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Moderating Effects of Family Business on Audit Committee Diligence and Firm Performance: A Middle Eastern Perspective

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ABSTRACT

This study presents an examination of the effects of audit committee (AC) diligence on firm performance in the Saudi Arabian context. Additionally, the moderating effects of family ownership on the relationship between AC diligence and firm performance are tested. A panel data analysis was undertaken on a total of 485 firm-year observations from the Saudi Arabia Stock Exchange (Tadawul) for the period of 2012 to 2016. A significant negative relationship was found between AC diligence and firm performance, which suggests that a higher number of AC meetings and meeting attendance results in negative firm performance, contradicting the extant literature. Our findings also indicate that the effect of family ownership on all measures of AC diligence leads to adverse firm performance. Our finding supports the socio-emotional wealth argument, where family owners' main concern revolves around meeting the family's affective needs at the expense of firm performance. The paper offers valuable insights that may aid policy makers in devising effective governance mechanisms befitting the cultural and social tradition of business practices in this region.

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INTRODUCTION

The moderating effects of family business on the relationship between audit committee (AC) diligence and firm performance in an emerging market are examined in this study. The importance of an AC can be observed through the vast and diverse literature exploring the role, characteristics and effectiveness of ACs in disbursing their oversight and supervisory roles in organisations (Al-Okaily and Naueihed, 2019; Al-Musali et al., 2019; DeZoort et al., 2002; Abbott et al., 2004; Carcello et al., 2002). While the extant literature has mainly focused on the developed economies, increasing attention has been given to the emerging markets, particularly in Middle Eastern countries such as Saudi Arabia (Baatour et al., 2017; Baydoun et al., 2012; Shehata, 2015, Al-Musali et al., 2019). Saudi Arabia forms an interesting framework for this study as it is characterized by unique cultural beliefs and strong hierarchical social norms (i.e., family, tribal and personal relationship).

One of the first studies about ACs in Saudi Arabia was by Al-Twaijry et al. (2002), who examined the role of ACs in the kingdom when it was first established 25 years ago. Al-Twaijry et al. (2002) discussed the early guidelines applied in the AC formation, following a government requirement: Ministerial Resolve 903 (hereafter, the Resolve) in 1994. Through research interviews with external and internal auditors of joint stock companies, Al-Twaijry et al. (2002) concluded that the ACs back then lacked terms of reference, restricted the scope of work and lacked independence and expertise, which created expectations gaps between what the AC were supposed to do and what they actually did. Safe to say, at this point, Al-Twaijry et al. (2002) indicated that the formation of an AC was simply an act of compliance to the Resolve to gain legitimacy and to create a favourable appearance instead of an effort to improve corporate governance.

Fast forward 20 years, and the outlook on corporate governance in Saudi Arabia has evolved tremendously both in spirit and substance. Following the recent financial and economic crisis, Saudi Arabia's Transformation Plan 2020 has moved from sole reliance on the oil industry towards entrepreneurships and foreign investments. A strong corporate governance regime is fundamental to attract foreign direct investments. As part of the country' reform towards better corporate governance, the Capital Market Authority issued the Corporate Governance Framework in 2006 (amended in 2017 and 2018), which became compulsory for all the listed companies in 2010. One of the important requirements is about the composition and the workings of the AC for publicly listed firms on Tadawul. All the firms are required to install an AC that consists of three to five members. At least one member has to be an independent director, and no executive director is elected on the committee. Additionally, one of its committee members has to be specialised in finance and accounting, and the chairman of the AC shall be an independent director (CMA, 2006).

While rapid progress has been seen in the development of corporate governance in Saudi Arabia, few studies were found to document AC effectiveness. With the exception of Al-Thuneibat et al. (2016), who investigated the effectiveness of an AC in constraining earnings management, no other study was found for the Saudi context. To narrow this gap, the intention in this study is to foster understanding about AC effectiveness in creating value for a firm. In particular, we examine AC diligence as a key element for AC effectiveness (DeZoort et al., 2002). AC diligence is defined as the committee members' willingness to work together in dispensing their function in the organisation (DeZoort et al., 2002), and the most common measure for diligence has been the number of AC meetings per year (Al-Musali et al., 2019). DeZoort et al. (2002) highlighted several studies that relate a limited number of AC meetings with fraudulent reporting occurrences (Beasley et al., 2000; Abbott et al., 2000). To reinforce the measure for diligence, this study also uses the percentage of directors' attendance as a proxy for AC diligence. Additionally, we also consider the Saudi business context in our investigation. The Saudi business environment is unique in the sense that most businesses are family owned (Al-Musali et al., 2019; Eulaiwi et al., 2016). Family-owned businesses posit another dimension of agency conflict, also known as Type II agency problems (Anderson et al., 2004; Eulaiwi et al., 2016; Al-Okaily and Naueihed, 2019). It is perceived that these agency problems are more severe, as the owners have both the incentive and ability to extract private benefits at the expense of minority shareholders (Hashim and Amrah, 2016; Anderson et al., 2004; Al-Okaily and Naueihed, 2019).

As such, AC diligence for Saudi listed firms, including family-owned businesses, were examined in this study. Interestingly, our findings indicated a negative relationship between AC diligence and firm performance. Subsequently, when we considered the effect of family ownership on the relationship of AC diligence and firm performance, our findings also indicated negative relationships. The results clearly suggest that governance measures, such as AC diligence, do not necessarily act in a favourable manner, as documented in the extant

literature. Instead, our findings argue that AC diligence further weakens the firm performance of family-owned businesses.

The remaining of the paper is organised as follows: The next section establishes the theoretical framework and hypothesis development of the present study. The data, measurement of variables and method employed in the study are described in the methodology section. The results and discussion section documents the results from the empirical analysis followed by a discussion of the findings. The final section presents the conclusions, implications from the study and suggestions for future research.

THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

Saudi Arabia is influenced by the Anglo-American model of corporate governance, also known as the market model or the shareholder model, which focuses on maximising the shareholders' wealth, yet the business context that is characterised by significant insider ownership (by government and families), concentrated shareholdings, low transparency levels and a strong inclination towards family finance (Pillai and Al-Malkawi, 2018) leads to inadequate shareholder involvement and protection (Abdallah and Ismail, 2017). In addition, the cultural context that leans towards secrecy and uncertainty avoidance induces a weak institutional environment characterised by weak regulations, deficient law enforcement and the absence of non-compliance costs (Moumen et al., 2016). Due to the unique Saudi business context, one way to instil investor protection and enhance management accountability is to inculcate solid corporate governance fundamentals (Pillai and Al-Malkawi, 2018).

