substitution hypothesis. Concentrated ownership generally takes over the decision making involving the selection of the degree of audit quality to complement the monitoring needs.

Inconsistent with expectations, *GOV\_OWN* ( $t_{-1}$ :  $p$ -value = 0.621;  $t_1$ :  $p$ -value = 0.444) has insignificant relationship with *AQ\_SCORE* in either period ( $t_{-1}$  &  $t_1$ ), suggesting that there is no association between the degree of the government ownership and the audit quality. Hence, hypothesis  $H_{3b}$  is rejected. This result gives support to the claim of Shleifer and Vishny (1997) that as owners obtain effective control of the firm, they can use earnings management to expropriate minority shareholders which, consequently, reduces the controlling owners' demand for auditing. This finding is also in consistent with the substitution function of corporate governance mechanisms (government ownership vs. family and corporate ownerships) with audit quality. This result could be attributed to several interpretations. This can be substantiated by the fact that GCC nations ensure to maintain a high level of political stability. For this reason, higher audit quality implies that the activities of government receive high degree of transparency as well as public attention which has the tendency of exposing favoritism in the political

arena (Leuz & oberholzer-Gee, 2006). Government in this case exercises control on firms to favor their supporting voters, their political contributors and others for their bribes (Bushman *et al*, 2004; La Porta *et al.*, 2002; Rajan & Zingales, 2003; Shleifer & Vishny, 1993, 1994).

Another possible interpretation is that government ownership is one of the dominant groups in GCC countries that create several agency problems including the absence of principal arise. First, the principal of the government shares is the government who is a representation of the entire GCC people. Second, ineffective corporate governance stemming from the ineffective monitoring of the principal over its agents and, third, corporate decisions are impacted by the political issues of the government (Chan *et al.*, 2007; Qi *et al.*, 2000; Xu & Wang, 1999), and minimal demand for independent auditing to produce quality accounting information (DeFond *et al.*, 2000; Want *et al.*, 2005).

Furthermore, investments by the government may possess some social and economic goals over that of profitability and, therefore, they have governance systems distinct from other ownership patterns. Also, government investors may not have the improvement of shareholders' value as their first priority and they may concentrate more on the objectives that are non-commercial (Mak & Li, 2001) which in turn may impact the inclination for high audit quality demand. From the viewpoint of accounting, the controlling ownership interest translates to the government-entity owner's inability to control the production of a firm's accounting information and its reporting practices.

Owing to the present regulatory profit mandate for additional capital raising of listed companies, government owners are strongly motivated to urge management to display positive earnings with little or no concern for audit quality (Chan *et al.*, 2006; DeFond *et al.*, 2000). Distinct from other types of investors, the government has sufficient power over the public on whatever information is required from listed companies. The absence of dependence upon publicly released financial reports for performance evaluation minimizes the government's requirement for independent auditing (Klassen, 1997).

With respect to the *FAMILY\_OWN*, a significantly positive association ( $t_{-1}$ :  $p$ -value = 0.070;  $t_1$ :  $p$ -value = 0.018) has been reported with the *AQ\_SCORE* in the both periods ( $t_{-1}$  &  $t_1$ ). This association provides support for hypothesis  $H_{4b}$ , suggesting that the family ownership is more significant in the period subsequent to the auditor selection ( $t_1$ :  $p < 0.05$ ) than the year prior to the auditor selection ( $t_{-1}$ :  $p < 0.10$ ). This is consistent with GCC client firms selecting higher audit quality in anticipation of changes in the family ownership more than in reaction to changes in the family ownership. This result is consistent with the agency literature that suggests of potential conflict in family business and that independent auditing is needed to alleviate contractual constraints (Jensen & Meckling, 1976). This result is in line with the substitution hypothesis of the association of corporate governance mechanism (family ownership vs. board of directors effectiveness and audit committee effectiveness) with demanding audit quality. Empirically, this result is also consistent with Carey *et al.* (2000).

In addition, *DOMESTIC\_OWN* has a significant association ( $t_{-1}$ :  $p$ -value = 0.017;  $t_1$ :  $p$ -value = 0.046) with *AQ\_SCORE* in the predicted direction (i.e., positive), suggesting that

the higher the level of the domestic corporate ownership, the greater the probability of selecting a quality-differentiated auditor. The association between the domestic corporate ownership and audit quality is more significant in the year prior to the auditor selection ( $t-1$ ) more than the year subsequent to the auditor selection ( $t_1$ ), implying that GCC client firms select higher quality auditors in reaction to changes in the domestic corporate ownership more than in anticipating of changes in the domestic corporate ownership. Therefore, hypothesis  $H_{5b}$  is accepted.

This result is consistent with the conjecture of Jensen and Meckling (1976) that suggests an increase in the holdings of the owner-largest shareholder reduces agency costs and, thus, the need to manage earnings in order to alleviate contractual constraints which, consequently, will motivate the controlling owners to improve earnings informativeness by demanding a higher quality auditor. The controlling owner may believe hiring a high-quality auditor is a signal of good corporate governance and credible financial reporting to minority shareholders and other investors. This result also gives support that corporate governance mechanisms (domestic corporate ownership vs. board of directors effectiveness and audit committee effectiveness) act in a substitution and not in a complementary function. This result also goes in the same line with Allen and Phillips (2000) who present evidence that supports the argument that corporate ownership provides significant benefits to firms involved in certain business agreements by reducing the costs of monitoring the alliances or ventures between firms and their corporate blockholders.

### 7.5.2 Audit-specific Characteristic

In consistent with the conjecture of the agency theory, this study reports a significant positive association between *FEE* and *AQ\_SCORE* in either period ( $t_{-1}$ :  $p$ -value = 0.000;  $t_1$ :  $p$ -value = 0.000). This significant association is comparable in the year prior ( $t_{-1}$ ) and subsequent ( $t_1$ ) to the auditor selection, indicating that GCC client firms select higher audit quality in reaction to and in anticipation of changes in the audit fees. Thus, this result gives support to hypothesis  $H_{6b}$ . This result is consistent, empirically, with Che Ahmad *et al.* (2006), Francis (1984), Nazri *et al.* (2012b), and Pong and Wittengton (1994). One possible interpretation for this result is that, as shown by Table 7.1, 62% of the auditor changes have been taken place among Big 4 audit firms, indicating that this group of auditors dominates the audit market of GCC countries and they charge fee premium.

### 7.5.3 Firm-Specific Characteristics

Giving no support to the conjecture of the agency theory, *LASSET* ( $t_{-1}$ :  $p$ -value = 0.843;  $t_1$ :  $p$ -value = 0.320) has insignificant association with *AQ\_SCORE* in the both periods; prior ( $t_{-1}$ ) and subsequent ( $t_1$ ) to the auditor selection. Thus, hypothesis  $H_{7b}$  is rejected. This result is in line with Abbott and Parker (2000), Chan *et al.* (2007), Eichenseher and Shields (1989), Francis and Wilson (1988) and Palmrose (1984b). This finding may indicate to the market power in light of the three leading groups that are in control of the market and that own the largest companies; government, family and domestic corporations. The companies' organizational structure is created to exhibit a superior

degree of close alignment between the owners and the decision control system which are reinforced by less legal enforcement and greater levels of family and friendship interrelationships. This is a significant environment for GCC countries to maintain their political stability. Hence, these situations may be mimicked in their selection of new auditor in a sense that it is based on friendship and business relationships and networks as opposed to the firm size.

This inconsistent result may also be justified as indicated by Schwartz and Menon (1985) by the sample of firms incorporated in the model that may not represent the size distribution of the entire firms' population. Consistent with this statement, the present study selects only the companies that have satisfied the criteria of new auditor selection and only those in the GCC representing a great portion of medium-sized companies. It is expected that small and medium sized companies in the GCC are more adept at making decisions of auditor selection as they are not under the influence of business and cultural networks. This is particularly true as they are more vulnerable to market trends.

Consistent with the predictions of the insurance hypothesis, *ROA* has been found to have a significantly negative association with *AQ\_SCORE* ( $t_{-1}$ :  $p$ -value = 0.003;  $t_1$ :  $p$ -value = 0.009), indicating that the less the firm performance (a loss condition), the higher the demand for audit quality. This association is higher in the year prior to the auditor selection ( $t_{-1}$ ) than the year subsequent to the auditor selection ( $t_1$ ), suggesting that GCC client firms select higher quality auditors in reaction to changes in the firm performance more than in anticipation of changes in the firm performance. Thus, hypothesis  $H_{8b}$  is rejected. One possible explanation for this result is that companies with unsound

financial conditions may have strain in the auditor-client relations and produce a conflicting environment that may be correlated with the existence of factors that give rise to selecting a higher quality auditor.

One of the most imperative determinants is the assurances to be provided by the larger audit firms to the investors and creditors of these companies. Unsound financially firms may consider selecting a higher audit quality to convey more strongly the absence of negligence or management fraud and/or corporate failure. This insurance demand can be considered as a means for risk distribution that stems from the auditor's professional liability exposure (Citron & Taffler, 1992; Haskins & Williams, 1990; Schwartz & Menon, 1985).

In contrary to the prediction of the agency theory, *LEV* was not significantly related to the *AQ\_SCORE* ( $t_{-1}$ :  $p$ -value = 0.664;  $t_1$ :  $p$ -value = 0.225), indicating that demanding for audit quality in GCC countries is not driven by the level of debt. This result is consistent, empirically, with Abbot & Parker (2000), Chan *et al.* (2007), Che Ahmad *et al.* (2006), DeFond (1992), Fargher *et al.* (2001), Guedhami *et al.* (2009), Palmrose (1984b), Velury *et al.* (2003) and Woo and Koh (2001). A possible reason for the leverage to fail in contributing to the audit quality is that auditees with higher degrees of leverage may be not favorable clients to quality-differentiated auditors because of the risk involved and, thus, they may not be cost effective clients (Palmrose, 1984b).

Another possible interpretation is that the presence of three dominant groups of ownership, namely; government, family and domestic corporations may influence the

means of monitoring the contractual-debt. Companies have organizational structure which is made to show a greater level association of the owners with the power of mechanism of decision control. This has the support of legal enforcement though not as much, but has greater levels of relationships with respect to friends and family. This is considered essential environment for political stability especially for GCC nations. Given this fact, these situations could provide greater effectiveness in supervising the debt contracts as compared with the factors influencing audit quality. In addition, Lin and Liu (2009) have documented that this result may indicate that demanding audit services is not a device to alleviate the effects of firm-specific risk.

As for *MGT\_CHANGE*, a significantly positive association has been reported with *AQ\_SCORE* in the year prior to the auditor selection ( $t_{-1}$ :  $p$ -value = 0.046) and insignificant association has been documented with audit quality in the year subsequent to the auditor selection ( $t_1$ :  $p$ -value = 0.910), suggesting that GCC client firms select auditors in reaction to management change and not in anticipation of management change. This result is consistent with the conjectures of agency theory and, empirically, it is supported by Hudiab and Cooke (2005), Nazri *et al.* (2012b), and Woo and Koh (2001).

