

Factors Associated with Audit Committee Meeting Frequency: Evidence from Kuwait

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Abstract

Purpose: The purpose of the current study is to examine factors influencing Audit Committee (AC) meeting frequency in the Kuwaiti market. In particular, this study aims at investigating whether AC meeting frequency is significantly related to ownership concentration, board ownership, board characteristics, AC characteristics, and certain firm organizational characteristics. A regression model is used to examine the research questions of interest using data related to firms listed on the Kuwait Stock Exchange (KSE). The study's results show that AC meeting frequency is positively related to ownership concentration, the audit firm type, and firm's affiliation to the finance industry, but is negatively related to board independence and firm's financial leverage. The results, however, reveals no significant relationship between AC meeting frequency and board size, or any of the AC characteristics examined.

Keywords: auditing, audit committee, meeting frequency, corporate governance, Kuwait

1. Introduction

Since the 1930's, when the U.S. Securities and Exchange Commission (SEC) was established, an Audit Committee (AC hereafter) has been recognized as an integral part of public firms' corporate governance (Fichtner, 2010), and has continued to play a critical role in improving corporate governance through overseeing firm's financial reporting and audit-related activities (Birkett, 1986; Collier & Zaman, 2005). The existence of an effective and diligent AC in public firms is expected to be helpful in improving transparency in securities markets (McMullen & Raghunadam, 1996; DeZoort, Hermanson, Archambeault, & Reed, 2002), and improving the quality of accounting information (Beasley, 1996; Abbott, Parker, & Peters, 2004; Pucheta-Martinez & De Fuentes, 2007). The importance of effective AC's for sound governance and control of firm's activities has long been recognized by several regulatory bodies. This importance has even increased during the last two decades as a result of the accounting-scandals-related collapse of giant companies, like Enron and WorldCom, as well as the world-wide financial crises during the last few years. All this has led to increasing the interest of market regulators as well as researchers in broadening their knowledge and understanding of factors influencing the effectiveness and diligence of AC's.

While obvious regulatory efforts have been undertaken in recent years in different countries, including developing countries like Kuwait, for enhancing the diligence of AC's, empirical research exploring factors related to this important attribute of AC has been little thus far. In addition, no research, the author is aware of, has been carried out to investigate this issue in the Middle East region, or within the context of a small developing country, like Kuwait. Hence, the purpose of this study is to extend research on this very important topic in the context of a developing country, where corporate governance regulations are still immature and in an early stage, the structure of the capital market is quite different from those of developed countries, the judicial system is delicate (Shleifer & Vishny, 1997), and much of the publically listed firms are featured with high corporate ownership concentration (Gill, 2003).

The current study presents an extension of this line of audit research as it provides evidence about factors influencing AC meeting frequency in the context of an unexplored developing market. While regulations related to corporate governance in prior studies' markets were stringent and matured, corporate governance rules in Kuwait, until the time this study was conducted, have been quite lax. The corporate-governance-related executive directives and orders, issued mainly by the Capital Markets Authority (CMA), subsequent to the issuance of the Kuwaiti *Capital Markets Law* in 2010, included rules requiring each firm listed on the Kuwait Stock Exchange (KSE) to form an audit committee (Note 1). The corporate governance rules, however, were set to be in effect starting from June 2016. Since the current study was carried out prior to the effective date of the corporate governance rules, it provides

an excellent and passing chance for investigating the research questions of interest in a setting where AC formation is done voluntarily. Empirical evidence from the pre-regulations and less regulated setting shall be of value as a basis for future comparisons to determine the impact of the new corporate governance rules on listed firms' post-regulations governance activities.

The results of the current study reveal a positive relationship between AC meeting frequency and ownership concentration, the type of audit firm (i.e., Big4), and company's affiliation to the finance industry. The empirical results also indicate that AC's meet less frequently when board independence is high and for firms with high financial leverage. The results do not show, however, any significant relationship between AC meeting frequency and firm's board size, AC size, AC independence, or AC financial expertise.

The remainder of the current article is organized into the following sections. The next section provides a theoretical background and a review of prior related literature of the study. The third section provides the research methodology used to investigate the research questions of interest. The fourth section provides the study's results, while the final section provides the study's concluding remarks.

