JCGIRM Journal of Corporate Governance, Insurance, and Risk Management (JCGIRM)
2016, Volume 3, Series 3

pp 89-104

Family, Governmental, Domestic Corporations and Board of Directors and Audit Committee Effectiveness in GCC**

Faisal Ayid Alroqy [a,*] **Khaled Salmen Aljaaid** [b]

[a] Accounting Department, College of Business Umm Al-Qura Unviersity, Saudi Arabia

[b] Accounting Department, College of Administrative Sciences Hadhramuat University, Republic of Yemen

A B S T R A C T

This study aims at investigating the association between ownership structure (government ownership, family ownership and domestic corporate ownership) and the interaction of board of directors effectiveness and audit committee effectiveness by GCC listed companies. The study utilizes a cross-sectional analysis of 492 firm-year observations during the 2006-2010 period. A pooled OLS regression analysis is used to estimate the associations proposed in the hypotheses. The study finds that government and domestic corporate ownerships are positively related to the effectiveness of board of directors and audit committee. However, such association could not be reported by the family ownership. The results of this study suggest that government-owned and domestic corporate-owned companies are characterized to have good corporate governance practices in terms of board of directors and audit committee as internal control and monitoring mechanisms. Further, the results of this study contribute to the existing theory and empirical evidence of how the effectiveness of board of directors and audit committee is related to monitoring and controlling ownership type. This study offers policy-makers additional evidence to be used for setting up and/or enacting regulations in GCC.

A R T I C L E   I N F O

Keywords:

Ownership structure, effectiveness of board of directors and audit committee, GCC

**Corresponding author:*

Faisal Ayid Alroqy

faroqy@uqu.edu.sa

Article History
Received 22 05 2016
Revised 25 06 2016
Accepted 27 11 2016

**Previously Published in EJEM, 2016, Volume 3 number 3

1. Introduction

Corporate governance has been incrementally the focus of regulators, investors, lenders and other stakeholders in the today's business market. 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. 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 (Houqe & Zijl, 2008; Kirkos et al., 2008; Yatim, Kent & Clarkson, 2006). Furthermore, 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 (Klein 1998; Birkett, 1986). 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.

Given the governance issues arising from the separation of ownership and control, several studies examining an AC formation, board formation and ownership structure have been empirically investigated based primarily on Anglo-Saxon countries and similar markets (Collier & Gregory, 1999; Menon &Williams, 1994; Pincus, Rusbarsky,&Wong, 1989; Turpin & DeZoort, 1998; Chau and Leung, 2006; Mendez and Garcia, 2007). This study will hopefully contribute to extending empirical research into ownership structure, board and audit committee effectiveness in GCC markets, which is a special case, one hallmark of which is an institutional framework that clearly differs from that of its Anglo-Saxon counterparts. It may not, in fact, be wise to extrapolate empirical evidence from Anglo- Saxon markets to their GCC counterparts for several reasons: (1) Previous studies used managerial ownership as a proxy for company ownership (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). 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). (2) GCC governments have intervened heavily in linking legal origins and financial arrangements. GCC countries are still suffering from a lack of equity among investors.

(3) 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). (4) 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. (5) Recently, however, GCC countries have adopted and developed large-scale economic and market policies and strategies that convert them to market-oriented economies. In this case, these issues may have an influence on the quality of board of directors and audit committee in the GCC, and agency problems are more likely to arise between majority and minority shareholders.

This study investigates the variation in the level of board and audit committee quality caused by different ownership structures among GCC companies. An agency theory framework is used to analyze the association between ownership structure and board of directors and audit committee effectiveness in GCC setting. One of the objectives of this paper is to extend such analyses in a number of important ways. 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 or different structure of ownership. 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). Furthermore, this study adds to the recent literature by investigating and associating ownership structure with board of directors and audit committee effectiveness. 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 degree impacted by the variation in the ownership structure. 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).

The findings of this study should be of interest to policymakers in GCC as well as to those emerging markets in the Middle East because of the similarities in the institutional and cultural environments and in the corporate ownership structure of firms (La Porta & Lopezde-silanes, 1999). The results may also be of interest to other researchers who are investigating the characteristics of firms in the formation and effectiveness of board of directors, ACs, and ownership structure. In addition, the results of this study will hopefully motivate further inquiries into why the effectiveness of board of directors and ACs varies among different degrees of family, government, and domestic corporate ownership structure.