The results' interpretation implies that once the management director is changed the contracting environment also changes. Specifically, attempts are being made by the management not to associate with the past relations but like to have dealing with the parties that are familiar. Non satisfaction of the new management with the audit cost and with the previous services quality offered by the auditor of the company may result. A



new management team which has the role of causing a corporate recovery could consider the methodological choice of reporting a medium for affecting suppliers' decisions on capital by presenting corporate performance in a better way. This could be brought about by getting an auditor who has the willingness of sanctioning the management supported approaches (Burton & Roberts, 1967; Carpenter & Strawser, 1971; Hudaib & Cooke, 2005; Lurie, 1977; Schwartz & Menon, 1985; Woo & Koh, 2001).

## **7.6 Summary and Conclusion**

In this chapter, the auditor selection framework (Model 2) has been investigated. After introducing the chapter, section two describes the sample, sample statistics and the data collection. Section three highlights the descriptive statistics and univariate analyses. In section four, diagnostic tests of detecting outliers, multicollinearity, tests of normality, linearity, homoscedasticity, autocorrelations and model specification tests have been reported. The findings of Multivariate regression have been presented in section five. The regression analyses show the association of the domestic corporate ownership, audit fees and management change with audit quality. Interestingly, the effect of the firm performance on the decision of auditor selection was statistically significant in the opposite direction.

It is notable that the current study reports, to an extent, varying findings concerning some determinants influencing the decision to select auditors in the context of GCC countries. Because of the lack of empirical evidence in this particular region,

comparisons between GCC countries' findings and international literature are conducted. The differences between the current and past studies are caused by several factors; first, the differences in audit and business regulatory environments among the sample countries/cities, sectors, and audit firms (Ball & Shivakumar, 2005; Chaney *et al.*, 2004). Second, methodological anomalies are revealed in prior literature including small sample size (Butterworth & Houghton, 1995; Nichols & Smith, 1983; Woo & Koh, 2001), and inconsistent definition of population (Williams, 1988). Hence, the result quality hinges on the sample data's quality. The present study does not incorporate the entire GCC companies but only those whose data are at hand. For instance, Kuwait is not included owing to its poor corporate governance disclosure. In addition, the sample companies' characteristics may also be distinct from those companies that are excluded.

Third, one different definition in this study is the audit quality measurement. All the previous studies in auditor choice have used individual measurements of audit quality except DeFond (1992)'s study in U.S that has used a combined measure of audit quality comprising of four individual surrogates, namely; brand-name, expertise, independence and size. DeFond (1992) has concluded that using the combined measure which is considered complicated calculations gives identical results to that obtained by the brand-name individual measurement. The present study is conducted in GCC setting and has adopted the similar combined measurement of DeFond (1992). However, different results have been obtained than those of DeFond (1992). Only three variables, brand-name; expertise and independence, have been extracted by the factor analysis to represent the audit quality. And, auditor size has been extracted as an individual

surrogate representing the audit quality. These differences could be attributed to regulatory, business and audit environments' differences between the U.S and the GCC. Forth, some important variables are omitted from models of auditor choice studies developed to date (Beattie & Fearnley, 1998; Eichenseher & Shields, 1989; Haskins & Williams, 1990; Johnson & Lys, 1990). Fifth, the decision of auditor selection might be influenced by the economic and industrial conditions over the extended time-periods examined (Williams, 1988).

Sixth, according to DeFond (1992), the studies' methodologies have viewed the relation between agency conflict and audit quality at one point in time and consideration should be placed on their selection of measure utilized as proxy for audit quality. The current research is distinct in a sense that it examines the determinants of auditor selection as significant relations arise in both cases consistent with management's anticipation and reaction to agency conflict changes. This shows that the findings of the studies which attempted to relate audit quality and agency conflicts hinge upon the duration of time over which the agency variables are gauged (DeFond, 1992). Along this line, Echinseher and Shields (1989) have revealed that auditor selection decision may be impacted by future variations in agency costs resulting from the anticipated changes in the structure of the company's capital. In other words, there is a possibility that the significant changes relating to corporate governance specific characteristics, audit-specific characteristics and firm-specific characteristics could have occurred in the period outside of the study's duration (2006-2009). These changes may be able to contribute to the partial explanation of the distinction between the current study's results and its counterparts.

## CHAPTER EIGHT

### SENSITIVITY ANALYSIS AND ADDITIONAL EMPIRICAL TESTS

#### 8.1 Introduction

This chapter shows several additional sensitivity and robustness tests that were run for the both models ( $t_{-1}$  &  $t_1$ ) and the empirical results and to further provide supplementary results.

#### 8.2 Auditor Change and Selection Models in Year ( $t_0$ )

This study methodologically examines a two-time period; before  $t_{-1}$  and after  $t_1$  the announcement of the auditor change and selection in year  $t_0$ . Fried and Schiff (1981) have documented that the selection of time period and the use of data from both sides of the announcement date were motivated by a desire to avoid potential biases resulting from unstable  $\beta$ s. In this regard, DeFond (1992) and Francis and Wilson (1988) have reported that examining auditor change in a time period both before and after this event measures managers' reactions to and anticipations of changes in agency conflicts. With support to this, Lindahl (1996) has documented that this procedure corrects the methodological flaws in the previous cross-sectional studies of auditor choice. An additional investigation of the pre-auditor and post-auditor change models has been further reexamined in the year of the auditor change ( $t_0$ ) and in the year of the auditor

selection ( $t_0$ ) in order to give support for the importance of the pre-auditor change and selection periods ( $t_{-1}$ ) and the post-auditor change and selections periods ( $t_1$ ) in explaining determinants contributing to the behavior of auditor choice, change and selection, as indicated in Tables 6.7 and 6.8.

Table 8.1  
*Logit Analysis Result–Auditor Change Model ( $t_0$ )*

Variables	Coef.	<i>t</i>	<i>P</i> >   <i>t</i>
<b>Corporate Governance Mechanisms</b>			
BDE_SCORE	2.46	2.13	<b>0.033</b>
ACE_SCORE	-0.34	-0.03	0.977
GOV_OWN	0.04	0.13	0.896
FAMILY_OWN	-2.95	-2.46	<b>0.014</b>
DOMESTIC_OWN	-1.25	-1.57	0.177
<b>Audit-Specific Characteristic</b>			
FEE	0.02	0.10	0.923
<b>Firm-Specific Characteristics</b>			
LASSET	-1.09	-4.01	<b>0.000</b>
ROA	0.02	1.11	0.266
LEV	0.02	1.76	<b>0.079</b>
MGT_CHANGE	0.01	0.02	0.983
Log Likelihood	-96.734		
Hosmer-Lemeshow	0.721		
Chi <sup>2</sup> (10)	31.72		
Prob > Chi <sup>2</sup>	0.000		
Nagelkerke <i>R</i> <sup>2</sup>	0.243		
Coxsnel <i>R</i> <sup>2</sup>	0.178		
Pseudo <i>R</i> <sup>2</sup>	0.141		
Correctly Classified (%)	69.2		
No. of Observations	170		

**Bold** = significant at 1%, 5% and 10%.

As shown by Table 8.1, the value of Pseudo *R*<sup>2</sup> is .141 in the period of auditor change  $t_0$  which provides, to some extent, a comparable explanatory power to the periods before ( $t_{-1}$ ) and after ( $t_1$ ) the auditor change ( $t_{-1}$ : .134;  $t_1$ : .142, respectively). This result gives support to the conjecture that the periods before and after the announcement of the auditor change is not less important than the event year in explaining the auditor change behavior (DeFond, 1992; Francis & Wilson, 1988; Lindal, 1996).

Table 8.2  
*OLS Analysis Results – Auditor Selection Model ( $t_0$ )*

Variables	Coef.	<i>t</i>	<i>P</i> >   <i>t</i>
<b>Corporate Governance Mechanisms</b>			
BDE_SCORE	0.82	1.29	0.201
ACE_SCORE	0.42	0.73	0.467
GOV_OWN	0.01	0.05	0.961
FAMILY_OWN	1.05	1.77	<b>0.081</b>
DOMESTIC_OWN	0.75	1.86	<b>0.065</b>
<b>Audit-Specific Characteristic</b>			
FEE	0.36	3.60	<b>0.001</b>
<b>Firm-specific Characteristics</b>			
LASSET	0.14	1.04	0.302
ROA	-0.01	-1.18	0.243
LEV	-0.003	-0.61	0.542
MGT_CHANGE	-0.01	-0.08	0.939
Adjusted $R^2$	0.095		
Model <i>F</i> -stat.	2.10		
<i>P</i> -value	0.032		
No. of Observations	105		

**Bold** = significant at 1%, 5% and 10%.

Table 8.2 exhibits that the adjusted  $R^2$  in the auditor selection year ( $t_0$ ) is .095 which is considered lower in value than the adjusted  $R^2$ s of the periods before ( $t_{-1}$ : .1438) and after ( $t_1$ : .1404) the auditor selection. This indicates that the period of time surrounding the auditor selection provides the greatest explanatory power for the auditor selection behavior than the event year (DeFond, 1992; Francis & Wilson, 1988; Lindal, 1996).

### 8.3 Individual Effects of Board and Audit Committee Characteristics

Following several recent international researches, this study captures the aggregate strength of the board of directors attributes and the audit committee attributes using two summary measures on the probability of changing auditors and selecting a higher audit quality (see chapters 6 and 7). These two summaries provide an in-depth representation of board of directors and audit committee within the firm by considering a range of

thirteen characteristics. The first summary measure is named the ‘board of directors’ effectiveness score (*BDE\_SCOR*) which combines seven board of directors attributes into a single score, namely; board independence, size, meeting, CEO duality, financial expertise, nationality and international experience. The second summary measure is called the ‘audit committee’s effectiveness score (*ACE\_SCORE*) that combines six attributes of the audit committee into a single score, namely; audit committee independence, size, meeting, financial expertise, nationality and international experience (Chahine & Filatotchev, 2011; DeFond *et al.*, 2005; Kent *et al.*, 2010; O’Sullivan *et al.*, 2007; Zaman *et al.*, 2011). The reasoning of using these combined scores is that corporate governance literature suggests that more effective board of directors and audit committee may help mitigating agency problems related to the separation of ownership and control which, in turn, will lead to enhancing the audit quality. Further, it is believed that these attributes act in a complementary or substitutable fashion in making decisions related to demanding a higher audit quality.

In addition to the composite measures of the attributes of the board of directors and audit committee, in this section, this study follows a number of previous researches that have individually examined the impact of the attributes of the board of directors and audit committee on the incidence of auditor change and demanding a higher audit quality (Abbott & Parker, 2001; Archambeault & DeZoort, 2001; Beasley & Petroni, 2001; Che Ahmad *et al.*, 2006; Lin & Liu, 2009).