Audit Committee Diligence

The evidence from early research has indicated that at least two AC meetings should suffice, where the first meeting was to approve the external auditors' audit plan and the subsequent meeting was to review the results (Menon and Williams, 1994). Abbott et al. (2000) found that independent ACs that meet at least twice annually are negatively associated with fraud. Recently, many regulatory bodies have recognised the importance of increasing the number of AC meetings to support the effective functioning of corporate governance. According to the Financial Reporting Council (2012), a frequency of meetings of at least three meetings annually between the AC and internal auditors augurs good communication. The AC is responsible for providing independent oversight as a mechanism to reduce agency conflicts. In the context of Saudi Arabia, where a majority of businesses are family owned, the agency conflict is exacerbated from the founding family business owners that have the upper hand in controlling a company's affairs (Eulaiwi et al., 2016). The controlling shareholders may influence management in undertaking decisions based on personal interests and exercising power in a way that is advantageous to the owners at the expense of the minority shareholders (Villalonga et al., 2019; Villalonga and Amit, 2006). Arguably, the shareholders imminent concern towards severe agency conflicts in the family-owned businesses in the Saudi market may be somewhat placated by the Corporate Governance Framework guidelines that require the AC to conduct at least four meetings in a company's financial year (CMA, 2006, p.36). According to Abbott et al. (2004) and Carcello et al. (2002), ACs that meet at least four times a year have higher quality audits as indicated by the higher audit fees paid by the firms. Goodwin-Stewart and Kent (2006) studied the Australian context and reaffirmed earlier findings that suggest that diligence, through the frequency of AC meetings, induces higher audit fees, implying increased audit testing and higher quality audits (Goodwin-Stewart and Kent, 2006). Abbott *et al.* (2004) also concluded that ACs that meet at least four times a year do not tend to get involved with earnings management.

The literature suggests that the AC fulfils its function through constant levels of activity (Sultana et al., 2015; Al Farooque et al., 2019). The frequency of AC meetings enriches and enhances the efficiency of the committees' roles (Bedard et al., 2004), which inadvertently improves firm performance (DeZoort et al., 2002; Al Farooque et al., 2019). AC meetings provide an avenue to address complex challenges and uncertainty within the financial and business environment (Bedard et al., 2004). Additionally, active ACs could detect and prevent opportunistic behaviour by the management, ensuring the integrity of reported earnings (Bedard et al., 2004). Other evidence has linked AC diligence with the issues of internal control and reporting problems, suggesting that a high frequency of AC meetings minimises opportunities for internal control and reporting problems (Naiker and Sharma, 2009; Zhang et al., 2007; Abbott et al., 2004; Archambeault and DeZoort, 2001; DeFond and Francis, 2005). Méndez and Garcia (2007) approximated the ACs' supervisory efforts through meeting

frequency as a measure of the degree and intensity of AC activities which leads to AC's firm control in the companies. Similarly, Karamanou and Vafeas (2005) documented that frequent meetings contribute towards accomplishment of monitoring role by the AC. Greco (2011) and Allegrini and Greco (2013) argued that ACs that meet frequently create opportunities for members to express judgment on the financial statement, its disclosures and financial reporting practices (Li et al., 2012). Empirically, Allegrini and Greco (2013) and Li et al. (2012) found that at least four meetings a year for AC members were significantly related to the level of voluntary disclosure and intellectual capital disclosure, respectively.

The earlier arguments clearly suggested that the frequency of AC meetings engenders a positive impact on the expected roles of an AC. According to DeZoort et al. (2002), AC diligence is a process variable that contributes to audit effectiveness. It has been widely noted that the extant literature predominantly uses the frequency of meetings (Menon and Williams, 1994; Collier and Gregory, 1999; Méndez and Garcia, 2007; Raghunandan and Rama, 2007) as an indicator for diligence. It is noted that the firm size; the AC size; block shareholding; the number of board meetings, finance and accounting experts on the AC; high-litigation risk industries and multiple directorships are positively associated with AC meetings. Despite being widely used, we proposed an additional proxy for diligence, the percentage of meeting attendance, to reinforce this single measure. According to Maraghni and Nekhili (2014), the diligence of the AC is inextricably linked to the attendance habit of its member (Maraghni and Nekhili, 2014). As such, examining both meeting frequency and attendance are equally important proxies for diligence.

In the context of Saudi Arabia, it has been mentioned that the institutional setup is relatively unique due to the distinctive cultural features: strong hierarchical social norms (family, tribal and personal relationships). Therefore, it is anticipated that agency cost may be relatively high amongst Saudi companies, especially when family members are in positions of authority. In that context, it is anticipated that meeting frequency and meeting attendance by AC members may not play a pivotal role in enhancing firm performance. Family owners and investors may not perceive frequent AC meetings and AC meeting attendance as important governance tools for the oversight of the financial reporting process, the audit process, the company's system of internal controls and compliance with laws and regulations. They may discern such governance practices as a hindrance to their business execution plans, which are more family oriented. Thus, the following hypotheses are tested:

H1a: There is a negative relationship between the audit committee meeting frequency and Tobin's-Q.
H1b: There is a negative relationship between the audit committee meeting frequency and return on equity.
H2a: There is a negative relationship between the audit committee meeting attendance and Tobin's-Q.
H2b: There is a negative relationship between the audit committee meeting attendance and return on equity.

Family-Owned Businesses

Family-owned businesses are salient features of the Saudi economy. According to statistics from the Jeddah Chamber of Commerce in 2012, approximately 156 of the listed companies and 5000 companies in the kingdom are family-owned businesses, making it a unique context of the kingdom's economy. Notably, the main corporate governance issues shrouding family-owned businesses are about the intricacies and conflicting relations and interests between family owners, managers and minority shareholders. The literature suggests that family-owned businesses create opportunities for rent expropriation towards minority shareholders where the controlling family may exercise their influence and power for their own private benefits (Shleifer and Vishny, 1997). Such a condition is pronounced in emerging markets where weaker external controls and less developed institutions are reported (La Porta et al., 1999).

Most times, family business owners' main concern is about increasing the wealth of the family, which is seemingly aligned with the minority shareholders' interests. However, at other times, family owners are also vested in meeting the family's affective needs and preserving socio-emotional wealth (Gómez-Mejia et al., 2007; Bodolica et al., 2020; Samara and Paul, 2019) over and above consideration for the company's performance (Gómez-Mejia et al., 2007; Naldi et al., 2007; Chrisman and Patel, 2012; Bodolica et al., 2020; Samara and Paul (2019). Another form of agency conflict arises in family-owned businesses between the owner-manager and other shareholders (other family business owners and minority shareholders), inciting principal-

principal conflicts as given by the agency theory Type II problem (Anderson et al., 2004; Al-Okaily and Naueihed, 2019; Al Farooque et al., 2019). The literature suggests that family contracting may present similar corporate governance issues as non-family businesses, such as short-term rather than long-term orientation, a reluctance to be innovative, a low risk appetite, the pursuit of projects that enhance one's reputation and empire building at the expense of firm profitability (Gómez-Mejia et al., 2007). However, family contracting is often based on emotion and sentiment, which are prone to fostering a departure from economic rationality. Family connections often lead to non-rational consequences and conflicts with business values and profitability, such as the inability to transcend parent-child dynamics, sibling rivalry and generational envy (Gómez-Mejia et al., 2007; Villalonga et al. 2019). As a consequence, many family businesses have low survival rates due to the conflicting needs between the business and the family. Additionally, family-owned businesses show a preference towards lower business risks. Family businesses may not thrive due to the attitude of owner-managers who are risk averse in identifying potential investments and business choices, given that their entire wealth has been invested in their family business only (Rouyer, 2016). Rouyer (2016) argued that family-owned businesses tend to seek capital preservation and stability through risk-reduction activities which lead to reduced performance. Surprisingly, even when owner managers engage in high-risk activities that lead to lower performance, the family connections shelter the owner manager from any penalty and consequences (Gómez-Mejia et al., 2007).