The remainder of the paper is organized as follows. Section 2 discusses the literature review and the hypotheses development. Section 3 describes the research methodology. The results and discussions have been highlighted in section 4. The final section provides conclusions and implications.

2. Literature review and development of hypotheses

2.1 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).

2.2 Board of directors and audit committee effectiveness score

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, & Lapides, 2000; Klein, 2002). 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.

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 (Houqe & Zijl, 2008; Kirkos et al., 2008; Yatim, Kent & Clarkson, 2006). Furthermore, 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. As for the audit committee effectiveness. 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 (Klein 1998; Birkett, 1986). 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.

Several prior researches on corporate governance have empirically linked ownership structure with board and audit committee effectiveness either by examining the board and audit committee characteristics in an individual manner or by examining separately the board characteristics from audit committee characteristics (Collier & Gregory, 1999; Menon &Williams, 1994; Pincus, Rusbarsky,&Wong, 1989; Turpin & DeZoort, 1998; Chau and Leung, 2006; Mendez and Garcia, 2007). Unlike these previous studies, the current study investigates the board and audit committee characteristics as a composite measure including the board of directors characteristics (independence, size, meetings, CEO duality, financial expertise, nationality and international experience) and the audit committee characteristics (independence, size, meetings, financial expertise, nationality and international experience). 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).

2.3 Ownership structure

2.3.1 Family ownership

Carey et al. (2000) argue 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). 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 an association between family ownership and board of directors and audit committee effectiveness. The testable hypothesis is stated as follows:

H_1: Ceteris paribus, there is an association between family ownership and board of directors and audit committee effectiveness.

2.3.2 Government ownership

High levels of government ownership create a series of agency problems of ineffective corporate governance that directly results in poor firm performance (Qi et al., 2000; Wang et al., 2005; Xu & Wang, 1999) and, consequently, low levels of board and audit committee effectiveness. 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.

The above disputing discussion guides the present study to propose an association between government ownership and board of directors and audit committee effectiveness. The testable hypothesis is identified as follows:

H_2: Ceteris paribus, there is an association between government ownership and board of directors and audit committee effectiveness.

2.3.3 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 board of directors and audit committee effectiveness. Increasing the quality of board of directors and audit committee 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 the board of directors and audit committee effectiveness. The testable hypothesis is stated in a direct form:

H_3: Ceteris paribus, there is a positive association between domestic corporate ownership and board of directors and audit committee effectiveness.

3. Data collection and research design

3.1 Sample selection and data collection

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 2010. 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). The information has been gathered as of three points in time; before, during and after the auditor switches. Samples selected for the three years spanning from 2006 to 2010 are depicted in Table 1.

Table 1

Sample Selection during 2006-2010

	Total Observation
Total listed companies	172 company
Period of study (2006-2010)	3 year
Total observations	516 observations
Missing and Incomplete data	(24 observations)
Total observations selected	492 observations

3.2 Regression model and definition of variables

The economic model is used to develop a model of board and audit committee effectiveness. The variables proposed for inclusion in the model capture differences in the costs of agency relationships. The dependent variable is a continuous measurement. To estimate this model, Multivariate Analysis is applied using Multiple regression model because the dependent variable is a continuous nature. A pooled OLS regression analysis is used to estimate the associations proposed in the hypotheses. The functional equation of the multiple regression model is utilized to determine the extent of the influence of each of the independent variables on the board and audit committee effectiveness:

$$BAC\_EFFE = \beta0 + \beta1\ FAMILY\_OWN + \beta2\ GOV\_OWN + \beta3\ DOMESTIC\_OWN + \text{Control variables} + e$$

Where the dependent variable is:

BAC_EFFE = Board and audit committee effectiveness

Where the independent variables are:

FAMILY_OWN	= percentage of 5 or more of the ordinary shares held by a family,
GOV_OWN	= percentage of 5 or more of the ordinary shares held by the government and its agencies,
DOMESTIC_OWN	= percentage of 5 or more of the ordinary shares held by domestic corporations
Control variables	
FSIZE	= $\log_{10}$ of the total assets,
ROE	= return on equity,
LEV	= total debt to total assets,
AUD_CHANGE	= "1" if auditor is changed, "0" otherwise,
e	error term.

4. Results and discussion

4.1 Descriptive statistics and correlation analyses

Table 4.1 predicts the mean, standard deviation, minimum and maximum of each variable in the sample data set.