Table 8.3  
*Logit Analysis Results—Auditor Change (Model 1)*

Variables	Pre-Auditor-Change Model 1 <sub>a</sub> ( <i>t</i> <sub>-1</sub> )			Post-Auditor-Change Model 1 <sub>b</sub> ( <i>t</i> <sub>1</sub> )		
	Coef.	<i>z</i>	<i>P</i> >   <i>z</i>	Coef.	<i>z</i>	<i>P</i> >   <i>z</i>
<b>Corporate Governance Mechanisms</b>						
<b>Board of Directors Characteristics</b>						
BIND	4.28	3.44	<b>0.001</b>	2.49	2.46	<b>0.014</b>
BSIZE	-0.29	-1.88	<b>0.061</b>	-0.26	-1.82	<b>0.070</b>
BMEETS	0.08	0.47	0.642	0.27	1.70	<b>0.089</b>
CEOCHR	-2.51	-2.77	<b>0.006</b>	-1.07	-1.44	0.151
BFINEXPER	0.17	0.37	0.708	-0.01	-0.03	0.977
BNATIONALITY	-1.10	-0.70	0.486	-0.23	-0.16	0.870
BINTEXPER	1.98	1.63	0.102	0.06	0.05	0.958
<b>Audit Committee</b>						
ACINDEP	-2.26	-1.62	0.105	-1.05	-0.97	0.334
ACSIZE	-0.01	-0.01	0.990	0.02	0.05	0.964
ACMEETS	0.62	2.86	<b>0.004</b>	0.11	0.56	0.579
ACFINEXPER	3.41	2.02	<b>0.044</b>	3.46	2.41	<b>0.016</b>
ACNATIONALITY	-1.44	-0.92	0.358	0.38	0.25	0.771
ACINTEXPER	-3.64	-1.87	<b>0.061</b>	0.52	0.29	0.771
<b>Ownership Structure</b>						
GOV_OWN	-0.54	-1.37	0.171	-0.25	-0.49	0.627
FAMILY_OWN	-3.94	-2.38	<b>0.017</b>	-3.09	-2.23	<b>0.026</b>
DOMESTIC_OWN	-3.12	-2.71	<b>0.007</b>	-1.74	-1.87	<b>0.062</b>
<b>Audit-Specific Characteristic</b>						
FEE	-0.05	-0.18	0.860	-0.12	-0.49	0.627
<b>Firm-Specific Characteristics</b>						
LASSET	-1.44	-3.31	<b>0.001</b>	-0.95	-2.75	<b>0.006</b>
ROA	0.06	2.13	<b>0.033</b>	0.03	1.25	0.213
LEV	0.03	1.97	<b>0.049</b>	0.01	0.87	0.384
MGT_CHANGE	-0.79	-1.35	0.177	-0.38	-0.90	0.369
Log Likelihood	-64.675			-79.582		
Chi <sup>2</sup> (21)	86.23			57.38		
Prob > Chi <sup>2</sup>	0.000			0.000		
Pseudo R <sup>2</sup>	0.400			0.265		
No. of Observations	162			163		

**Bold** = significant at 1%, 5% and 10%.

The basic auditor change framework 1 (model 1<sub>a</sub>: *t*<sub>-1</sub> & model 1<sub>b</sub>: *t*<sub>1</sub>) and auditor selection framework 2 (model 2<sub>a</sub>: *t*<sub>-1</sub>; model 2<sub>b</sub>: *t*<sub>1</sub>) are further tested allowing for possible associations between the individual characteristics of the board of directors and auditor committee with auditor change and with auditor selection as shown in Tables 8.3 and 8.4.



Table 8.4  
*OLS Analysis Results—Auditor Selection (Model 2)*

Variables	Pre-Auditor-Selection Model 2 <sub>a</sub> ( $t_{-1}$ )			Post-Auditor-Selection Model 2 <sub>b</sub> ( $t_1$ )		
	Coef.	$z$	$P >  z $	Coef.	$z$	$P >  z $
<b>Corporate Governance Mechanisms</b>						
<b>Board of Directors Characteristics</b>						
BIND	0.37	0.81	0.421	0.47	1.18	0.242
BSIZE	-0.57	-0.95	0.346	-0.10	-1.51	0.136
BMEETS	0.08	1.22	0.225	0.01	0.18	0.855
CEOCHR	0.76	1.76	<b>0.081</b>	0.44	0.95	0.344
BFINEXPER	0.07	0.29	0.769	-0.01	-0.03	0.977
BNATIONALITY	0.65	1.32	0.189	0.74	1.22	0.226
BINTEXPER	-0.76	-1.84	<b>0.069</b>	-1.17	-0.32	0.748
<b>Audit Committee</b>						
ACINDEP	0.26	0.53	0.595	0.13	0.27	0.789
ACSIZE	0.29	1.58	0.118	0.15	0.19	0.471
ACMEETS	-0.07	-1.09	0.279	-0.06	-0.75	0.457
ACFINEXPER	1.15	2.40	<b>0.019</b>	0.78	1.66	0.101
ACNATIONALITY	0.32	0.65	0.520	-0.20	0.57	0.721
ACINTEXPER	0.18	0.27	0.791	0.44	0.65	0.518
<b>Ownership Structure</b>						
GOV_OWN	-0.07	-0.41	0.683	0.12	0.73	0.470
FAMILY_OWN	0.67	1.09	0.280	1.30	1.92	<b>0.058</b>
DOMESTIC_OWN	0.61	1.46	0.147	0.62	1.54	0.128
<b>Audit-Specific Characteristic</b>						
FEE	0.28	2.48	<b>0.015</b>	0.38	3.26	<b>0.002</b>
<b>Firm-Specific Characteristics</b>						
LASSET	0.03	0.18	0.859	0.18	1.21	0.230
ROA	-0.01	-1.32	0.190	-0.03	-2.36	<b>0.021</b>
LEV	-0.01	-1.24	0.217	-0.01	-1.09	0.280
MGT_CHANGE	0.45	1.95	<b>0.054</b>	-0.21	-1.06	0.293
Adjusted $R^2$	0.192			0.128		
Model $F$ -stat.	2.17			1.74		
$P$ -value	0.007			0.041		
No. of Observations	105			106		

**Bold** = significant at 1%, 5% and 10%.

With respect to board of directors characteristics in auditor change framework (Model 1), Table 8.3 exhibits that board independence (*BIND*) is positively and significantly associated with the likelihood of auditor change (*CHANGEI*) in either period ( $t_{-1}$ :  $p$ -value = 0.001;  $t_1$ :  $p$ -value = 0.014) as predicted by the agency theory. This result suggests that the higher the percentage of the independent board members, the more the

probability the auditor is changed. This probability increases as managers react to changes in board independence ( $p < 0.001$ ) more than to anticipate for changes in board independence ( $p < 0.05$ ). With respect to the auditor selection framework (Model 2), as shown by Table 8.4, board independence (*BIND*) is insignificantly associated with audit quality (*AQ\_SCORE*) in either period ( $t_{-1}$ :  $p$ -value = 0.421;  $t_1$ :  $p$ -value = 0.242) as predicted by the agency theory.

With regard to board size (*BSIZE*) in the auditor change framework (Model 1), as shown by Table 8.3, a negatively significant association has been reported with auditor change (*CHANGE*) in either period ( $t_{-1}$ :  $p$ -value = 0.061;  $t_1$ :  $p$ -value = 0.070) as predicted by the agency theory, suggesting that GCC client firms change their auditors in reaction to and in anticipation for changes in board size. As for board size (*BSIZE*) in the auditor selection model (Model 2), as portrayed by Table 8.4, an insignificant association has been documented with audit quality (*AQ\_SCORE*) in either period ( $t_{-1}$ :  $p$ -value = 0.346;  $t_1$ :  $p$ -value = 0.136), indicating that board size has no association with the decision related to demanding a higher quality auditor.

In terms of board meetings (*BMEETS*) in the auditor change framework (Model 1), as exhibited by Table 8.3, insignificant association has been reported with auditor change (*CHANGE*) in the year prior to the auditor change ( $t_{-1}$ :  $p$ -value = 0.642) and a positively association has been documented in the year subsequent to the auditor change ( $t_1$ :  $p$ -value = 0.089), suggesting that GCC client firms change their auditors in only anticipation for changes in the board meetings ( $p > 0.05$ ). This result gives support to the prediction of the agency theory. And, empirically, this result is in line with Lee *et al.*

(2004). With regard to the board meetings (*BMEETS*) and the audit quality (*AQ\_SCORE*) in the auditor selection framework (Model 2), as shown by Table 8.4, an insignificant association has been reported in either period ( $t_{-1}$ :  $p$ -value = 0.225;  $t_1$ :  $p$ -value = 0.855), indicating for no support to the conjectures of the agency theory.

As for the CEO duality (*CEOCHR*) in the auditor change framework (Model 1), as shown by Table 8.3, a negatively significant association has been reported with the auditor change (*CHANGE*) in the period prior to the auditor change ( $t_{-1}$ :  $p$ -value = 0.006) and an insignificant association has been documented in the year subsequent to the auditor change ( $t_1$ :  $p$ -value = 0.151), indicating that GCC client firms change their auditors only in reaction to the changes in the power of the CEO. This result is consistent with the prediction of the agency theory. With regard to the association between the CEO duality and the audit quality (*AQ\_SCORE*) in the auditor selection framework (Model 2), as exhibited by Table 8.4, a significantly positive association has been found in the year prior to the auditor selection ( $t_{-1}$ :  $p$ -value = 0.081) and an insignificant association has been found in the year subsequent to the auditor selection ( $t_1$ :  $p$ -value = 0.344), suggesting that GCC client firms select a higher audit quality only in reaction to changes in the CEO power. A possible explanation for this result is that in GCC countries dominant owners try to practice influence on the decision making using the power of the CEO duality which implies that CEO duality is a positive characteristic in the environment of GCC through which owners can achieve their objectives (Chahine & Tohme, 2009). In consistent with this, Rechner and Dalton (1991) have indicated that the CEO's strategic vision can shape the destiny of the firm with minimum board interference. An influential CEO may act as a positive force in organizational

governance and may maximize the effectiveness of the board (Maitlis, 2004). This argument is justified by the fact that an independent board is stricter as a monitoring mechanism and the CEO may hesitate to share information with it. If the board of directors' aim is to enhance managerial decision-making, the existence of the CEO on the board may lead to the enhancement of information flow towards the board members and to improved interactions and discussions that, in turn, would result in a more significant advice (Desender, 2009). Hence, the CEO may improve the information flow towards the members if the board's priority lies in helping management in developing strategies as opposed to monitoring its actions.

Board financial experience (*BFINEXPER*) in auditor change framework (Model 1), as shown by Table 8.3, is insignificantly associated with auditor change (*CHANGE*) in either period ( $t_{-1}$ :  $p$ -value = 0.708;  $t_1$ :  $p$ -value = 0.977) and in auditor selection framework (Model 2), as portrayed by Table 8.4, is also insignificantly associated with audit quality (*AQ\_SCORE*) in either period ( $t_{-1}$ :  $p$ -value = 0.769;  $t_1$ :  $p$ -value = 0.977). This indicates that GCC client firms change their auditors and select new ones neither in reaction to nor in anticipation for changes in board financial experience. This result is in contradictory to the conjecture of the agency theory, and, empirically, with the findings of Lee *et al.* (2004). In terms of board nationality (*BNATIONALITY*) in auditor change framework (Model 1), as displayed by Table 8.3, an insignificantly association has been reported with auditor change (*CHANGE*) in either period ( $t_{-1}$ :  $p$ -value = 0.486;  $t_1$ :  $p$ -value = 0.870) and in auditor selection framework (Model 2), as revealed by Table 8.4, an insignificant association has been documented with audit quality (*AQ\_SCORE*) in either period ( $t_{-1}$ :  $p$ -value = 0.189;  $t_1$ :  $p$ -value = 0.226). This indicates that GCC client

firms do not change their auditors and select new ones either in reaction to or in anticipation for changes in board nationality. This result is in contradictory to the conjectures of managerial grid theory and attraction-selection-attrition framework. Therefore, auditor change and selection decisions are not derived by the origin of board members' nationalities.