Contrasting to the rent-seeking arguments above, family-owned businesses have also been portrayed as the contingent factor that induces stability and protection towards minority shareholders (Aguilera and Crespi-Caldera, 2012). This perspective suggests that owners are sincerely devoted to their businesses. Having tenaciously invested all their wealth and efforts growing their family-owned business, it is unlikely that the owners would risk making uneconomic decisions that could destroy the firm value. In fact, with their unique insights about the business, the owners could vigilantly monitor management and provide protection for the minority shareholders (Aguilera and Crespi-Cladera, 2012). This argument appears more profound when companies operate within a weak institutional environment (Aguilera and Crespi-Caldera, 2012). According to Aguilera and Crespi-Caldera (2012), in countries where investor protection is weak, minority shareholders may benefit from investing in family-owned businesses where the owners themselves imbue an extra layer of protection, supplementing the omnipresence of institutional deficiencies.

In situations where family owners seek to take advantage over the minority shareholders, the literature predicts that family-owned businesses would have less demand for an effective AC (Hashim and Amrah, 2016). For example, Jaggi and Leung (2007) found that AC effectiveness is reduced when family members dominate the corporate boards. Similarly, in his study of Hong Kong listed firms, Wong (2011) found that the ACs of family firms were less independent and had less financial expertise. A study in the Spanish context that examined the effects of ownership structure on the AC activity found a significant negative correlation between AC meetings and the presence of large controlling shareholders (Méndez and Garcia, 2007). The authors offered two interpretations for this occurrence. They argued that the reduced number of AC meetings could potentially be the outcome of opportunistic behaviour by large shareholders who exploited the benefits of control and acted against the general interests of small shareholders, or the effective supervisory roles exerted by the large shareholders curbed the opportunity for managers to distort financial statements and henceforth reduced the need for meeting frequency.

In a study of the East Asian context, Lam and Lee (2012) found that board committees, such as nomination and remuneration committees, affect firm performance. Their findings indicated that the nomination committee positively affected firm performance when its composition was independent. This means that the board committees that consist of independent directors added value to firms. On the contrary, the presence of family ownership indicated an adverse effect on the relationship between board committees and firm performance. While not directly studying the effect of ACs on firm performance, Lam and Lee's study gives some insights as to how board committees and firm performance may be affected in the presence of family ownership.

AlGhamdi and Rhodes (2015) examined the performance of family-owned businesses in the Saudi context and did not find any evidence that supported any relationship between family ownership and firm performance, as measured by the return on assets (ROA). However, using Tobin's Q as a measure of performance engenders different findings that relate positive firm performance in the presence of family ownership. AlGhamdi and Rhodes (2015) investigated the performance of Saudi listed firms between 2006 and

2011 using a sample of 792 firm-years for observation. Similar findings were documented by Fallatah and Dickins (2012), who did not find any relationship between corporate governance characteristics, contingent on family ownership, and firm performance as measured by ROA.

The presence of family ownership can either reduce or exacerbate agency costs. Nonetheless, AC diligence that manifests in greater monitoring and oversight and leads to improved financial decision making and risk assessment shall benefit shareholders, regardless. However, given the strong family and tribal traditions in the Saudi context and the results of earlier studies on Saudi listed firms that failed to portray favourable relations between family ownership and firm performance (at least not measured by the accounting performance), we are inclined to anticipate that family-owned businesses prioritise activities focusing on maintaining the family's affective and socio-emotional needs at the expense of firm profitability. Arguably, family owners should have a greater tendency to extract private benefits at the costs of minority shareholders who cannot be constrained or alleviated by AC diligence. As such, the following hypotheses are tested:

H3a: Family ownership weakens the relationship between audit committee meeting frequency and Tobin's-Q.
H3b: Family ownership weakens the relationship between audit committee meeting frequency and return on equity.
H4a: Family ownership weakens the relationship between audit committee meeting attendance and Tobin's-Q.
H4b: Family ownership weakens the relationship between audit committee meeting attendance and return on equity.

METHODOLOGY

The sample consisted of 485 firm-year observations covering the publicly listed firms from the Saudi Stock Exchange between 2012 and 2016. All the data were obtained from the annual reports except for the data on firm performance, which had been obtained from the Emerging Market Information Studies (EMIS). This study on Saudi Arabia provides an opportunity to gain understanding about the effect of family ownership on AC effectiveness given the fact that the majority of the firms were either government- or family-owned businesses. Due to the different nature of the banking industry, which is governed by different regulatory standards known as the Banking and Financial Institution Act (BAFIA), financial institutions have been excluded from this study, as government regulations may have potentially affected the firm performance (Anderson and Reeb, 2004).

Measurement of variables

Table 1 Variables description and measurement.

Variables	Operationalization	Source
	Independent Variables	
AC meeting frequency (ACMF)	Number of meetings AC holds in one calendar year	Annual Report (Tadawul).
AC meeting attendance (ACMA)	The overall percentage of meeting attendance of all AC members.	Annual Report (Tadawul).
Family-owned business (FB) *Family business is identified if at least 2 members in the BOD are family members or if the ownership of the firm by family members are more than 50%.*	A binary variable of 1 is assigned for family business and a 0 if otherwise.	Annual Report (Tadawul).
	Dependent Variables	
Tobin's-Q	Total Market Value of Firm / Total Asset Value of Firm.	EMIS database
Return on Equity (ROE)	Net Income / Shareholders' Equity	EMIS database
	Control variables	
Firm Size (FS)	Natural log of total assets	Annual Report (Tadawul)
Firm Age (FA)	Difference between year of study and the year of incorporation.	Annual Report (Tadawul).
AC Size (ACS)	Number of AC members.	Annual Report (Tadawul).
Auditor's Reputation (AudR)	A binary variable of 1 is assigned if the auditors are one of the big-4 CPAs and a 0 if otherwise.	Annual Report (Tadawul).

Table 1 Cont.

Variables	Operationalization	Source
	Control variables	
Independent Directors in AC (IDAC) *A director from the Board of Directors who does not have any pecuniary relationship and is not involved in the executive management of the firm.*	Total number of independent directors in the AC / total number of directors in the AC.	Annual Report (Tadawul).
Outside financial experts in AC (OFAC) *Financial experts on AC who are non-board of directors (BOD) and are mainly from outside the firm.*	Total number of outside financial expert in the AC / total number of directors in the AC	Annual Report (Tadawul).

Table 1 provides detailed measurements of the independent, dependent and control variables employed in the study. Consistent with prior work by DeZoort et al. (2002), Méndez and Garcıa (2007) and Raghunandan and Rama (2007), AC diligence is measured by the AC meeting frequency. In addition, we also included the percentage of meeting attendance as an indicator of AC diligence, consistent with Maraghni and Nekhili (2014), who worked on the AC diligence of French companies. Maraghni and Nekhili retained both attributes of AC diligence – the meeting frequency and the percentage of attendance – arguing that two committees with the same number of AC meetings but with different participation rates cannot be considered to be equally diligent. Furthermore, the percentage of AC meeting attendance reflects the directors' commitment and dedication towards their roles, another measure for AC diligence. Another independent variable employed in the current study was family ownership. A binary variable of 1 was assigned for family business and 0 if otherwise.