2. Theoretical Background and Literature Review

Prior related literature (McMullen & Raghunandan, 1996; Beasley, Carcello, & Hermanson, 1999; Archambeault & DeZoort, 2001; Abbott et al., 2004) maintains that a diligent AC can be helpful for assuring reliable accounting information, effective internal controls, and responsible management of firm's risk exposures. Although AC diligence as a concept has long been problematic to define in the audit literature, the number of AC meetings per year is generally regarded as a signal of AC efforts, and thus has been used as "a widely-accepted proxy for AC diligence" (Yin, Gao, Li, & Lv, 2012, p. 426). The number of AC's meeting has also been used by several corporate governance guidelines as a surrogate for AC's diligence. The Blue Ribbon Committee (1999), for example, suggested a minimum number of four meetings per year as a quantitative measure of AC's effectiveness. The number of AC meetings per year has also been used as an indicator of the effectiveness of AC's by the audit profession (e.g., KPMG, 1999; PriceWaterHouseCoopers, 1993).

2.1 Previous Research

As indicated, the audit literature (e.g., Kalbers & Fogarty, 1993; ; Turpin & DeZoort, 1998; Carcello, Hermanson, Neal, & Riley, 2002; Willekens, Bauwhede, & Gaeremynck., 2004; Turely & Zaman, 2007) has long recognized diligence as an important quantitative measure of the effectiveness of AC's. Yet, research examining factors influencing AC diligence has been very little. Moreover, the rare empirical findings about this issue are predominantly based on data from developed countries' markets (Yin et al., 2012). Menon & Williams (1994) was perhaps the first to examine factors influencing AC meeting frequency. Using data related to 200 US firms, they found a positive association between AC meeting frequency and both firm's size and the percentage of outside board directors. More than a decade later, Raghunandan & Rama (2007) re-examined this issue in the U.S. using a sample of 319 S&P firms. They found that AC meeting frequency is positively related to AC's size and the number of accounting experts serving as AC members. They also found AC meeting frequency to be positively associated with the number of outside block shareholders. Mendez & Garcia (2007) performed a similar investigation using data from the Spanish market. Using a sample of 69 firms listed in Madrid Stock Exchange, they found a negative relationship between AC meeting frequency and large shareholders' ownership concentration. Their results, however, could not reveal any significant impact of board characteristics or AC characteristics on AC meeting frequency. Sharma, Naiker, & Lee (2009) examined this issue in the New Zealand market, using data related to 96 firm-year observations. Their results provided evidence of a positive relationship between AC meeting frequency and both AC size and the extent of institutional and managerial ownership. Their study's results also showed that AC meeting frequency is negatively related to multiple directorships and AC independence. Using data related to 179 Italian listed firms, Greco (2011) found AC meeting frequency to be positively associated with the proportion of independent board members, but negatively associated with insider ownership. Yin et al. (2012) examined the determinants of AC meeting frequency using data from the Chinese market. Their study's results showed a positive relationship between AC meeting frequency and both AC size and firm size. In addition, their results showed a negative relationship between AC meeting frequency and the proportion of shares owned by a majority shareholder, state share ownership, and the proportion of independent board directors.

As indicated previously, the purpose of the current study is to expand on existing audit literature by investigating the determinants of AC meeting frequency in the context of Kuwait, a small developing Gulf Cooperation Council (GCC) country. Drawing on previous related research, the current study particularly aims at exploring whether AC meeting frequency in Kuwaiti firms is influenced by the firm's ownership structure, board characteristics, AC characteristics,

and/or certain firm organizational characteristics (i.e., firm's size, firm's leverage, firm's profitability, the type of external audit firm, and firm's affiliation to the finance industry). As shown in the next parts of the paper, the review of the extant relevant literature shows that both theoretical arguments and empirical findings about the research questions examined in this study are mixed and still inconclusive, which renders a good reason for further investigating these research inquiries, especially in a different and unexplored setting.