Table 4.1
Descriptive statistics (*N* = 492)

Panel A: Independent variables				
Variables	Mean	Std.Deviation	Minimum	Maximum
FAMILY_OWN	.124	.192	.000	.950
GOV_OWN	.081	.163	.000	1.00
DOMESTIC_OWN	.250	.266	.000	1.00
Control variables				
FSIZE	1937085.762681	6995892.1297166	2097.5000	78121395.2600
ROE	12.707	32.039	-186.220	503.210
LEV	20.946	22.572	.000	115.800
Panel B: Dependent variable				
BAC_EFFE	.444	.1662	.07	.86
Panel C: Control variable (a dichotomous measure)			Companies with an auditor change	Otherwise
AUD_CHANGE			300 (61%)	192 (39%)

Table 4.1; panel A shows that there is a significant range of variation among the considered sample of this study. The range of family ownership *FAMILY_OWN* is from .000 to .95 with a mean of .124 and standard deviation of .192. The range of government ownership *GOV_OWN* is from .000 to 1.00 with a mean of .081 and standard deviation of .163. as for the domestic corporate ownership *DOMESTIC_OWN*, it ranges from .000 to 1.00 with a mean of .250 and standard deviation of .266. With respect to the control variables, firm size *FSIZE* ranges from S.R2097.500 to S.R78121395.2600 with a mean of S.R1937085.762681 and standard deviation of S.R6995892.1297166. The range of return on equity *ROE* is from -186.220 to 503.210 with a mean of 12.707 and standard deviation

of 32.039. The range of leverage *LEV* is from .000 to 115.800 with a mean of 20.946 and standard deviation of 22.572. As for auditor change *AUD_CHANGE* as shown in panel C, the majority of the sample companies (61%) have changed their auditors during the three points in time selected. In terms of the dependent variable; board and audit committee effectiveness *BD_AC*, panel B shows a range between .07 to .86 with a mean of .444 and standard deviation of .1662, meaning that there is a variation among the sample companies in terms of the degree of board and audit committee effectiveness.

The Pearson correlations between the variables are presented in Table 4.2. Most of the coefficients of correlation are small and the highest correlation was between *FSIZE* and *AUD_CHANGE*, indicating that larger firms have a higher incidence of switching auditors.

Table 4.2

Pearson Correlation Analysis results (n = 492)

	FAMILY_OWN	GOV_OWN	DOMESTIC_OWN	FSIZE	ROE	LEV	AUD_CHANGE
FAMILY_OWN	1.00						
GOV_OWN	-.249	1.00					
DOMESTIC_OWN	-.220	-.254	1.00				
FSIZE	-.224	.304	-.134	1.00			
ROE	-.006	.046	-.027	.031	1.00		
LEV	.146	-.102	.114	.006	-.196	1.00	
AUD_CHANGE	-.070	-.021	.005	-.344	-.012	.061	1.00

** Significant at 1 per cent level (2-tailed).

*Significant at 5 per cent level (2-tailed).

the correlation matrix confirms that no multicollinearity exists between the variables as none of the variables correlates above 0.80 or 0.90 all variables have a correlation of less than 0.304 (Myers, 1990).

4.2 Regression results and discussions

Pooled Ordinary-Least Square (OLS) was used to evaluate the level of effect of the hypothesized variable, family ownership, government ownership, and domestic corporate ownership on the effectiveness of audit committee. Table 4.3 shows that the coefficient of determination (adjusted R^2) for *BD_AC* is equal to 12.2. The statistics show that this model has explained 12.2% of the total variance in the effectiveness of board and audit committee. The table also depicts that the
model is a statistically significant where the F test statistic = 10.749 with a p-value < 0.001, indicating that the overall model can be interpreted.

Table 4.3

Pooled OLS regression (n = 492)

Variables	**Expected sign**	**Coeff.**	***t***	***p*-value**

(Constant)			9.793	0.000
FAMILY_OWN		-0.55	-1.138	0.256
GOV_OWN		0.175	3.696	0.000
DOMESTIC_OWN	+	0.203	4.329	0.000
Control variables				
FSIZE		-0.200	-4.023	0.000
ROE		0.080	1.861	0.063
LEV		0.115	2.578	0.010
AUD_CHANGE		0.111	2.401	0.017
Adjusted R^2	12.2			
Model *F*-stat.	10.749			
P-value	0.000			