The literature offers limited guidance in measuring family ownership (Anderson and Reeb, 2004). Following Anderson and Reeb (2004), family ownership is identified through equity ownership of the founding family and (or) the presence of family members on the board of directors. A board of directors dominated by family representatives indicates family ownership clustering (Méndez and Garcia, 2007). We identified family ownership if two or more family members sat on the board. Generally, it is quite easy to identify family relationships in Saudi Arabia, as all individuals carry their family names, which do not change even after marriage. Systematically checking the family relationships of board members, we identified whether the company was family owned or not. Additionally, if we could not identify family relationships on the board, we would further investigate the identity of the major shareholders. This was usually the case when the major shareholders were companies (see Rouyer, 2016). We would find out who their major shareholders were and once again find family relationships as before. If 50% family ownership was identified in these companies, they were categorised as family owned. We strongly believe that 50% ownership prompts affirmative influence and control in a firm's decision making.

We employed Tobin's-Q and ROA as measures of firm performance. This was also consistent with Anderson and Reeb's (2004) performance measures. We estimated Tobin's-Q as the market value of total assets divided by total asset value of the firm, and ROA was calculated by scaling net income over total assets. Finally, we used several control variables associated with governance and the AC literature (Maraghini and Nekhili, 2014; Anderson and Reeb, 2004), notably, the firm age and size, the AC size, the number of independent and outside directors on the AC and auditors' reputation.

In addition to determining the distribution of the data, we performed generalised least square (GLS) panel data analyses using Stata to test the relationship between the dependent and the independent variables over a five-year period for Model 1 and 2. Unlike cross-sectional data analyses, the panel data approach controls for heterogeneity problems (Moulton, 1987) and allows more data points. To test for the moderating effects of family ownership in Model 3 and 4, we created an interacting term between the independent variables: AC meeting frequency (*ACMF*) and AC meeting attendance (*ACMA*), with the moderating variable: family-owned business (*FB*). These interacting terms are denoted as *ACMFxFB* and *ACMAxFB* in equations 3 and 4 below. Notably, the differences between Model 1 and 2 with Model 3 and 4 will be explained by the effect of the interacting terms (family-owned businesses), altering the strength or nature of the relationship between AC diligence and firm performance.

As a result, the following equations were formulated:

$$\text{Tobin's-Q}_{it} = \beta_0 + \beta_1 ACMF_{it} + \beta_2 ACMA_{it} + \beta_3 FA_{it} + \beta_4 FS_{it} + B_5 ACS_{it} + B_6 IDAC_{it} + \beta_7 OFAC_{it} + \beta_8 AudR_{it} + \varepsilon_{it} \quad (1)$$

$$\text{ROE}_{it} = \beta_0 + \beta_1 ACMF_{it} + \beta_2 ACMA_{it} + \beta_3 FA_{it} + \beta_4 FS_{it} + B_5 ACS_{it} + B_6 IDAC_{it} + \beta_7 OFAC_{it} + \beta_8 AudR_{it} + \varepsilon_{it} \quad (2)$$

$$\text{Tobin's-Q}_{it} = \beta_0 + \beta_1 ACMF_{it} + \beta_2 ACMA_{it} + FB_{it} + \beta_3 ACMF_{it} \times FB_{it} + \beta_4 ACMA_{it} \times FB_{it} + \beta_5 FA_{it} + \beta_6 FS_{it} + B_7 ACS_{it} + B_8 IDAC_{it} + \beta_9 OFAC_{it} + B_{10} AudR_{it} + \varepsilon_{it} \quad (3)$$

$$\text{ROE}_{it} = \beta_0 + \beta_1 ACMF_{it} + \beta_2 ACMA_{it} + FB_{it} + \beta_3 ACMF_{it} \times FB_{it} + \beta_4 ACMA_{it} \times FB_{it} + \beta_5 FA_{it} + \beta_6 FS_{it} + B_7 ACS_{it} + B_8 IDAC_{it} + \beta_9 OFAC_{it} + B_{10} AudR_{it} + \varepsilon_{it} \quad (4)$$

where *ACMF* = AC meeting frequency; *ACMA* = % of meeting attendance; *FB* = Family-owned business; *FA* = Firm age; *FS* = Log firm size; *ACS* = AC size; *IDAC* = Independent directors on AC; *OFAC* = Outside financial expert on AC; and *AudR* = Auditors' reputation.

Methodology

In a normal regression model, the results from cluster errors will usually reduce the precision of the estimated parameter, and the variance of the estimator $\hat{V}(\hat{\beta})$. The option of using the cluster-robust standard errors will fix the variance issue (Cameron and Miller, 2015). In panel data with G clusters, for gth cluster, the estimation can be written as $y_g = X_g\beta + \mu_g, where\ y_g\ and\ \mu_g\ are\ N_g \times 1\ vectors,$

$$\hat{\beta} = (X'X)^{-1}X'y = \left(\sum_{g=1}^{G} X_g' X_g\right)^{-1} \sum_{g=1}^{G} X_g' y_g$$

$$\hat{V}(\hat{B}) = (X'X)^{-1}B(X'X)^{-1},\ where\ B = X'V(\mu|X)X.$$

This simplifies to

$$\beta_{clu} = \sum_{g=1}^{G} X_g' E[\mu_g \mu_g' | X_g] X_g$$

$$\beta_{clu} = \sum_{g=1}^{G}\sum_{i=1}^{N_g}\sum_{j=1}^{N_g} x_{ig} x_{jg}' \omega_{ig,jg},$$

$$where\ \omega_{ig,jg} = E[\mu_{ig}\mu_{jg} | X_g],\ the\ error\ \text{cov}arience\ for\ the\ ig^{th}\ and\ jg^{th}\ observations.$$

Finally, the cluster-robust estimate is,

$$\hat{V}_{clu}(\hat{B}) = (X'X)^{-1}\hat{B}_{clu}(X'X)^{-1},\ where\ \hat{\beta}_{clu} = \sum_{g=1}^{G} X_g' \hat{\mu}_g \hat{\mu}_g' X_g$$

and $\hat{\mu}_g = y_g - X_g\hat{\beta}$ is the vector of OLS residuals for the gth cluster.

The consistent Cluster-Robust variance matrix estimates is obtained by using the average of all $\hat{\beta}_{clu}$.

We further test for firm and time effects, and found that only firm effect is present.

For our panel data, we observe that only firm effect is present. Thus, the panel data is analyzed using the OLS robust regression with firm clustering as suggested by Cameron and Miller (2015).

We proceed to calculate the conditional standard errors for a fully-specified interaction model as suggested by Brambor *et.al.* (2005) in Table 5b.