Board international experience (*BINTEXPER*) in auditor change framework (Model 1), as displayed by Table 8.3, is found to have a significantly positive association (close to  $p = 0.10$ ) with auditor change (*CHANGE*) in the year prior to the event of the auditor change and this association is found to be insignificant in the year subsequent to the auditor change (*CHANGE*) ( $t_1$ :  $p$ -value = 0.958), suggesting that GCC client firms change their auditors only in reaction to changes in the international experience of the board members. This result is inconsistent with the managerial grid theory and attraction-selection-attrition framework in a manner that the other cultures' exposures the managers get into influence their decision-making (i.e., auditor change). As presented by Table 8.4, board international experience (*BINTEXPER*) in auditor selection framework (Model 2) is found to be negatively associated with audit quality (*AQ\_SCORE*) in the year prior to the auditor selection ( $t_{-1}$ :  $p$ -value = 0.069) and this association is found to be insignificant in the year subsequent to the auditor selection ( $t_1$ :  $p$ -value = 0.748), indicating that GCC client firms select auditors only in reaction to changes in the international experience of their board members. This result is inconsistent with the suggestions of the managerial grid theory and attraction-selection-attrition framework. A possible explanation for this result could be attributed to the majority members of the board of directors that represent local citizens with a dominant

power practiced on the board. As indicated earlier that there is a strong alignment between owners and managers. This alignment is governed by the Arabic culture where family and friendship relations are respected. The board may then be designed to improve managerial decision making. The information flow among the board members would be increased as well as the interactions and discussions, leading to more valuable advice which, in turn, could reduce the need for higher audit quality (Desender, 2009; Forbes & Milliken, 1999).

Audit committee independence (*ACINDEP*), audit committee size (*ACSIZE*) and audit committee nationality (*ACNATIONALITY*) in the auditor change framework (Model 1), as revealed by Table 8.3, are insignificantly associated with the incidence of auditor change (*CHANGE*) in either period, respectively ( $[ACINDEP:t_{-1}: p\text{-value} = 0.105; t_1: p\text{-value} = 0.334]$ ,  $[t_{-1}: p\text{-value} = 0.990; t_1: p\text{-value} = 0.964]$ ,  $[t_{-1}: p\text{-value} = 0.358; t_1: p\text{-value} = 0.771]$ ) in contrary to the predictions of the agency theory, managerial grid theory and attraction-selection-attrition framework. This suggests that auditor change is not derived by the audit committee independence, size and nationality in the GCC. One possible explanation for this result is that, as discussed earlier, audit committees in the GCC are new concepts to be adopted and implemented. The primary objective of this structure is just only to complement the monitoring and controlling functions of the owners via board of directors. Therefore, their contributions to the auditor change decision using the characteristics of their independence, size and nationality is shrunk. As for audit committee meetings (*ACMEETS*), it has a positively significantly association with the probability of auditor change (*CHANGE*) in the year prior to the event ( $t_{-1}: p\text{-value} = 0.004$ ) as predicted by the agency theory and it has an

insignificantly association with the incidence of auditor change in the year subsequent to the event ( $t_1$ :  $p$ -value = 0.579). This suggests that GCC client firms change their auditors only in reaction to changes in the audit committee meetings and there is no consideration given for the anticipation of these changes.

As displayed by Table 8.3, in the auditor change framework (Model 1), that audit committee financial experience (*ACFINEXPER*) is positively and significantly associated with the likelihood of auditor change (*CHANGE*) in either period ( $t_{-1}$ :  $p$ -value = 0.044;  $t_1$ :  $p$ -value = 0.016) as predicted by the agency theory. This implies that GCC client firms change their auditors in reaction to and in anticipation of changes in the audit committee financial experience. In terms of audit committee international experience (*ACINTEXPER*), a negatively significantly association has been reported with the incidence of auditor change (*CHANGE*) in the year prior to auditor change ( $t_{-1}$ :  $p$ -value = 0.061) and an insignificant association has been reported with the probability of auditor change in the year subsequent to the auditor change ( $t_1$ :  $p$ -value = 0.771). This result indicates that GCC client firms change their auditors only in reaction to changes in the international experience of their board members. This result is not in line with the managerial grid theory and attraction-selection-attrition framework. A possible interpretation for this result is that, as discussed earlier, the majority of the board members are local internationally experienced members. And due to the high alignment of the owners and managers, those members are on the board as advice givers to the powerful ownership that dominates the GCC markets. Further, the business and work environments are dominated by family and friendship relationships which, in turn, concerns for establishing a long-term relationships and contracts.

Auditor selection framework (Model 2), as portrayed by Table 8.4, shows that the only audit committee characteristic out of six other characteristics contributing to the decision of demanding a higher audit quality (*AQ\_SCORE*) is the audit committee financial experience (*ACFINEXPER*) in either period ( $t_{-1}$ :  $p$ -value = 0.019;  $t_1$ :  $p$ -value = 0.101) as conjectured by the agency theory. This suggests that GCC client firms select higher audit quality in reaction to and in anticipation of changes in the audit committee financial experience. As for the other characteristics, audit committee independence (*ACINDEP*); audit committee size (*ACSIZE*); audit committee meetings (*ACMEETS*); audit committee nationality (*ACNATIONALITY*); and audit committee international experience (*ACINTEXPER*), insignificant associations have been reported with the audit quality (*AQ\_SCORE*) in either period ( $t_{-1}$  &  $t_1$ :  $p > 0.10$ ). This result is inconsistent with the predictions of the agency theory, managerial grid theory and attraction-selection-attrition framework. A possible explanation for this result is that, as aforementioned, audit committee is a new concept to GCC business environment. This structure is designed as a complement function to the decision makers in the board of directors. Therefore, the most important characteristic through which they can contribute to the decision of audit quality is the financial experience.

With respect to auditor change framework (Model 1), as portrayed by Table 8.3, the  $chi^2$  values for model 1<sub>a</sub> and model 1<sub>b</sub> are statistically significant at 1% level. The Pseudo  $R^2$ s for model 1<sub>a</sub> and model 1<sub>b</sub> are 40% and 27%, respectively. It is interesting to note that including the individual characteristics of the board of directors and audit committee increases the explanatory powers of model 1<sub>a</sub> and model 1<sub>b</sub> by 68% and 48%, respectively. Therefore, the explanatory powers of model 1<sub>a</sub> and model 1<sub>b</sub> using the



effectiveness scores of the board of directors and audit committee are comparable, as displayed by Table 6.7. While using the individual characteristics of the board of directors and audit committee has changed dramatically the explanatory powers of the both models, indicating that the period preceding the auditor change provides the greatest explanatory power for auditor change behavior than the year subsequent to the auditor change. Further, using the individual characteristics of the board of directors and audit committee has only changed the result of the relationship between the domestic corporate ownership and the incidence of auditor change. The other variable results remain, to some extent, the same.

With respect to the auditor selection framework (Model 2), as shown by Table 8.4, the  $P$ -values for model 2<sub>a</sub> is statistically significant at 1% level and for model 1<sub>b</sub> is statistically significant at 5% level. The adjusted  $R^2$ s for models 1<sub>a</sub> and model 1<sub>b</sub> are 19% and 13%, respectively. In particular, when including the individual characteristics of the board of directors and audit committee, there is a sharply increase in the explanatory power for the year preceding the auditor selection (model 2<sub>a</sub>) by 26% than when these characteristics are included as an individual score, as showed by Table 7.8. As for the year subsequent to the auditor selection (model 2<sub>b</sub>), there is a slightly drop in the explanatory power by 0.09%. This suggests that the period of time preceding the auditor selection provides the greatest explanatory power for the behavior of selecting a higher audit quality. In terms of the other variables' relationships with the occurrence of the auditor change, only domestic corporate ownership has shown sensitivity to the inclusion of the individual characteristics of the board of directors and audit committee. The other variables' results were generally similar to those in the basic models.

## 8.4 Country-Specific Characteristics

As has been previously indicated that GCC countries share a large number of economic, institutional, longstanding cultural, political, geographical similarities that, by far, outweigh any differences. Therefore, these countries are considered as one homogeneous block (Al-Hussaini *et al.*, 2008; Al-Muharrami *et al.*, 2006; Chahine & Tohme, 2009). Since this study investigates the decisions of auditor change (*CHANGE*) and auditor selection (*AQ\_SCORE*) for two time periods surrounding 2006 and 2009 and it also investigates five homogeneous countries, changes in macroeconomic conditions and institutional environments in the time period considered may affect the auditor change and selection decisions (Choi & Wong, 2007; Fargher *et al.*, 2001; Hope *et al.*, 2008; Guedhami *et al.*, 2009). This study captures the effect of two country-specific characteristics, namely; economic development and institutional environment score on the demand for audit quality. The motivation for considering these country factors is that auditor change decision and auditor selection decision could be derived by these country level factors in different time periods than the other variables considered for this study (i.e., corporate governance characteristics, audit fees and firm-specific characteristics) and the fact that minor variations may exist across GCC countries. Data regarding the country-level factors have been retrieved from the official website of the World Bank statistics.

For macroeconomic condition, gross domestic product per capita (*GDPPERCAPITA*) is among the most commonly used macroeconomic indicators. This study incorporates the level of economic development with the natural logarithm of GDP per capita given

extant evidence that the level of economic development indicates to the evolvement of complex legal and regulatory requirements which, in turn, associates with the degree of the sophistication of audit procedures required and the proportion of audits conducted. Therefore, the level of economic development is expected to be significantly associated with the decisions of auditor change (*CHANGE*) and auditor selection (*AQ\_SCORE*) (Choi & Wong, 2007; Fargher *et al.*, 2001; Guedhami *et al.*, 2009; Hope *et al.*, 2008). As for the institutional environment score, due to data limitations, this study was unable to extract quantitative data concerning the efficiency of legal/judicial system of Saudi Arabia, Oman and Qatar from the World Bank statistics. Therefore, it was incapable to apply the accurate “legal enforcement” variable measured by La Porta *et al.* (1998) which consists of the mean score across three legal variables, namely; (1) the efficiency of the judicial system, (2) an assessment of rule of law, and (3) the corruption index. Instead, this study applies the Principal Component Analysis (PCA) using the varimax rotation to combine two available indices of La Porta *et al.* (1998), namely; “corruption index” and “rule of law” beside including a third variable called “strength of investor protection index” which is an average of 3 indices-the extent of disclosure index, the extent director liability index and the ease of shareholder suit index. Thus, the institutional environment score is used by this study to proxy for the strength of the legal environment which determines the level of audit quality demanded. Firms in stronger legal environments are more likely to hire quality-differentiated auditors (Choi & Wong, 2007; Fargher *et al.*, 2001; Guedhami *et al.*, 2009; Hope *et al.*, 2008).

The common factor produced by the PCA measures the institutional environment score. The PCA revealed the presence of one factor or component loading with one eigenvalue

exceeding one for the both models 1 & 2 and for the both periods considered  $t_{-1}$  &  $t_1$ . This suggests that the institutional environment score in GCC countries encompasses of an aggregation measurement of the corruption index, rule of law and strength of investor protection index as shown in Table 8.5.