As illustrated by Table 4.4, the regression coefficient for *GOV_OWN* is positive (.175) and statistically significant ($p < 0.001$), suggesting that government ownership is associated positively with the effectiveness of board and audit committee in GCC. This result is consistent with the prediction of agency theory and supported empirical studies. It provides support for hypothesis H_2. Further, the regression coefficient for *DOMESTIC_OWN* is positive (.203) and statistically significant ($p < 0.001$), indicating that domestic corporate ownership influences positively the effectiveness of board and audit committee in GCC. Therefore, this result gives support to the suggestion of agency theory and the supporting empirical evidence. Hence, hypothesis H_3 is accepted. On the other hand, this study fails to find an association between *FAMILY_OWN* and the effectiveness of board and audit committee in GCC. Therefore, hypothesis H_1 is not supported. An explanation to this result could be attributed to the model specification in which the associations of government and domestic corporations are more influential than family ownership when aggregated in one model. Supporting this evidence, an additional analysis is run excluding government and domestic corporations as depicted in the following Table 4.4.

Table 4.4
Pooled OLS regression (n = 492)

Variables	**Coeff.**	***t***	***p*-value**
(Constant)		11.225	0.000
FAMILY_OWN	-0.127	-3.206	0.001
Control variables			
FSIZE	-0.037	-4.138	0.000
ROE	0.000	1.951	0.052
LEV	0.115	2.578	0.010
AUD_CHANGE	0.001	3.012	0.003
Adjusted R^2	8.00		
Model *F*-stat.	9.490		
P-value	0.000		

Table 4.4 shows that there is a significantly negative association ($t = -3.206$, $p < 0.001$) between family ownership and the effectiveness of board and audit committee in GCC region. Therefore, this result gives support to the agency theory and the supported empirical evidence.

5. Conclusions and implications

Our study examines the association of family ownership, government ownership and domestic corporate ownership with the effectiveness of board and audit committee in the GCC region. The hypotheses of this study are based on the premise that family and government ownerships affects the effectiveness of board and audit committee. Further, domestic corporate ownership influences positively such effectiveness. Since this study focuses on the GCC setting which is referred to as a unique corporate ownership and corporate governance structure, it does contribute to the body of literature in providing empirical evidence regarding the board and audit committee effectiveness. It is worth mentioning that GCC companies are characterized as having unclear separation of ownership and control as that found in the Western countries. Therefore, the result of this study can be used as a piece of evidence adding to the current body of literature about Arab countries and similar markets. Our result supports the hypotheses that government, domestic and corporations do influence positively the effectiveness of board and audit committee. One important implication of this finding relates to the issue of board and audit committee effectiveness in GCC. GCC governments, stock market, companies and accounting and auditing regulators would gain some new insights from this study in terms of the understanding the association of family ownership, government ownership and domestic corporate ownership with the effectiveness of ard and audit committee. The results of this study would benefit banks in the way that they can assess the creditworthiness of incorporating companies in GCC. Moreover, credit decisions made by lenders are determined based on information included in the financial statements. Therefore, board and audit committee effectiveness issues are of the utmost important for any lending institution. Investors and financial analysts may depend on issues of the effectiveness of board and audit committee to interpret decisions related to bonds, bond rating, interest rate, and all other decisions related to investments in GCC markets. Accordingly, increased understanding and prediction of companies' events is important to this user group. Further, the results of this study will be of interest to the researchers and academic community due to a lack of formal research body addressing the issues of family ownership, government ownership and domestic ownership and the effectiveness of board and audit committee and, therefore, this study will provide with substantial information about issues in the markets of GCC to count on, in the future, as premise data. Limitations of the study lie on the other internal corporate governance mechanisms (i.e., board of directors characteristics and ownership structures). Future line of research should put an effort to introduce more characteristics of these mechanisms. Further research should replicate this model to determine its validity in different contexts of Arab countries, in different time periods, and with different sample sizes. These limitations may motivate more future research in the Middle Eastern markets.

References

Abbott, L., & Parker, S. (2000). Auditor selection and audit committee characteristics. *Auditing*, 19(2), 47-66.

Agrawal, A., & Knoeber, C. R. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis, 31*(03), 377-397.

Al-Hussaini, A & Al-Sultan, W. (2008). Development of enforcement mechanisms following adoption of international accounting standards in the Gulf Co-Operation Council member states. *International Journal Of Business Strategy, 8*(3), 50-71

Ali, R. (1999). The rules of good corporate governance: Methods of efficient implementation. *In 12th Commonwealth Law Conference, Kuala Lumpur*.