For $Y = b_0 + b_1X + b_2Z + b_3XZ + e$, where Z is a dichotomous variable, the standard error of the conditional marginal effect of X on Y is given by;

$$\hat{\sigma}_{\frac{dY}{dX}} = \sqrt{var(b_1) + Z^2 var(b_3) + 2Zcov(b_1 b_3)}$$

RESULTS AND DISCUSSION

Descriptive Analysis

Table 2 Descriptive statistics of Tadawul companies from 2012 – 2016

	Mean	**Std Dev**	**Min**	**Max**
Number of AC meetings (*ACMF*)	8	4.26	4	10
AC Meeting Attendance (*ACMA*)	68%	26.41	41%	100%
Independent Directors in AC (*IDAC*)	63%	31.93	18%	100%
Outside financial experts in AC (*OFAC*)	14%	0.54	0%	54%
ACS	3.67	0.86	2	6
Tobin's-Q	1.16	8.52	0.46	1.64
ROE	14.48	14.84	-49.54	56.59
FA (years)	31.45	17.14	8.000	90.00
Ln FS (million)	8.509	1.42	6.409	12.33
AudR	0.862	0.47	0.000	1.00

Note: AC=Audit Committee; ROE=Return on Equity; *ACS*=AC Size; *FA*=Firm Age; *FS*= Firm Size, *AudR*=Auditors' Reputation

The descriptive statistics for all the variables are provided in Table 2. The statistics show that the firms had eight AC meetings in a year on average, with a minimum of four and a maximum of ten meetings annually. Meeting attendance was 68% on average. The lowest meeting attendance was recorded at 41%, while highest meeting attendance was reported at 100%. The AC size varied between two and six members. On average, the ACs of the sample firms had between three and four members. The mean for independent directors on the AC was 63%. This suggests that almost two thirds of the AC members in the sample firms were independent directors who neither had any pecuniary relationship nor were involved in the executive management of the firms. On the contrary, independent financial experts were reported at a very low average of 14%. Also, 45.4% (or 220 firms) and 2% (or 10 firms) of the sample firms had two outside financial experts on their AC, respectively. This means, hypothetically, for an AC that has seven members, at least one of them is a financial expert nominated from outside the firm. This governance requirement was imposed in the Corporate Governance Framework of the KSA (CMA, 2006) to enhance the effective governing role for the AC.

As for the dependent variables, our analysis reports an average of Tobin's-Q of 1.16 with a minimum value of 0.46 and a maximum value of 1.64. This ratio indicates a company's market value comparative to its asset value. The average q-ratio suggests that the market value is greater than the recorded value of its assets by 16%. Consistent findings were also derived from the sample firm's accounting performance, where an average return on equity (ROE) was reported at 14.48% with a minimum ROE of −49.5% and a maximum ROE of 56.6%. Finally, the descriptive statistics also represent the values of other control variables, as follows: firm age varied from 8 years to 90 years, with an average of 31.45 years, while the mean for the log of firm size was 8.5 million. As for the reputation of the auditors, an overwhelming majority (86%) of the sample firms were audited by Big 4 auditors.

Correlation Analysis

Table 3 presents the Pearson correlation matrix between the dependent, independent and control variables. The AC meeting frequency and the meeting attendance levels negatively correlated with both measures of performance, Tobin's Q and ROE, respectively. For the control variables, the firm age, the size and AC board independence positively correlated with performance. On the contrary, the size of the AC, the presence of outside financial experts and the auditors' reputation negatively correlated with performance.

Table 3 Correlations matrix

	TOBINQ	ROE	ACMF	ACMA	ACMFxFB	ACMAxFB
TOBINQ	1					
ROE	0.8380***	1				
ACMF	-0.1439**	-0.1579	1			
ACMA	-0.1370**	-0.1840***	0.0433	1		
ACMFxFB	0.0508	-0.0008	0.7599***	0.0649	1	
ACMAxFB	-0.1708***	-0.2006***	-0.0458	0.8690***	0.1259**	1
FA	0.2239***	0.2874***	-0.1896***	-0.0937	-0.0545	-0.1860***
SIZELN	0.02	0.1079	-0.0564	-0.2627***	-0.0924	-0.2308***
ACSIZE	-0.1332**	-0.0607	0.1392**	-0.2339***	-0.0439	-0.2782***
OFAC	-0.1854***	-0.0188	0.2546***	-0.0099	0.1061	-0.1084
AUDR	-0.1944***	-0.0699	0.1435**	0.0486	0.0349	0.1836***
IDAC	0.0336	0.0727	0.2358***	-0.0257	0.2326***	-0.1503**

Note: ***Pearson correlation significant at 0.01 level (2 tailed); **Pearson correlation significant at 0.05 level (2-tailed). Symbols refer to variables already specified.

Table 3 Cont.

	FA	SIZELN	ACSIZE	OFAC	AUDR	IDAC
TOBINQ						
ROE						
ACMF						
ACMA						
ACMFxFB						
ACMAxFB						
FA	1					
SIZELN	-0.0909	1				
ACSIZE	-0.0665	0.3518***	1			
OFAC	0.1867***	0.1477**	0.1806***	1		
AUDR	-0.2470***	0.3381***	0.0938	0.1782***	1	
IDAC	0.2256***	-0.3147***	-0.1442**	0.1561**	-0.0904	1

Note: ***Pearson correlation significant at 0.01 level (2 tailed); **Pearson correlation significant at 0.05 level (2-tailed). Symbols refer to variables already specified.

The bivariate correlations for all variables are between 0.001 to 0.869 with an average of 0.163.-

Regression Analysis

Table 4 Relationship between AC diligence and firm performance

	Model 1 (H1a and H2a)		**Model 2 (H1b and H2b)**	
	Tobin's-Q		**ROE**	
Variables	Coefficient	Probability	Coefficient	Probability
Intercept	5.8897***	0.0005	3.8036	0.2194
AC meeting frequency *(ACMF)*	-0.0217	0.6956	-0.2643*	0.0769
AC meeting attendance *(ACMA)*	-0.0365***	0.0000	-0.0344**	0.0167
Firm Age *(FA)*	0.0090***	0.0000	0.0108***	0.0000
Log Firm Size *(FS)*	0.9852***	0.0000	2.0472***	0.0000
AC Size *(ACS)*	-1.3146***	0.0000	-1.4249***	0.0002
% of Indep Directors on AC *(IDAC)*	0.0765***	0.0000	0.0684***	0.0000
Outside Financial expert on AC *(OFAC)*	-2.1935***	0.0000	-1.1970	0.1113
Auditors' Reputation *(AudR)*	-3.8049***	0.0000	-3.8553***	0.0000
Adjusted R^2	0.71		0.60	
F-statistics	69.10***	0.0000	41.07***	0.0000
Number of observation (n)	485		485	

Note: Notes: *p<0.10; **p<0.05; ***p<0.01

Table 4 presents the empirical findings on the relationship between AC diligence, as measured by AC meeting frequency (ACMF) and AC meeting attendance (ACMA), and firm performance, as measured by Tobin's-Q and ROE, respectively. The empirical evidence suggests a significant relationship between the independent and dependent variables. As hypothesised, Model 1 and 2 indicated a negative relationship between the test variables and firm performance. Our results did not support the relationship between AC meeting frequency and Tobin's-Q in Model 1, but a negative relationship was documented between AC meeting attendance and Tobin's-Q significant at the 1% level. Notably, Model 2 demonstrated a negative relationship between AC meeting frequency and AC meeting attendance, with ROE, significant at the 10% and 5% levels, respectively. Thus, hypotheses H_{1b}, H_{2a} and H_{2b} (with the exception of H_{1a}) were supported. Notably, all the variables measuring AC diligence indicated a negative coefficient, or a reduction of firm performance, irrespective of accounting

performance (ROE) or market performance (Tobin's-Q). This suggests that when firms have a higher number of AC meetings and/or a higher percentage of attendance, it results in negative firm performance. Though these results may not be anticipated based solely on the extant literature, we predicted during the hypotheses development that AC diligence would not engender positive firm performance due to the cultural and social background of firms in Saudi Arabia. Perhaps this indicates that the level of agency conflicts in the Saudi listed firms is pervasive and cannot be curbed through the functioning of the AC and diligence. Saudi Arabia has a distinctive cultural feature in which the preservation of socio-cultural values supersedes the considerations of financial interests and wealth. The society is bounded by tight family relations and upholds strong tribal traditions (Alzeban, 2015). Family and friendship are important and influential factors in the functioning of institutions and groups (Bjerke and Al-Meer, 1993). Formal planning systems and business policies sometimes remain as 'empty shells' or 'facades' for the organisation, despite the detrimental effects towards organisational efficiency and effectiveness (Bjerke and Al-Meer, 1993). Saving face and keeping one's honour and reputation are priorities at all times. Saudi managers dislike conflicts, and if they are forced, they will resort to authoritarian behaviour (Bjerke and Al-Meer, 1993). While some argue that the rules and formal systems are not followed (Muna, 1990), Bjerke and Al-Meer (1993) observed otherwise. Their observation indicated that 'official formal systems are very fluid and elastic but you have to be 'insider' to understand how the system works' (Bjerke and Al-Meer, 1993; p.32).