Table 8.5  
Principal Component Analysis) on Institutional Environment Score

Variables	Auditor Change (Model 1)		Auditor Selection (Model 2)	
	Factor loadings ( $t_{-1}$ )	Factor Loadings ( $t_1$ )	Factor Loadings ( $t_{-1}$ )	Factor Loadings ( $t_1$ )
Corruption Index	.96	.94	.96	.95
Investor Protection	.94	.94	.94	.96
Rule of Law	.92	.96	.94	.97
Eigenvalue	2.64	2.679	2.685	2.761
% of variance	87.99	89.295	89.509	92.034
Kaiser-Meyer-Olkin (KMO)	.750	.758	.764	.752
Bartlett's Test of Sphericity: Approx Chi-Square	428.477	461.605	277.946	355.534
df	3	3	3	3
Sig	.000	.000	.000	.000

As depicted by Table 8.6 that the GDP per capita (*GDP PERCAPITA*) has a significantly negative association with auditor change (*CHANGE*) in the period preceding the auditor change ( $t_{-1}$ :  $p$ -value = 0.001) and no association has been reported in the period subsequent to the auditor change ( $t_1$ :  $p$ -value = 0.310), suggesting that the higher the economic development, the less likely the probability of auditor change. GCC client firms change their auditors in reaction to changes in the economic development. One possible interpretation could be attributed, as explained earlier, to the nature of business environment of GCC countries that is based on establishing family and friendship relationships and social networks with auditors.

Table 8.6  
*Logit Analysis Results—Auditor Change (Model 1)*

Variables	Pre-Auditor-Change Model 1 <sub>a</sub> ( $t_{-1}$ )			Post-Auditor-Change Model 1 <sub>b</sub> ( $t_1$ )		
	Coef.	z	P>  z	Coef.	z	P>  z
<b>Corporate Governance Mechanisms</b>						
BDE_SCORE	2.38	1.82	<b>0.068</b>	2.67	2.26	<b>0.024</b>
ACE_SCORE	0.22	0.18	0.861	-0.68	1.37	0.620
GOV_OWN	0.13	0.46	0.644	0.06	0.19	0.847
FAMILY_OWN	-2.90	-2.43	<b>0.015</b>	-3.27	1.25	<b>0.009</b>
DOMESTIC_OWN	-0.82	-0.95	0.343	-1.19	-1.55	0.122
<b>Audit-Specific Characteristic</b>						
FEE	0.16	0.72	0.472	0.16	0.79	0.430
<b>Firm-Specific Characteristics</b>						
LASSET	-0.91	-2.97	<b>0.003</b>	-0.98	-3.39	<b>0.001</b>
ROA	-0.004	-0.21	0.836	0.03	1.23	0.218
LEV	0.017	1.59	0.112	0.02	1.64	<b>0.100</b>
MGT_CHANGE	-0.73	-1.65	<b>0.099</b>	-0.05	-0.14	0.886
<b>Country-specific Characteristics</b>						
ECONOMIC DEVELOPMENT GDP/PERCAPITA	-0.00	-3.21	<b>0.001</b>	-3.51	-1.02	0.310
INSTITUTIONAL ENVIRONMENT SCORE INSTSCORE	1.07	3.62	<b>0.000</b>	0.09	0.47	0.638
<hr/>						
Log Likelihood	-88.299			-96.865		
Chi <sup>2</sup> (12)	49.39			33.33		
Prob > Chi <sup>2</sup>	0.000			0.001		
Pseudo R <sup>2</sup>	0.219			0.147		
No. of Observations	172			172		

**Bold** = significance at 1%, 5% and 10%.

Further, the complex legal and regulatory requirements and the sophistication of audit procedures in GCC countries have been mitigated by hiring the dominant group of auditors, Big 4, and establishing stringent business relationships with them. With respect to the institutional environment score (*INSTSCORE*), consistent with expectations, a significantly positive association has been documented in the period prior to the auditor change ( $t_{-1}$ :  $p$ -value = 0.000) and no association has been reported in the year subsequent to the auditor change ( $t_{-1}$ :  $p$ -value = 0.638), indicating that GCC client firms change their auditors in reaction to changes in the institutional environment. The change in the strength of the institutional environment score may cause shifts in the degree of audit

quality demanded which, in turn, may lead to the possibility of auditor change (Choi & Wong, 2007; Fargher *et al.*, 2001; Guedhami *et al.*, 2009; Hope *et al.*, 2008).

Interestingly, as reported by Table 8.7 that economic development (*GDPPERCAPITA*) is insignificantly associated with the auditor selection (*AQ\_SCORE*) in either period ( $t_{-1}$ :  $p$ -value = 0.643;  $t_1$ :  $p$ -value = 0.359). This suggests that audit quality (*AQ\_SCORE*) is not driven by the economic development across GCC countries and across different periods. In terms of the institutional environment score (*INSTSCORE*), insignificant association has been reported with the auditor selection in the year preceding the auditor selection ( $t_{-1}$ :  $p$ -value = 0.643) and a significantly positive association, as expected, has been found in the year subsequent to the auditor selection ( $t_1$ :  $p$ -value = 0.096), indicating that GCC client firms select a quality-differentiated auditors in an anticipation for changes in the institutional environment. This result is consistent with several empirical studies in auditor choice (Choi & Wong, 2007; Fargher *et al.*, 2001; Guedhami *et al.*, 2009; Hope *et al.*, 2008).

As for the auditor change framework (Model 1) presented by Table 8.6, the  $chi^2$  values for model 1<sub>a</sub> and model 1<sub>b</sub> are statistically significant at 1% level. The Pseudo  $R^2$  for model 1<sub>a</sub> is 0.22, increasing sharply by 0.09 than the basic model. And, for model 1<sub>b</sub>, it is 0.15, increasing by 0.01 than the basic model. Thus, the explanatory power for model 1<sub>a</sub> after including the country-level variables is higher than the basic model. As for the explanatory power for model 1<sub>b</sub>, it is still comparable to the basic model. Interestingly, including the country-level variables to the both models of the auditor change (1<sub>a</sub>& 1<sub>b</sub>)

has caused no change, to some extent, to the relationships of the other variables with the probability of auditor change (*CHANGE*).

Table 8.7  
*OLS Analysis Results – Auditor Selection (Model 2)*

Variables	Pre-Auditor-Selection Model 2 <sub>a</sub> ( <i>t</i> <sub>-1</sub> )			Post-Auditor-Selection Model 2 <sub>b</sub> ( <i>t</i> <sub>1</sub> )		
	Coef.	<i>t</i>	<i>P</i> >   <i>t</i>	Coef.	<i>t</i>	<i>P</i> >   <i>t</i>
<b>Corporate Governance</b>						
<b>Mechanisms</b>						
BDE_SCORE	-0.33	-0.46	0.643	0.59	0.92	0.359
ACE_SCORE	0.11	0.21	0.837	0.01	0.02	0.987
GOV_OWN	0.07	0.48	0.633	0.11	0.75	0.455
FAMILY_OWN	1.06	1.77	<b>0.080</b>	1.30	2.10	<b>0.038</b>
DOMESTIC_OWN	1.02	2.51	<b>0.014</b>	0.72	2.00	<b>0.049</b>
<b>Audit-Specific Characteristics</b>						
FEE	0.39	3.40	<b>0.001</b>	0.34	3.49	<b>0.001</b>
<b>Firm-specific Characteristics</b>						
LASSET	-0.00	-0.01	0.991	0.06	0.48	0.634
ROA	-0.03	-2.93	<b>0.004</b>	-0.02	-2.57	<b>0.012</b>
LEV	-0.00	-0.32	0.746	-0.00	-1.20	0.234
MGT_CHANGE	0.37	1.72	<b>0.090</b>	-0.05	-0.28	0.778
<b>Country-specific Characteristics</b>						
Economic Development <i>GDP</i> PERCAPITA	0.07	-0.19	0.847	-1.58	-0.91	0.366
Institutional Environment Score <i>INSTSCORE</i>	0.17	1.10	0.275	0.18	1.68	<b>0.096</b>
Adjusted <i>R</i> <sup>2</sup>	0.137			0.140		
Model <i>F</i> -stat.	2.36			2.44		
<i>P</i> -value	0.011			0.008		
No. of Observations	104			107		

**Bold** = significance at 1%, 5% and 10%.

With respect to the auditor selection model (Model 2), as depicted by Table 8.7, the *P*-values for model 2<sub>a</sub> is statistically significant closer to 1% level and for model 2<sub>b</sub> is statistically significant at 1% level. The adjusted *R*<sup>2</sup>s for models 2<sub>a</sub> and model 2<sub>b</sub> are closer to 14%. In specific, including the country-level variables has caused no change, to some extent, to the explanatory powers of models 2<sub>a</sub> and 2<sub>b</sub> compared with the basic models. Interestingly, as for the other variables, their relationships with the quality of the auditor selection (*AQ\_SCORE*) were generally similar to those in the basic models.

## **8.5 Summary and Conclusion**

In this chapter, a number of sensitivity and additional tests have been carried out in order to make sure that the regression models and the empirical results are robust and to further provide supplementary results. After introducing the chapter, section two presents a test of the auditor change and selection in the event year. The results of this test give support to the proposition that the periods preceding and subsequent to the auditor change and selection are not less important than the event year in explaining the auditor change and selection behaviors. Section three depicts the individual effect of the board of directors characteristics and the audit committee characteristics on the decisions of auditor change and selection. The results show that board of directors independence and meetings are positively associated with the decision of auditor change. However, board size and CEO duality are negatively associated with auditor change. With regard to the audit committee characteristics, the meetings and financial expertise are found to have a significantly positive association with auditor change. Nevertheless, the international experience has reported to have a significantly negative association with auditor change. In terms of the board and audit committee characteristics with auditor selection, interestingly, CEO duality is documented to positively associated with the audit quality and the board's international experience is found to negatively associated with the audit quality. As for the audit committee characteristics, only financial expertise is reported to have a significantly positive association with the audit quality.

The final section reports the association of country-level factors, economic development and institutional environment score, on the decisions of auditor change and selection.



Given the small differences among GCC countries, the economic development is reported to negatively associate with the decision of auditor change. But, the institutional environment score is positively associated with the decision of auditor change. These results indicate that the decision of auditor change among GCC countries is driven by the economic development and the institutional environment. As for the decision of the auditor selection, no association has been reported between the economic development and institutional environment with the audit quality. This result shows that GCC companies do not consider either the economic development or the institutional environment in making decisions of selecting auditors.

## CHAPTER NINE

### SUMMARY AND CONCLUSION

#### 9.1 Introduction

This thesis examines determinants of auditor change and selection in GCC audit market, with a focus on these countries' unique culture, legal and institutional environments. In particular, this thesis provides a review of the literature, develops testable hypotheses, discusses research methods, and presents empirical findings vis-à-vis the determinants of auditor change and new auditor selection.

The purpose of this chapter is to present the findings and discuss the contributions and limitations of the study, as well as suggestions for future research. This chapter is organized as follows: section 9.2 summarizes the overall findings of this study. Section 9.3 addresses the potential implications of the study. Section 9.4 features a discussion on research limitations. Section 9.5 offers several possible opportunities for further research. Section 9.6 offers brief conclusions.