AL-Majlis, The GCC Board Directors Institute. (2009). *AL Majlis, The GCC Board Directors Institute Newsletter, 1*. Retrieved December 12, 2009, from AL Majlis, The GCC Board Directors Institute website at http://www.gccbdi.org/assets/docs/ Al_Majlis_ Issue_01.pdf

Al-Shammari, B., Brown, P., & Tarca, A. (2008). An investigation of compliance with international accounting standards by listed companies in the Gulf Co-Operation Council member states. *The International Journal of Accounting, 43*(4), 425-447.

Beasley, M. S., Carcello, J. V., Hermanson, D. R., & Lapides, P. D. (2000). Fraudulent financial reporting: Consideration of industry traits and corporate governance mechanisms. *Accounting Horizon*, (December), 441–454.

Birkett, B. (1980). *Perceptions of the Role of Corporate Audit Committees*.[Doctoral Dissertation]. The Louisiana State University.

Bley, J., & Chen, K. (2006). Gulf Cooperation Council (GCC) stock markets: The dawn of a new era. *Global Finance Journal, 17*(1), 75-91.

Bradbury,M. E. (1990). The incentives for voluntary audit committee formation. *Journal of Accounting and Public Policy*, *9*, 19–36.

Brunninge, O., & Nordqvist, M. (2004). Ownership structure, board composition and entrepreneurship: Evidence from family firms and venture-capital-backed firms. *International Journal of Entrepreneurial Behaviour & Research*, *10*(1/2), 85-105.

Cai, J., Liu, Y., & Qian, Y. (2009). Information asymmetry and corporate governance. *Drexel College of Business Research Paper No. 2008-02.*

Carcello, J., & Neal, T. (2003). Audit committee characteristics and auditor dismissals following" new" going-concern reports. *Accounting Review*, *78*(1), 95-117.

Cassell, C. A., Giroux, G. A., Myers, L. A., & Omer, T. C. (2012). The effect of corporate governance on auditor-client realignments. *Auditing: A Journal of Practice & Theory, 31*(2), 167-188.

Center for International Private Enterprise and Global Corporate Governance Forum. (2011).*Advancing corporate governance in the Middle East and North Africa: Stories and Solutions*. Available at www.cipe.org/publications/bookstore/.../ advancingCGinTheMENA.p

Center for International Private Enterprise and Global Corporate Governance Forum. (2011).*Advancing corporate governance in the Middle East and North Africa: Stories and Solutions*. Available at www.cipe.org/publications/bookstore/.../ advancingCGinTheMENA.p

Chen, C., & Jaggi, B. (2000). Association between independent non-executive directors, family control and financial disclosures in Hong Kong. *Journal of Accounting and Public Policy*, *19*, 285–310.

Claessens, S., Fan, J. P. H., & Lang, L. H. P. (2006). The benefits and costs of group affiliation: Evidence from East Asia. *Emerging Markets Review, 7*(1), 1-26.

Collier, P., & Gregory, A. (1996). Audit committee effectiveness and the audit fee. *European Accounting Review, 5*(2), 177-198.

Collier, P., & Gregory, A. (1999). Audit committee activity and agency costs. *Journal of Accounting and Public Policy, 18*, 311–332.

Copley, P., & Douthett Jr, E. (2002). The association between auditor choice, ownershipretained, and earnings disclosure by firms making initial public offerings. *Contemporary Accounting Research, 19*(1), 49.

Daily, C. M., & M. J. Dollinger. (1992). An empirical examination of ownership structure in family and professionally managed firms. *Family Business Review 5*(2), 117–136.

Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, *88*, 88–307.

Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *Journal of Law and Economics*, (June), 327–349.

Fama, E., & Jensen, M. (1983). Separation of ownership and control. *The Journal of Law and Economics, 26*(2), 301-325.

Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C (1995). Multivariate data analysis with readings. Prentice Hall.

Harabi, N. (2007). State of Corporate Governance in Arab Countries: An Overview. MPRA unpublished paper, MPRA: Munich Personal RePEc Archive. Retrieved August 12, 2009, from http://mpra.ub.uni-muenchen.de/4566/.

Hawkamah, the Institute for Corporate Governance and IFC, International Finance Corporation. (2008). *Corporate governance survey of listed companies and banks across the Middle East and North Africa*. Available at http://www.hawkamah.org.