Given the unique Saudi cultural context, we believed that installing an AC with the purpose of providing independent oversight and advice may not be welcomed in some organisations, especially if the company is managed and controlled by their owners. Arguably, adherence and attendance to AC meetings remain as 'a façade' of good governance, decoupling the structure (appearance of diligence) with the actual governance processes (or lack, thereof) that takes place behind closed doors. As such, the formation of ACs in companies are only for the purpose of complying with regulatory requirements, which echoes the earlier observation by Al-Twaijry et al. (2002), who argued that the installation of ACs in the KSA was more from obeying the form, but not the spirit of good governance. A further analysis of the control variables supports this prediction, where other external governance mechanisms, such as the engagement of reputable audit firms, the size of the AC and the presence of outside financial experts, also did not contribute towards positive firm performance (results were significant at the 1% level).

Table 5a Moderation effects of family ownership on AC diligence and firm performance

	Model 3 (H3a and H4a)		**Model 4 (H3b and H4b)**	
	Tobin's-Q		**ROE**	
Variables	Coefficient	Probability	Coefficient	Probability
Intercept	5.698	0.515	0.593	0.966
AC meeting frequency *(ACMF)*	0.277	0.216	0.222	0.463
AC meeting attendance *(ACMA)*	0.054*	0.081	0.030	0.472
Family-owned business (*FB*)	10.991***	0.001	14.592***	0.005
ACMA x FB	**-0.165*** **	**0.011**	**-0.194***	**0.083**
ACMF x FB	**-0.529** **	**0.019**	**-0.720** **	**0.028**
Firm Age *(FA)*	0.002	0.974	0.075	0.377
Log Firm Size *(FS)*	0.334	0.627	0.970	0.397
AC Size *(ACS)*	-1.372	0.196	-1.620	0.268
% of Indep Directors on AC *(IDAC)*	-0.011	0.758	0.009	0.890
Outside Financial expert on AC *(OFAC)*	-1.339	0.537	0.548	0.891
Auditors' Reputation *(AudR)*	-0.259	0.910	1.885	0.534

Notes: *p<0.10; **p<0.05; ***p<0.01

Table 5a demonstrates the effect of family ownership on the relationship between AC diligence (as measured by AC meeting frequency and AC meetings attendance) and firm performance (as measured by ROE and Tobins-Q). In Model 3 and 4, the moderating effects were tested by adding the interaction terms (*ACMFxFB* and *ACMAxFB*) to the earlier equations. The results indicated that the interacting terms in both models were significant at 5% and 10% level for Model 3 and 4 respectively.

The conditional standard errors for a fully-specified interaction model as suggested by Brambor *et.al.* (2005) are depicted in Table 5b. The respective values of the conditional standard error and t-values for Z equals 0 and 1 are calculated here.

Table 5b Conditional standard error and t-values.

Tobin's Q	StdError (marginal effect)		Coefficient		b_1+b_3Z		$t = (b_1+b_3Z)/StdError$	
	Z = 0	Z = 1	b_1	b_3	Z = 0	Z = 1	Z = 0	Z = 1
ACMA x FB	0.030	0.041	0.054	-0.165	0.054*	-0.111**	1.781*	-2.700**
ACMF x FB	0.220	0.129	0.277	-0.529	0.277	-0.253**	1.255	-1.962**
ROE	StdError (marginal effect)		Coefficient		b_1+b_3Z		$t = (b_1+b_3Z)/StdError$	
	Z = 0	Z = 1	b_1	b_3	Z = 0	Z = 1	Z = 0	Z = 1
ACMA x FB	0.042	0.085	0.030	-0.194	0.030	-0.164*	0.724	-1.931*
ACMF x FB	0.299	0.212	0.222	-0.720	0.222	-0.499**	0.740	-2.354**

Note: Significance level: *p<0.10, **p<0.05

The empirical results in Table 5c show the extracted coefficients for AC meeting frequency (ACMF) and meeting attendance (ACMA) for the respective equations (Equation 5) used in the analysis.

Table 5c. Moderation effects of family owned business on the relationship between AC diligence and Tobin's-Q and ROE

	Family-owned business	**Meeting frequency**	**Meeting attendance**
		Coefficient	
TOBIN'S-Q	*Non-family business*	0.277	0.054*
	Family business	-0.253**	-0.111**
ROE	*Non-family business*	0.222	0.030
	Family business	-0.499**	-0.164*

Note: Significance level: *p<0.10, **p<0.05

The empirical results in Table 5c indicate that when we allow the effect of AC diligence on firm performance to differ between family and non-family businesses, we found that the negative relations persisted in all the family business firms. The results show that there is positive relationship between Tobin's-Q and ROE, with meeting frequency and meeting attendance for non-family business. Interestingly and on the contrary, we find a significant negative relationship between Tobin's-Q and ROE, with meeting frequency and meeting attendance for family business (supporting H3a, H3b, H4a and H4b). This indicates, with the presence of family ownership, AC diligence which is intended to provide independent oversight and counsel, leads to negative firm performance. This consistently supports our earlier argument that suggests agency conflicts persist extensively beyond the principal-agent relation (Type I agency problem) that usually dissipates through independent monitoring by an AC. Instead, with the presence of family ownership, the agency conflicts are between the family owners and the minority shareholders, representing a principal-principal conflict as depicted by Type II agency problems (Anderson et al., 2004), which cannot be easily resolved through AC functioning and diligence. The presence of family ownership creates opportunities for rent expropriation, where the controlling family exercises influence and power for their own personal benefits at the expense of the company's performance (Shleifer and Vishny, 1997; Gómez-Mejia et al., 2007; Naldi et al., 2007; Chrisman and Patel, 2012). Arguably, even when family owners may not necessarily engage in 'rent expropriation' activities, they may undertake less risky business decisions and investment portfolios to protect their family's wealth (Gómez-Mejia et al., 2007), notably rejecting committee members' advice and counsel that may favour risky but profitable business ventures. These family business-related issues have ultimately weakened the relationship between AC diligence and firm performance.

SUMMARY AND CONCLUSIONS

This study offered an examination of whether AC diligence affects firms' performance in the Saudi Arabian context. Additionally, the moderating effects of family ownership on the relationship between AC diligence and firm performance were tested. AC diligence was proxied by AC meeting attendance and AC meeting frequency, while firm performance was measured by ROE (accounting performance) and Tobin's-Q (market performance). A panel data analysis was undertaken on a total of 485 firm-year observations from Tadawul, from 2012 to 2016. A negative relationship was found between AC diligence and firm performance. The findings also indicated that the effect of family ownership on all the measures of AC diligence led to adverse firm performance. Though several studies have been undertaken in the areas of AC diligence and family ownership, the extension and contribution of this study is twofold. First, the study is from an emerging market perspective,

as most studies have been undertaken in the developed and Western countries, and their results cannot be generalised or imputed into the Middle Eastern context due to the differences in culture and institutional characteristics. Second, most existing studies have examined board of director (BOD) diligence and *not* specifically AC diligence. Overall, this study provides a more nuanced view on the implication of AC diligence in the presence of family ownership in the context of institutional voids and the prevalence of family firms in the stock market.