#### 9.2 Summary of Results

This study investigates the association of board of directors effectiveness, audit committee effectiveness, government ownership, family ownership, domestic corporate

ownership, audit fees, firm size, leverage, firm performance, and management change with the decisions of auditor change (Model 1) and auditor selection (Model 2) preceding and subsequent to these events in GCC countries. The following shows a summary of the results of each model.

### **9.2.1 The Results of the Auditor Change Framework (Model 1)**

In this model, a total of 172 non-financial companies listed on GCC stock markets for the periods preceding and subsequent to the auditor change, over the period 2005–2010, were selected. A quantitative approach was adopted to answer 10 specific hypotheses developed for the auditor change framework (Model 1).

From the analyses conducted, with respect to corporate governance mechanisms, the results suggest that only two variables out of five are found to have an association with the propensity of auditor change. These include board of directors effectiveness, which is positively related to auditor change, and family ownership, which is negatively associated with the incidence of auditor change. Audit committee effectiveness, government ownership, and domestic corporate ownership are not related to the propensity of auditor change. With regard to the audit-specific characteristic, audit fee is documented to have no association with the decision of auditor change. As for firm-specific characteristics, firm size has been found to be negatively related to the auditor change decision, while leverage is positively associated. Neither firm performance nor management change is found to be significantly related to the decision of auditor change.

In particular, as for the board of directors effectiveness and auditor change, the association is reported to exist both preceding and subsequent to the auditor change. This result suggests that GCC client firms change their auditors in reaction to, and in anticipation of, changes in the effectiveness of the board of directors. This refers to the substitution function of board of directors effectiveness and external auditors. This could also indicate insufficiency with the current services offered, or it could be related to recurrent hidden events. Therefore, this result points toward the importance of cultural matters and the integration of economic and behavioral theories (agency theory, managerial grid theory, and attraction-selection-attrition framework) in the setting of the GCC in explaining the behavior of auditor change. They represent a better proxy for board of directors effectiveness as perceived by client firms to reduce agency conflicts by augmenting the effectiveness of monitoring and providing advice. A potential justification for this result could also be attributed to institutional theory, in which the different institutions of the GCC, such as the governance of concentrated ownership, are often affected by political connections and family involvement. This can deteriorate the board's ability to perform its governance role by controlling, monitoring, and addressing various agency problems.

In terms of the audit committee and propensity for auditor change, the result does not support the inclusion and integration of economic and behavioral theories (agency theory, managerial grid theory, and attraction-selection-attrition framework). These corporate governance mechanisms (board of directors effectiveness vs. audit committee effectiveness) act as a substitute for, rather than as a complement to, auditor change.

As for government ownership and the auditor change decision, the unassociated result documented also reflects the substitution, not complementary, function of the association with the corporate governance mechanism (government ownership vs. board of directors and audit committee effectiveness). This result could relate to political steadiness, in which auditor change might expose questionable political favors (Leuz & Oberholzer-Gee, 2006). This result may also indicate the association between government ownership and ineffective corporate governance which, in turn, leads to little demand for independent auditing to supply quality accounting information (Qi *et al.*, 2000; Xu & Wang, 1999; Wang *et al.*, 2005).

In terms of the association of family ownership with the incidence of auditor change, the result indicates that GCC companies change their auditors in reaction to, and in anticipation of, changes in the proportion of the family ownership. This result is line with the view of Jensen and Meckling (1976), who suggest an increase in the holdings of the largest shareholder reduces agency costs and thus, the need to manage earnings in order to alleviate contractual constraints. Consequently, this will motivate the controlling owners to improve earnings transparency by demanding a higher quality auditor. The controlling owner may believe hiring a high-quality auditor is a signal of good corporate governance and credible financial reporting to minority shareholders and other investors. This circumstance would lead to a decrease in the frequency of auditor change. This result is also consistent with Carey *et al.*, (2000), which reveals that the association among corporate governance mechanisms in making a decision related to the auditor change (family ownership vs. board of directors and audit committee

effectiveness) is complementary and not a substitution. In addition, this association (family ownership vs. audit committee) is a substitution and not complementary.

As for the relationship between domestic corporate ownership and the propensity for auditor change, this result refers to the uniqueness of GCC companies, in which domestic corporations control the business environment. Those owners sit on the board of directors; consequently, they would influence management's decision through the effectiveness of the board of directors. This result also indicates that there is a close alignment between the owners and the board of directors as a decision control system. Therefore, corporate governance mechanisms (domestic corporate ownership vs. board of directors and audit committee effectiveness) act in substitution of, and not complementary to, their relationship with the auditor change decision.

As for the association between audit fees and the incidence of auditor change, the result confirms the dominance of the Big 4 audit firms in GCC market. They have comparable reputations and charge comparable audit fees; therefore, the majority of the auditor-change cases (62%) have taken place among these audit firms. As a consequence, no significant differences have been captured among auditors of the same class.

Concerning firm size and the incidence of auditor change, this result is contrary to the conjecture of the agency theory, suggesting that the larger the firm size, the lower the probability of auditor change. This result also implies that client firms in the GCC change their auditors in reaction to, and in anticipation of, changes in firm size. This result is consistent with Krishnan *et al.* (1996), and may indicate that Big 4 audit firms

dominate GCC market. In other words, as GCC firms become larger, they retain their auditors.

Regarding the association between firm performance and the decision of auditor change, the result does not support the prediction of the agency theory and information suppression hypothesis. Empirically, however, it is consistent with Lee *et al.* (2004), Williams (1988) and Woo and Koh (2001). This result may be interpreted differently by a variety of companies in terms of profits achieved (Aljifri, 2008; Aljifri & Moustafa, 2007). In this study, the mean (median) of ROA for the full sample included in the auditor change model is 9.60 (9.11) for the ex-ante period and 7.90 (7.92) for the ex-post period, indicating that GCC companies demonstrate healthy performance. In addition, Schwartz and Menon (1985) indicate that there is a positive association between changes in the companies' financial conditions and changes in the auditing packages demanded. In the setting of the GCC, no substantial changes have been reported in the financial conditions of GCC companies ( $t_{-1}$ : 18%;  $t_1$ : 13%).

With respect to the association between leverage and auditor change, the result is in line with the prediction of the agency theory and, empirically, consistent with DeFond (1992), Eichenseher and Shields (1989) and Woo and Koh (2001). This suggests that GCC client firms change their auditors in reaction to, and in anticipation of, changes in the degree of leverage.

Concerning the association of management change with the propensity for auditor change, the result is inconsistent with the prediction of the agency theory. One possible

explanation is that Arab management attempts to associate with the prior auditor relationship if the auditor change is occurred among the same quality level of auditors. Another interpretation is that the new management may be satisfied with the quality of past services provided by the company's auditor, as well as with the cost of the audit (Burton & Roberts, 1967; Carpenter & Strawser, 1971; Hudaib & Cooke, 2005). This result is consistent with that found by Schwartz and Menon (1985), Chow and Rice (1982) and Williams (1988). This suggests that GCC companies, on average, do not select their board members optimally, which may lead to lack of coordination and communication, and cause decision making problems (Aljifri & Moustafa, 2007).

### **9.2.2 The Results of the Auditor Selection Framework (Model 2)**

To measure the auditor selection decision, this study adopts the combined measure of audit quality in DeFond's (1992) sole study, a U.S.-based study, which comprises four surrogates: brand name auditor, auditor independence, auditor size, and auditor expertise. This study compares different time periods than DeFond's (1992); as the U.S. and the GCC have different institutional and business environments, audit markets, and culture between, this study expects to report different results than those of DeFond (1992).

DeFond (1992) indicates that studies on auditor choice, methodologically, lack a comprehensive proxy for audit quality. He reports that the combined measure captures the same underlying construct—the auditor's ability to alleviate agency conflicts. In this regard, the combined variables are expected to be a good measure of audit quality when



considered as a group and not individually. In this manner, they would increase the power of the tests by reducing noise in the dependent variable. Further, Nunnally and Bernstein (1994) argue that combining several variables provides greater construct validity and scientific generalizability in the domain as a whole, relative to a single measure. These variables act in a complementary mode, which might explain the conflicting results reported by the previous studies. They consider each variable in isolation from the others, ignoring the fact that the effectiveness of a single variable depends on the others.

DeFond (1992) concludes that using the combined measure, which entails complicated calculations, gives identical results to those obtained by the brand-name individual model. This suggests that, in the U.S setting, audit quality, as an aggregate measurement, encompasses the four auditor characteristics. Following DeFond's (1992) combined measure of audit quality in GCC context, however, a different result has been reported. The combined measure of audit quality in GCC countries comprises only three surrogates: brand-name auditor, auditor independence, and auditor expertise, as revealed by factor analysis.

A total of 104 and 108 non-financial companies listed on GCC stock markets for the periods preceding and subsequent the event, respectively, over the period 2005–2010 were studied. A quantitative approach was applied to answer 10 specific hypotheses developed for the auditor selection model.

Concerning the empirical results, two corporate governance mechanisms, family ownership and domestic corporate ownership, are positively associated with audit quality. Nevertheless, board of directors effectiveness, audit committee effectiveness, and government ownership are not related to the decision of new auditor selection.

With respect to firm-specific characteristics, management change for the period preceding the new auditor selection is reported to have a positively significant association with audit quality. Firm performance is negatively associated with audit quality. However, firm size, leverage, and management change subsequent to the new auditor selection are insignificantly associated with audit quality.

Concerning the association of board of directors effectiveness with audit quality, the result does not support the optimal combination of board of directors economic and behavioral characteristics integrated with economic theory (agency theory) and behavioral theories (managerial grid theory and attraction-selection-attrition framework). However, this result supports the substitution function of corporate governance mechanisms (board of directors effectiveness vs. audit committee vs. ownership structure vs. external auditor). This result also reflects the close alignment between owners and managers which, in turn, weakens the board's ability to perform its governance role by being effective in controlling, monitoring, and addressing various agency problems. These boards are still affected by the Arab cultural and historical legacies, the bureaucratic legacy of colonial status, and Bedouin orientations. This could be also a consequence as managers in the Arab world encourage the nepotism when they choose their counterparts. Therefore, there would be high levels of hierarchical authority

and patriarchal approach. These environments do not indicate to good corporate governance practices, such as demanding a higher audit quality

As for the association of audit committee effectiveness with audit quality, the result implies that one of the most effective monitoring roles of the audit committee—ensuring higher audit quality—has deteriorated. This result does not support the optimal combination of audit committee economic and behavioral characteristics integrated with economic theory (agency theory) and behavioral theories (managerial grid theory and attraction-selection-attrition framework). Audit committees are still new in the business environment of the GCC, and serious penalties for not implementing codes of corporate governance do not exist. In addition, the duties, objectives, independence, and scope of audit committees are unclear. In particular, the most important function of audit committees is to nominate the external auditor and justify the criteria used for this nomination. Further, there is a lack of academic and professional qualifications among audit committee members, which prevents them from coping with incremental developments. Furthermore, in the GCC, some companies have failed to establish detailed guidelines that clearly identify the function of the audit committee. Another interpretation for this result is that audit committee and audit quality are substitution functions.