Hawkamah, the Institute for Corporate Governance and IFC, International Finance Corporation. (2008). *Corporate governance survey of listed companies and banks across the Middle East and North Africa*. Available at http://www.hawkamah.org.

Ho, S. M., & Wong, K. S. (2001). A study of the relationship between corporate governance structures and the extent of voluntary disclosure. *Journal of International Accounting, Auditing & Taxation, 10*, 139–156.

Houqe, N., Van Zijl, T., Dunstan, K., & Karim, A. K. M. (2010). Board ethics and auditor choice–International evidence. *Board Ethics and Auditor Choice–International Evidence (December 23, 2010)*. Available at http:www.afaanz.org/ openconf/2010/modules/ request.php? module=oc_p

INSEAD, The Business School for the World. (2010). *Governance in the Gulf: In search of best practice and a common review*. INSEAD Governance Meeting with support of The Abu Dhabi Center for Corporate Governance (ADCCG) and The Hawkamah, Institute for Corporate Governance. Available at http://www.insead.edu/facultyresearch/.../governance.../

INSEAD, The Business School for the World. (2010). *Governance in the Gulf: In search of best practice and a common review*. INSEAD Governance Meeting with support of The Abu Dhabi Center for Corporate Governance (ADCCG) and The Hawkamah, Institute for Corporate Governance. Available at http://www.insead.edu/facultyresearch/.../governance.../

Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and capital structure. *Journal of financial economics, 3*(4), 305-360.

Karim, A. K. M., & T. Van Zijl, T. (2008). *Role of corporate governance in influencing auditor choice in emerging audit services market*. Victoria University of Wellington, Working Paper.

Kawaura, A. (2004). Deregulation and governance: plight of Japanese banks in the 1990s. *Applied Economics, 36*(5), 479-484.

Kirkos, E., Spathis, C., & Manolopoulos, Y. (2008). Support vector machines, Decision Trees and Neural Networks for auditor selection. *Journal of Computational Methods in Science and Engineering, 8*(3), 213-224.

Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics, 33*(3), 375-400.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1999). Corporate ownership around the world. *Journal of Finance, 54*(2), 471-517.

Lennox, C. S., & Park, C. W. (2007). Audit Firm Appointments, Audit Firm Alumni, and Audit Committee Independence. *Contemporary Accounting Research, 24*(1), 235-258.

Mautz, R., & Neumann, F. (1977). *Corporate audit committees: Policies and practices*. Cleveland, OH Ernst & Ernst.

Menon, K. & D. Williams (1991). Auditor credibility and initial public offerings. *The Accounting Review 6*6(2), 313–332.

Menon, K., &Williams, J. D. (1994). The use of audit committees for monitoring. *Journal of Accounting & Public Policy, 13*, 121–139.

Menon, K., &Williams, J. D. (1994). The use of audit committees for monitoring. *Journal of Accounting & Public Policy, 13*, 121–139.

Mona, F. (1986). *The Arab executive.* Macmillan, London.

Omran, M. M., Bolbol, A., & Fatheldin, A. (2008). Corporate governance and firm performance in Arab equity markets: Does ownership concentration matter? *International Review of Law and Economics, 28*(1), 32-45.

O'Sullivan, N., & Diacon, S. R. (2006). The impact of ownership, governance and non-audit services on audit fees: Evidence from the insurance industry. *International Journal of Auditing, 6*(1), 93-107.

Pincus, K., Rusbarsky, M.,&Wong, J. (1989). Voluntary formation of corporate audit committees among NASDAQ firms. *Journal of Accounting and Public Policy, 8*, 239–265.

Saidi, N. (2011). Corporate governance in the GCC: What has been done and what remains. *Qatar Business Review,* 11-13.

Saidi, N. (2011). Corporate governance in the GCC: What has been done and what remains. *Qatar Business Review,* 11-13.

The National Investor. (2008a). *Power matters: A survey of GCC boards*. A study conducted by The National Investor in association with The Institute for Corporate Governance and Institute of Directors.

The National Investor. (2008b). *Back to BASICs, An alternative look at liquidity, volatility and transparency*. A study conducted by The National Investor in association with The Institute for Corporate Governance and Institute of Directors.

Turpin, R. A., & DeZoort, F. T. (1998). Characteristics of firms that include an audit committee report in their annual report. *International Journal of Auditing, 2*, 35–48.

Wolnizer, P. (1995). Are audit committees red herrings. *Abacus, 31*(1), 45-66.