Theoretically, the findings from this study should provide insights into the principal-principal conflict (agency conflict Type II), which has been debated less frequently within the realm of the agency problems in developed economies. Most corporate governance solutions have been tailored to fix the agency problems of a Type I nature (principal-agent conflict), which appears less effective in the context of emerging economies, particularly where tribal and family relations are pervasive even in business dealings. This study highlights the importance of the preservation of social-emotional wealth (Gómez-Mejia et al., 2007) in when strategic decisions are considered, which contradicts the concept of economic rationality in the decision-making process.

Noting that corporate decisions may not always be economically motivated, the existing governance mechanisms that operate under the assumption of curbing managers' financial interests and greed may not necessarily bring the desired effect. With this understanding, regulators and policymakers should consider different strategies that can protect minority interests. For example, the installation of a comprehensive and balanced performance measurement and reporting system may be an alternative to independent oversight.

Future research could take several different directions to further broaden the findings of this study. The study could be extended to other GCC countries that have similar cultures and institutional characteristics. Additionally, the study could also be expanded in terms of the effect of the moderation role of multiple directorships on AC diligence and performance. Overall, it is envisioned that this study contributes to developing a more contingent understanding of AC diligence in a family-owned business environment with a strong social and cultural tradition in a non-Western, emerging economy.

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REFERENCES

Abbott, L. J., Parker, S. and Peter, G. F. (2004) 'Audit Committee Characteristics and Restatements'. *AUDITING: A Journal of Practice and Theory*. 23(1) pp. 69-87.

Abbott, L. J., Park, Y. and Parker, S. (2000) 'The Effects of Audit Committee Activity and Independence on Corporate Fraud. *Managerial Finance*. 26(11) pp. 55-67.

Abdallah, A. A. and Ismail, A. K. (2017) 'Corporate governance practices, ownership structure, and corporate performance in the GCC countries'. *Journal of International Financial Markets, Institutions and Money*. 46 pp. 98-115.

Aguilera, R. V. and Crespi-Cladera, R. (2012). 'Firm family firms: Current debates if corporate governance in family firms'. *Journal of Family Business* Strategy. 3(2) pp. 66-69.

Al Farooque, O., Buachoom, W. and Sun, L. (2019) 'Board, audit committee, ownership and financial performance – emerging trends from Thailand'. *Pacific Accounting Review*. 32(1) pp. 54-81. https://doi.org/10.1108/PAR-10-2018-0079

AlGhamdi, M. and Rhodes, M. (2015) 'Family Ownership, Corporate Governance and Performance: Evidence from Saudi Arabia'. *International Journal of Economics and Finance*. 7(2) pp. 78-89.

Allegrini, M. and Greco, G. (2013) 'Corporate boards, audit committees and voluntary disclosure: Evidence from Italian listed companies'. *Journal of Management and Governance*. 17(1) pp. 187–216.

Al-Musali, M. A., Qeshta, M. H., Al-Attafi, M. A. and Al-Ebel, A. M. (2019) 'Ownership structure and audit committee effectiveness: evidence from top GCC capitalized firms'. *International Journal of Islamic and Middle Eastern Finance and Management*. 12(3) pp. 407-425. https://doi.org/10.1108/IMEFM-03-2018-0102

Al-Okaily, J. and Naueihed, S. (2019) 'Audit committee effectiveness and family firms: impact on performance'. *Management Decision*. 58(6) pp. 1021-1034.

Al-Thuneibat, A. A, Al-Angari, H. A. and Al-Saad, S. A. (2016) 'The effect of corporate governance mechanisms on earnings management: Evidence from Saudi Arabia'. *Review of International Business and Strategy*. 26(1) pp. 2-32.

Al-Twaijry, M., Brierley, A. and Gwilliam, R. (2002) 'An examination of the role of audit committees in the Saudi Arabian corporate sector'. *Corporate Governance: An International Review*. 10 pp. 288-297.

Alzeban, A. (2015) 'Influence of audit committees on internal audit conformance with internal audit standards'. *Managerial Auditing Journal*. 30(6/7) pp. 539-559.

Anderson, R. and Reeb, D. (2004) 'Board Composition: Balancing Family Influence in S andP 500 Firms'. *Administrative Science Quarterly*. 49(2) pp. 209–237.

Anderson, R., Mansi, S. and Reeb, D. (2004) 'Board characteristics, accounting report integrity, and the cost of debt'. *Journal of Accounting and Economics.* 373 pp. 315-342.

Archambeault, D. and DeZoort, F. T. (2001) 'Auditor Opinion Shopping and the Audit Committee: An Analysis of Suspicious Auditor Switches'. *International Journal of Auditing.* 5 pp. 33-52.

Baatour, K., Ben Othman, H. and Hussainey, K. (2017) 'The effect of multiple directorships on real and accrual-based earnings management: Evidence from Saudi listed firms'. *Accounting Research Journal*. 30(4) pp. 395-412.

Baydoun, N., Maguire, W., Ryan, N. and Willett, R. (2012) 'Corporate governance in five Arabian Gulf countries'. *Managerial Auditing Journal*. 28(1) pp. 7–22.

Beasley, M., Carcello, J., Hermanson, D. and Lapides, P. (2000) 'Fraudulent financial reporting: Consideration of industry traits and corporate governance mechanisms'. *Accounting Horisons*. 144 pp. 441-454.

Bédard, J., Chtourou, S. M. and Courteau, L. (2004) 'The Effect of Audit Committee Expertise, Independence, and Activity of Aggressive Earnings Management'. *Auditing: A Journal of Practice and Theory*. 23(2) pp. 13-35.

Bjerke, B. and Al-Meer, A. (1993) 'Culture′s Consequences: Management in Saudi Arabia'. *Leadership and Organization Development Journal*. 14(2) pp. 30-35.

Bodolica, V, Dupuis, D. and Spraggon, M. (2020) 'At the intersection of corporate governance and performance in family business settings: Extant knowledge and future research'. *Business Ethics: A European Review*. 29 pp. 143– 166. https://doi.org/10.1111/beer.12254

Brambor, T., Clark, W., and Golder, M. (2006) 'Understanding Interaction Models: Improving Empirical Analyses'. *Political Analysis*. 14(1) pp. 63-82. doi:10.1093/pan/mpi014.

Cameron, A. and Miller, D. (2015) 'A Practitioner's Guide to Cluster-Robust Inference'. *Journal of Human Resources*. 50 pp. 317-372. 10.3368/jhr.50.2.317.

Capital Market Authority (2006). *Corporate Governance Regulations in the Kingdom of Saudi Arabia*. Capital Market Authority, Saudi Arabia.

Carcello, J. V., Hermanson, D. R. and Neal, T. L. (2002) 'Disclosures in audit committee charters and reports'. *Accounting Horizons.* pp. 291–304.