Regarding the relationship of government ownership and audit quality, the result is consistent with the substitution function of corporate governance mechanisms (government ownership vs. family and domestic corporate ownerships) with audit quality. One possible justification is that GCC countries strive to keep a high degree of

political stability. Higher audit quality means high levels of transparency and public attention given to the governments' activities, which might expose political favors of questionable legality. In this aspect, governments pursue control over firms to compensate their supporters for votes, political contributions, and bribes. Thus, governments in the GCC may give other controlling owners on the board more flexibility in decision-making, which, in turn, may influence the lack of demand for a high audit quality.

With regard to family ownership and audit quality, the result is consistent with GCC client firms selecting higher audit quality in anticipation of changes in the family ownership, more than in reaction to changes in the family ownership. This result is consistent with the agency literature, which suggests that independent auditing is needed to alleviate contractual constraints of potential conflict in a family business. This result is in line with the substitution hypothesis of the association of corporate governance mechanism (family ownership vs. board of directors and audit committee effectiveness) with demanding audit quality. Empirically, this result is consistent with Carey *et al.* (2000).

In terms of the association of domestic corporate ownership and audit quality, the result is consistent with the agency theory of potential conflict and information asymmetry when demanding monitoring via audit quality. This result also supports the idea that corporate governance mechanisms (domestic corporate ownership vs. board of directors and audit committee effectiveness) are substitution functions, not complementary functions. This result also agrees with Allen and Phillips (2000), who present evidence

that corporate ownership provides significant benefits to firms involved in certain business agreements by reducing the costs of monitoring the alliances or ventures between firms and their corporate blockholders.

As for audit fee and audit quality, the result is consistent with the prediction of agency theory. This result is also consistent, empirically, with Che Ahmad *et al.* (2006). With respect to the association between firm size and audit quality, this result is inconsistent with agency theory. Nevertheless, this result is in line with Abbott and Parker (2000), Chan *et al.* (2007), Eichenseher and Shields (1989), Francis and Wilson (1988) and Palmrose (1984b). This refers to the market power of controlling owners who sit on the board, and is associated with less legal enforcement and high degrees of family and business relationships. This environment is important in the GCC in order for the governments to be politically stable. In this case, the decision of new auditor selection is based on friendship, business relationships, and social networks rather than firm size.

With respect to the relationship between firm performance and audit quality, the result is consistent with the predictions of agency theory and the insurance hypothesis. In terms of the association between leverage and audit quality, the result is contrary to the prediction of agency theory. However, it is consistent, empirically, with Abbot and Parker (2000), Chan *et al.* (2007); Che Ahmad *et al.* (2006); DeFond (1992); Fargher *et al.* (2001); Guedhami *et al.* (2009); Palmrose (1984b); Velury *et al.* (2003) and Woo and Koh (2001). This result may indicate that auditors perceive high-risk clients as less cost effective. This result may also refer to the close alignment of controlling owners and managers, who are more effective in monitoring debt contracts than audit quality factors.

Therefore, appointing high-quality auditors is not a means to mitigate the effects of firm-specific risk. Concerning management change and audit quality, the significantly positive association with audit quality is only reported in the period prior to the auditor selection, suggesting that GCC client firms select new auditors in reaction to management change and not in anticipation of management change. This result is consistent with the conjecture of agency theory, and its empirically supported by Hudiab and Cooke (2005) and Woo and Koh (2001).

### **9.3 Implications of the Study**

#### **9.3.1 Implications for Theory**

The findings of this study generally show that board of directors effectiveness is related positively to the auditor change decision both preceding and subsequent to the auditor change. This indicates that the greater the effectiveness of the board of directors, the higher the probability that the auditor is changed. From the perspective of the substitution hypothesis, this result indicates the importance of behavioral issues and the culture of the board of directors (nationality and international experience) in corporate governance. This has a significant impact on the development of financial markets, which fosters independent auditing and which, in turn, influences the decision of auditor change. It shows that the prediction of integrating economic theory (agency theory) and behavioral theories (managerial grid theory framework and attraction-selection-attrition) are a better proxy for board of directors effectiveness as perceived by client firms to reduce agency conflicts by enhancing the effectiveness of monitoring and providing advice. This result also supports the argument that the theory of auditor change is

heavily based on economic theory (agency theory), overlooking the behavioral issues of audit clients. Therefore, economic theory can provide only a partial explanation, and is not sufficient to explain auditor change behavior. Thus, combining economic and behavioral theories can provide more sufficient explanations about auditor change behavior in GCC countries where culture preferences dominate the business environment and decision-making.

Looking at this result from the institutional theoretic perspective, the dominance of GCC owners that are affected by political ties and family involvement can weaken the board's ability to perform its governance role to be effective in controlling, monitoring, and addressing various agency problems. This environment may be explained by "hegemony theory," in which the board is viewed as a passive instrument relying on top executives for information (Demb & Neubauer, 1992; Kosnik, 1987), or because of other obligations, board members are too busy to perform their duties effectively. In the same vein, Arab firms, on average, do not select their board members optimally, which may lead to lack of coordination and communication, and cause decision-making problems. These practices do not encourage internally-driven improvements in the effectiveness of corporate governance practices such as demanding audit quality. Governments in the GCC view the tribal system, in which tribal attitudes and loyalty are rewarded, as useful for their political stability.

As for the association of audit committee effectiveness with auditor change and audit quality, and the association of board of directors effectiveness with audit quality, an insignificant association has been reported in either period. This result indicates to a

substitutable action and not a complementary function (board of directors vs. audit committee and ownership structure). This finding is also inconsistent with the prediction of integrating economic theory (agency theory) and behavioral theories (managerial grid theory and attraction-selection-attrition framework). They indicate that behavioral issues and culture (nationality and international experience) are less important in the work of the audit committee in terms of auditor change and audit quality, and of the board of directors concerning the auditor selection.

With respect to the association of government ownership with auditor change and audit quality, an insignificant association has been documented. This result is in line with substitution, and is not a complementary function of the association among the corporate governance mechanism (government ownership vs. board of directors and audit committee effectiveness). Concerning family ownership and the decisions of auditor change and selection, a significantly negative association is reported with auditor change, and a significantly positive association is reported with auditor selection. This result is consistent with the prediction of agency theory. This finding also reveals that the association among corporate governance mechanisms in making decisions related to auditor change and audit quality (family ownership vs. board of directors and audit committee effectiveness) is a substitutable action and not a complementary function. In terms of the association of domestic corporate ownership with auditor change and audit quality, an insignificant association has been documented with auditor change, and a significantly positive association has been documented with audit quality. The insignificant association reported with the auditor change supports substitution and not a complementary function (domestic corporate ownership vs. board of directors



effectiveness). The significantly positive association with audit quality is consistent with the suggestion of agency theory, and supports that it is a substitutable action and not a complementary function (domestic corporate ownership vs. board of directors and audit committee effectiveness).

Regarding firm size with auditor change, a significantly negative association has been reported in both periods. As for the association of firm size with auditor selection, an insignificant association has been reported in both periods. These results are inconsistent with the conjecture of agency theory. Despite the fact that agency theory conjectures dominate corporate governance studies, explaining other alternative theories such as managerial grid theory, attraction-selection-attrition framework, hegemony theory, and institutional theory is an important step toward gaining further understanding of the relationship of board and audit committee effectiveness and ownership structure with auditor choice.

### **9.3.2 Implications for Policymakers**

This study reports the association between corporate governance mechanisms, the audit-specific characteristic, and firm-specific characteristics with the decisions of auditor change and selection. Therefore, the five member states of GCC governments, stock markets, and accounting and auditing regulators would gain new insights from this study in terms of the extent to which regulations, laws, codes of corporate governance, decrees, and resolutions are implemented by both auditees and auditors. Further, the findings of this study will be useful to regulators in deliberating policies on issues

related to corporate governance and auditing, since auditor independence may be impaired. One possibility is to make it mandatory for companies incorporating in GCC region to disclose in their annual reports their reasons for changing auditors, in a manner to determine the direction of future governance policies for GCC corporations. Thus, regulators would be able to decide when and how corporate governance, accounting, and auditing practices are being carried out in GCC setting.

### **9.3.3 Implications for Management and Stakeholders**

The findings of this study may serve to enhance the practices of corporate governance by the management and shareholders and can as well improve the demanding for audit quality in their organization. The significance of having better practices of corporate governance ought to be recognized in making financial reporting to be more credible and quality. It has not been considered a suitable practice for listed firms which have weak internal system of corporate governance to appoint auditors with low-quality. In this environment, the shareholders who control the listed firms have the tendency of depriving the private benefits of exploiting small shareholders.

The results of this study would benefit banks in the way they assess the creditworthiness of incorporating companies in the GCC. The numbers appearing in audited financial statements mandate bond covenants. Moreover, credit decisions made by lenders are based on audited financial statements. Therefore, audit opinions are of the utmost important for any lending institution. Investors and financial analysts depend on audited financial statements to make decisions related to bonds, bond rating, and all other

decisions related to investments in GCC markets. Accordingly, increased understanding and prediction of companies' events are important to this user group.

All types of audit firms would benefit from an increased understanding of the audit environment in GCC setting. This opportunity would help them assess the propriety of continuing their current strategies and policies to attract new clients and, therefore, enhance positive strategies and policies and correct negative ones. For instance, the audit firm may make decisions to adjust its audit proposal, change the audit team or staff, and/or make any other reasonable adjustment that would increase its chance to stay with the existing client, as well as attract new ones.

#### **9.3.4 Implications to Academia**

The results of this study will be of interest to researchers and the academic community, due to a lack of a formal research body addressing the issues of auditor choice in the GCC. Therefore, this study will provide them with substantial information about issues in the markets of the GCC, as well as premise data in the future. This study contributes to the body of knowledge and the growing empirical literature about auditing, and encourages further research on the association between corporate governance and auditor change and selection.

Rather than focus solely on board of directors and audit committee characteristics from the perspective of agency theory, this study provides evidence on cultural behaviors such as board nationality and international experience, and how to use behavioral theories,

such managerial grid theory and attraction-selection-attrition framework, to explain and link these cultural values with auditor choice in GCC region. In addition, this study provides evidence of the uniqueness of GGC ownership structure—government and its agencies, family ownership, and domestic corporate ownership—and how this ownership domination and classification is related to auditor choice issues in GCC region.

#### **9.4 Limitations of the Study**

The above results, however, are susceptible to a number of important limitations. The main limitations of the study are as follows:

1. The auditor change and corporate governance data in this study covers only three years—the period spanning 2005–2010—which may not be generalized for other before-and-after periods. Generalizing the results of this study to other years should be seen with some attentiveness.
2. The random basis is not applied to select and include this study's sample companies. Rather, selection was based on the availability of auditor change and corporate governance data. Therefore, the quality of the results depends on the quality of the sample data. In this regard, some auditor-change companies may be excluded from the study, and the characteristics of the sample companies may be different from those of the excluded companies. In this case, the results are valid only to the extent that the sample is representative of the population. However, this caveat is not an issue for this study since only 73 out of 482

companies (e.g., 15%) were found to have incomplete data. Therefore, the directional bias is not problem for this study.