Chang, J. C., Luo, M. and Sun, H. L. (2011). 'The impact of independent and overlapping board structures on CEO compensation, pay-performance sensitivity and accruals management'. *Quarterly Journal of Finance and Accounting*. 50(2) pp. 54-84.

Chrisman, J. and Patel, P. C. (2012) 'Variations in R andD Investments of Family and Nonfamily Firms: Behavioral Agency and Myopic Loss Aversion Perspectives'. *Academy of Management Journal*. 55(4) pp. 976-997.

Collier, P. and Gregory, A. (1999) 'Audit committee activity and agency costs'. *Journal of Accounting and Public Policy*. 18(4–5), pp. 311–332.

DeFond, M. L. and Francis, J. R. (2005) 'Audit Research after Sarbanes-Oxley'. *AUDITING: A Journal of Practice and Theory*. 24(s-1) pp. 5-30.

DeZoort, F. T., Hermanson, D. R., Archambeault, D. S. and Reed, S. A. (2002) 'Audit committee effectiveness: A synthesis of the empirical audit committee literature'. *Journal of Accounting Literature.* 21 pp. 38–75.

Eulaiwi, B., Al-Hadi, A., Taylor, G., Al-Yahyaee, K. H. and Evans, J. (2016) 'Multiple directorships, family ownership and the board nomination committee: International evidence from the GCC'. *Advances in Accounting, incorporating Advances in International Accounting*. pp. 61-88.

Fallatah, Y. and Dickins, D. (2012) 'Corporate governance and firm performance and value in Saudi Arabia'. *African Journal of Business Management*. 6(36) pp. 10025-10034

Financial Reporting Council (2012). 'The UK Corporate Governance Code'. [online]. Available at: https://frc.org.uk [Accessed 14 Jul. 2019].

Gómez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J. L. and Moyano-Fuentes, J. (2007) 'Socioemotional Wealth and Business Risks in Family-controlled Firms: Evidence from Spanish Olive Oil Mills', *Administrative Science Quarterly*. 52(1) pp. 106-137.

Goodwin-Stewart, J. and Kent, P. (2006) 'The use of internal audit by Australian companies'. *Managerial Auditing Journal*. 21(1) pp. 81-101.

Greco, G. (2011) 'Determinants of board and audit committee meeting frequency: Evidence from Italian companies'. *Managerial Auditing Journal*. 26(3) pp. 208-229,

Hashim, H. A., Amrah, M. (2016) 'Corporate governance mechanisms and cost of debt: Evidence of family and non-family firms in Oman'. *Managerial Auditing Journal*. 31(3), pp. 314-336.

Jaggi, B. and Leung, S. (2007) 'Impact of family dominance on monitoring of earnings management by audit committees: Evidence from Hong Kong'. *Journal of International Accounting, Auditing and Taxation*. 161 pp. 27-50.

Karamanou, I. and Vafeas, N. (2005) 'The Association between Corporate Boards, Audit Committees, and Management Earnings Forecasts: An Empirical Analysis'. *Journal of Accounting Research*. 43 pp. 453-486.

La Porta, R, Lopez-De-Silanes, F. and Shleifer, A. (1999) 'Corporate Ownership Around the World'. *The Journal of Finance*. 54 pp. 471-517.

Lam,T. Y. and Lee, S. K. (2012) 'Family ownership, board committees and firm performance: evidence from Hong Kong'. *Corporate Governance: The International Journal of Business in Society*. 12(3) pp. 353-366.

Li, J., Mangena, M. and Pike, R. (2012) 'The effect of audit committee characteristics on intellectual capital disclosure'. *The British Accounting Review*. 44 pp. 98-110.

Maraghni, I. and Nekhili, M. (2014) 'Audit committee diligence in French companies: a question of independence or competence?'. *Comptabilité–Contrôle–Audit*. 202 pp. 99–128.

Méndez, C. F. and García, R. A. (2007) 'The Effects of Ownership Structure and Board Composition on the Audit Committee Meeting Frequency: Spanish evidence'. *Corporate Governance: An International Review*. 15 pp. 909-922.

Menon, K. and Williams, J. O. (1994) 'The use of audit committees for monitoring'. *Journal of Accounting and Public Policy*. 13(2) pp. 121–139.

Moulton, B. (1987) 'Diagnostics for Group Effects in Regression Analysis'. *Journal of Business and Economic Statistics*. 5(2) pp. 275-82.

Moumen, N., Ben Othman, H. and Hussainey, K. (2016) 'Board structure and the informativeness of risk disclosure: Evidence from MENA emerging markets'. *Advances in Accounting, incorporating Advances in International Accounting*. 35 pp. 82-97.

Muna, F. A. (1980). *The Arab Executive,* St. Martin's Press. New York, NY.

Naiker , V. and Sharma, D .S. (2009) 'Former Audit Partners on the Audit Committee and Internal Control Deficiencies'. *The Accounting Review*. 84(2) pp. 559-587.

Naldi, L., Nordqvist, M., Hellerstedt, K. and Wiklund, J. (2007) 'Entrepreneurial Orientation, Risk Taking, and Performance in Family Firms'. *Family Business Review*. 20(1) pp. 33-47.

Petersen, M. A. (2009) 'Estimating Standard Errors in Finance Panel Data Sets: Comparing Approaches'. *The Review of Financial Studies*. 22(1) pp. 435–480. https://doi.org/10.1093/rfs/hhn053

Pillai, R. and Al-Malkawi, H. N. (2018) 'On the relationship between corporate governance and firm performance: Evidence from GCC countries'. *Research in International Business and Finance*. 44 pp. 394-410.

Raghunandan, K. and Rama, D. (2007) 'Determinants of audit committee diligence'. *Accounting Horizons*. 21(3) pp. 265–297.

Rouyer, E. (2016) 'Family ownership and busy boards: impact on performance', *Management Decision*. 54(4) pp. 832-853.

Samara, G. and Paul, K. (2019) 'Justice versus fairness in the family business workplace: A socioemotional wealth approach'. *Business Ethics: A European Review*. 28(2) pp. 175-184. https://doi.org/10.1111/beer.12209

Shehata, N. F. (2015) 'Development of corporate governance codes in the GCC: An overview'. *Corporate Governance*. 15(3) pp. 315 – 338.

Shleifer, A. and Vishny, R. W. (1997) 'A survey of corporate governance'. *The Journal of Finance*. 52 pp. 737–783.

Sultana, N., Singh, H. and Van der Zahn, J. L. W. (2015) 'Audit Committee Characteristics and Audit Report Lag', *International Journal of Auditing*. 19 pp. 72–87.

Villalonga, B. and Amit R. (2006) 'How do family ownership, control and management affect firm value?'. *Journal of Financial Economics*. 80(2) pp. 385–417.

Villalonga, B., Trujillo, M.-A., Guzmán, A. and Cáceres, N. (2019) 'What Are Boards For? Evidence from Closely Held Firms in Colombia'. *Financial Management*. 48 pp. 537-573.

Wong, K. (2011) 'Audit committee characteristics, family control and earnings management: evidence based on Hong Kong firms after the corporate governance reform in 2. PhD thesis. The Hong Kong Polytechnic University, Hong Kong.

Zhang,Y., Zhou, J. and Zhou, N. (2007) 'Audit committee quality, auditor independence, and internal control weaknesses'. *Journal of Accounting and Public Policy*. 26(3) pp. 300-327.