3. Several important determinants documented by the prior literature to have an association with auditor choice have been excluded from the study's model, due to data unavailability and/or weak variables such as audit opinion, non-audit fees, board of directors and audit committee educational backgrounds, managerial ownership, foreign-institutional ownership, foreign operations, and firm complexity. Thus, the independent variables included in the auditor change model and auditor selection model are not exhaustive. Further, the number of independent variables is reduced in this study because of the small sample size of auditor switchers.
4. Kuwaiti firms have been excluded from the sample because of poor disclosed corporate governance information.
5. For the purpose of testing the auditor choice, a complex method of simultaneous equation could produce more rigorous findings. The studies of auditor choice ought to take into consideration the demand for audit services as well as its supply. The technique of simultaneous equation may be employed to control the effects of the demand for audit services as well as its supply. A causal association ought to be assumed even though the reported findings of the study indicated a statistically significant relationship between the dependent and explanatory variables. For the purpose of emphasis on the issue, test like *Linktest* and the *Ramsey* test are performed on the specification of the model.
6. Past studies focused on the companies in developed and western countries like the U.S and U.K. Therefore, the results obtained from this study may not be

applicable to other settings or situations. Perhaps this could not necessarily serve as limitation since the results obtained from developing economies or from different culturally background economies like GCC member states could serve as contribution to the body of knowledge in auditing.

7. Good internal corporate governance is firm specific and not all governance devices considered sound may work for an individual company, or may not work for reasons not controlled in this study. Therefore, the results of the existent relationships between internal corporate governance and audit quality are only an average, without considering differences due to company size, financial risk, or overall governance quality. In this case, the findings may not extend to an individual company to explain auditor choice decisions.
8. The existence of some internal corporate governance mechanisms does not necessarily serve as a proxy for the quality of governance. For example, audit committee presence in some companies might be more “image management” than serving any real monitoring purpose. Therefore, controlling for more prior variables is significant in this case in predicting audit quality choice.

## **9.5 Suggestions for Future Research**

Extension to the current study is possible in the following areas:

1. Although this study focuses on a specific setting, GCC region, there is a possibility of extending future examinations to other country settings that have comparable features and business environments to those of the present study, in

order to determine its validity in different environments and time periods. For example, features such as concentrated ownership structure and cultural issues, such as nationality and international experience, could be included, as could other Arab countries. The results of this study can be displayed by a more powerful tests as a large sample companies are included from different countries. Additionally, a longer longitudinal study may better analyze the association between corporate governance and audit quality. On the other hand, comparative studies with other MENA countries might provide further insight to the theory proposed in this study. Moreover, future studies may replicate this study using non-listed or small-sized companies. The sample should also include both large and small auditees to enable a researcher to ascertain the level of competition in the market.

2. As this study reports that audit quality and the incidence of auditor change matter in the family businesses in GCC region, future studies might examine the differences in demanding audit services between family and non-family businesses. This might shed the light on the practices of corporate governance in countries where concentrated ownership in the hands of family members dominates the business environment.
3. This study applies the quantitative approach of accounting research using the positive paradigm. Potential research can be derived to using an interpretive or critical approach to examine issues that have not been touched by this study. For instance, future studies can investigate the process of auditor choice and how board of directors and audit committee involve in these processes. The results of such studies may contribute to the understanding of auditor choice.

4. Future studies could test more cultural variables in the setting of the GCC, such as the family name of the CEO since it represents the family power on the board. This cultural value is expected to influence the auditing function in GCC region.
5. Understanding why most of the companies in the GCC change auditors within specific quality categories is important in developing a theory of auditor change. For example, in this study, 62% of the sample has changed to another auditor of the same quality (where quality is measured as classification as a Big 4, international audit firm, or local audit firm).
6. Future studies may consider using cross-sectional data of one year in which the auditor change is occurred. Data may be collected using a secondary data method (i.e., annual reports), or a questionnaire survey could be used to investigate behavioral and cultural issues on the board that led to the change. This methodology is important in developing a theory of auditor change in GCC region, where behavioral and cultural issues matter.
7. This study finds that the number of companies in GCC region that changed their auditors between 2006 and 2009 outnumber those that have not changed. This finding could be tested in GCC context, which may reveal new insights into the behavior of auditor change and contribute to the developing theory of auditor change.
8. Finally, future studies could test the relationship examined in this study using different measurements of industry specialist auditors, such as Palmrose (1986) and Franz *et al.* (1998); Craswell *et al.* (1995); and Dopuch and Simunic (1982). Using different measurements could validate the existing findings of this study.



## 9.6 Conclusion

The present study was pursued as an attempt to investigate the associations of board of directors effectiveness (independence, size, expertise, meetings, duality, nationality, and international experience), audit committee effectiveness (independence, size, expertise, meetings, nationality, and international experience), government ownership, family ownership, domestic corporate ownership, audit fees, firm size, leverage, firm performance, and management change with the decisions of auditor change and selection in two time periods—before and after the event of change and selection—in GCC context. Importantly, this study finds evidence consistent with an association between internal corporate governance mechanisms and external audit quality.

The results indicate that board of directors effectiveness is positively related to auditor change decisions prior and subsequent to the auditor change. From the substitution hypothesis, this supports the integration of economic and behavioral theories in explaining the auditor change decision in GCC context. It sheds light on cultural variables; nationality, and international experience, cultural theories; managerial grid theory, and attraction-selection-attrition framework that affect corporate governance and behavior of board members, which is of vital interest to multinational corporations. The study also provides strong support for the role of family ownership in making decisions concerning auditor change and selection in both periods. In addition, domestic corporate ownership is positively associated with audit quality in both periods. Audit fee is positively related to audit quality in both periods. Firm size and leverage are negatively

related to audit quality in both periods. Management change is positively related to audit quality selection in the period preceding the auditor change.

The results also suggest that the association between audit quality and agency conflicts is sensitive to the time period over which agency conflicts are measured (before and after changing), the choice of the measure used as a proxy for audit quality, and the context in which such a proxy is measured. Further, the results indicate that in GCC setting the auditor change may take different legitimate reasons. In this regard, stakeholders should take care of the illegitimate reasons of auditor change that may also take place (e.g., opinion shopping). Therefore, it is recommended that regulatory authorities should develop an auditor change policy that prevents illegitimate auditor changes and allows the legitimate ones.

Generally, the evidence suggests that large auditors have been able to differentiate themselves in GCC audit market, and the effectiveness of audit monitoring is positively affected by the quality of the firm's corporate governance practices in the GCC. Further, this study suggests that Arab companies have high percentages of family ownership with high degrees of political relationships and market power. These circumstances may lead to an environment where corporate governance is weak which, in turn, minority shareholder and other investors' rights are not protected. However, the results also provide evidence of the active monitoring role of domestic corporate owners and the role they play in improving the efficiency of GCC markets, the effectiveness of corporate governance, and the credibility of accounting information. Therefore, the introduction of large institutional shareholders can compensate for the absence of the institutional

features typically found in free-market economies that provide incentives for managers to supply credible accounting information via quality audits. The results also reveal that ownership structure can serve as a substitute for board and audit committee effectiveness in mitigating agency problems. With respect to the auditor change model, board of directors effectiveness can substitute for audit committee and ownership structure. With regard to the auditor selection model, ownership structure can substitute for board and audit committee effectiveness.

In addition, in companies controlled by family and domestic corporations, audit quality may play a complementary role. Hence, GCC government and market regulators should revise and promote the reform of the current corporate governance codes to take into account the developments in international best practices, especially in the areas of board and audit committee competence, ownership structure, and enhancing the surveillance of the behaviors of the controlling shareholders. The GCC should also strengthen corporate governance codes, develop their stock markets, and emphasize more enforcement of codes, laws, and regulations that protect investors and creditors. Families in business need to enhance their focus on responsibilities to investors, strengthen their internal control systems, and put in place effective internal control policies. Families should also ensure an appropriate and balanced board structure, which includes some independent, non-executive directors. Further, improving board composition and developing the knowledge and capabilities of directors are still the most significant barriers to improving board effectiveness. In this regard, affiliate and family relationships should be disclosed, and a culture of independent directors should be implemented. GCC countries are heading towards improving their accounting and auditing practices to an

international level in order to respond to the incremental developments in the economic reforms and business restructuring. Consequently, auditing profession and GCC stock markets would also develop to meet these changes.

Regarding the periods prior and subsequent to auditor change and selection, for the auditor change framework (Model 1), the auditor change in the both periods has a comparable correlation with the independent variables (as measured by Pseudo  $R^2$ ). With respect to the auditor selection framework (Model 2), the audit quality score in both periods has a comparable correlation with the independent variables (as measured by adjusted  $R^2$ ). These results show that the periods prior and subsequent to auditor change and selection may explain the auditor change and selection behaviors no less than the event year. In addition, this result is in line with the suggestion that managers change their auditors and select new ones in reaction to, and in anticipation of, changes in agency conflict variables.

The results from this study, as discussed earlier, may differ from previous research, due to several methodological differences. First, cross-temporal differences in auditor change and selection and agency conflict variables are measured over two time periods: prior and subsequent to the auditor change and selection. The period of this study is restricted to one year prior and subsequent to the auditor change and selection because of the availability of GCC data. The only studies using cross-temporal differences are Francis and Wilson (1988), who use variables measured only over the three-year period prior to the auditor change; and DeFond (1992) and Abidin (2006), who use a two-year period prior and subsequent to the auditor change.

Second, based on factor analysis results, and unlike DeFond (1992), audit quality score in the GCC is constructed from three measures of audit firm characteristics: brand-name auditor, auditor independence, and industry specialist. In particular, the evidence is consistent with the audit quality score being perceived by client firms as the audit firm characteristic most effective in signaling the auditor's ability to alleviate agency problems associated with family ownership, domestic corporate ownership, audit fees, firm performance, and management change. Traditionally, however, the majority of auditor choice studies have simply used a Big 4 and non-Big 4 dichotomy to characterize audit firms.

Third, for the auditor change framework (Model 1), this study was unable to use "matched-pair sampling" because, interestingly, GCC companies that have changed their auditors outnumber the companies that have not.

Lastly, the sample used in this study excludes several categories of companies that have changed their auditors for non-agency cost reasons. This procedure has the effect of increasing the power of the test (reducing noise) and minimizing measurement error from using financial statements that may include unreliable information. Thus, one should be careful when interpreting the results of this study, and should take into account the effects of different environmental factors when comparing auditing practices in the GCC to those in developed countries.

The results from the study signal to the need to bring about some kind of reform process to enhance the boards of management as well as improving more accountable boards. A review of previous results of the study suggests the concern for considering the practice of western systems of corporate governance as relevant to be applied to business environs GCC countries. Given the fact that different countries reflects different structure of corporate governance due to institutional environments which are distinct, simply taking to adoption of western styles of corporate governance structures by developing countries need be reconsidered. Evidently, the relationship of ownership structure with the auditor choice suggests the important effect of ownership structure as well as audit quality. It is hoped that the current research will enhance deeper insights into the systems of corporate governance and the influence they have on the decisions to select and change auditors. This could serve as a guide to financial information users to evaluate the effect of such systems of corporate governance on enhancing the quality of audit.

The most important conclusion that can be drawn from this study is that various theories advanced in the literature to explain why companies change and select a certain type of auditor over another are related to the stage of economic development and cultural issues of the countries under study. All the economic theories ignored the cultural issues in Arab countries; these theories would gain support in developed economies more than in Arab countries, where cultural issues dominate the business environment.

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