2.2 Hypotheses Development

2.2.1 Ownership Concentration

Prior related literature offers propositions for both a positive and a negative relationship between ownership concentration and increased internal monitoring and control (e.g. more AC meetings). On the one side, when ownership is more concentrated, majority shareholders, motivated by their higher stake on earnings, are expected to support more supervisory and monitoring arrangements on management activities (Shleifer & Vishny, 1986; Shleifer & Vishny, 1997; Brickley, Lease, & Smith, 1988; Kang & Shivdasani 1995). Hence, we would expect that when ownership concentration is high, any increased supervisory and monitoring costs incurred are justified by the increased share value for majority shareholders. Accordingly, we would anticipate a positive relationship between ownership concentration and AC meeting frequency. On the other side, other research (e.g., Dyck & Zingales, 2004) suggests that the more concentrated the ownership of the firm, the higher large shareholders' ability to economically take advantage of their direct access to private inside information. This economic advantage makes dominant shareholders have no interest in having effective monitoring mechanisms (e.g., active AC), which may deprive them from their private ownership concentration benefit (Leftwich, Watts, & Zimmerman., 1981). Accordingly, we would expect AC meeting frequency to be negatively related to ownership concentration. Such a negative relationship is reported in some previous related research (e.g., Mendez & Garccia, 2007; Yin et al., 2012). It is apparent, therefore, that empirical findings on the relationship between ownership concentration and the frequency of AC meeting are mixed. Hence, no directional prediction is made about the relationship between ownership concentration and AC meeting frequency, and the study's first research hypothesis is stated as follows:

H1: there is a significant relationship between AC meeting frequency and ownership concentration.

2.2.2 Board Characteristics

Several studies have emphasized the importance of board size for effective control and governance mechanisms, including AC activities. For example, both Lipton & Lorsch (1992) and Jensen (1993) suggest that smaller boards of directors may lack the necessary capacity to fulfill board's different duties, while larger boards, due to coordination burdens and courtesy considerations, may suffer from ineffective supervision and slower decision making. Therefore, almost all prior related research has examined board size as a potentially important determinant of AC meeting frequency. Empirical findings and predictions about this factor, however, are mixed. For example, while Raghunandan & Rama (2007) and Sharma et al. (2009) posit that AC meeting frequency could be either positively or negatively affected by board size, Greco (2011) suggests a negative relationship between board size and AC meeting frequency. Furthermore, a neutral relationship between board size and AC meeting frequency is also documented in prior research (Yin et al., 2012).

Prior related research has also examined the relationship between AC meeting frequency and board independence. This research includes different views about this relationship, though. Raghunandan & Rama (2007), for example, view the extent of board independence as a sign of a company's commitment to effective corporate governance, and hence, suggest a positive relationship between board independence and AC meeting frequency. On the other hand, Sharma et al. (2009) suggest that the more independent the board of directors is the less board meetings would be needed for discussions and deliberations, and correspondingly the less frequent AC meetings would be. Empirically, while Menon & Williams (1994), using data from U.S. market, found evidence of a positive relationship between AC activity and the proportion of outside board members, Collier & Gregory (1999) found no evidence of a significant relationship of this type in the U.K market, and interpreted their different findings to be due to differences in the board structure between U.S. and U.K. Additionally, Yin et al. (2012) performed similar examination using data from the Chinese market, and found AC meeting frequency to be negatively associated with the proportion of independent board members.

The mixed findings about the relationship between the frequency of AC meetings and both board size and independence suggest that this relationship is still unclear. Therefore, the study's next hypotheses, are stated as follows:

H2: there is a significant relationship between AC meeting frequency and board size.

H3: there is a significant relationship between AC meeting frequency and board independence.

2.2.3 AC Characteristics

Prior research (e.g., Sharma et al., 2009) suggests that the impact of AC size on AC meeting frequency could be either positive or negative. Larger AC's are said to lead to more effective monitoring since they offer exposure to more human resources and managerial talents, which may compensate for more frequent meetings (Sharma et al., 2009). We would expect, therefore, that larger AC's would be associated with less frequent AC meetings. Alternatively, larger AC's may be looked at as a less efficient form of governance, due to the potentially increased diversity of viewpoints and discussions among members, resulting in a need for more frequent AC meetings (Vafeas, 1999). If this is the case, then we would expect larger AC's to be associated with more frequent AC meetings. Because of the aforementioned mixed views about the relationship between AC size and AC meeting frequency, no prediction is made about the direction of this relationship. The study's next hypothesis is, therefore, stated as follows:

H4: there is a significant relationship between AC meeting frequency and AC size.

From an agency theory perspective, members who are independent from firm's management are expected to make more objective decisions which usually require less discussions and deliberations, and hence will need less frequent meetings (Sharma et al., 2009). From another perspective, however, we would expect independent AC members, who have no stake in the firm, to demand more effective monitoring and control over the firm's financial reporting, which is expected to lead to more AC meetings (Sharma et al., 2009). This later conjecture is backed by the empirical evidence that the existence of more independent AC members is associated with enhanced levels of monitoring over financial reporting (Beasley, 1996; Dechow, Sloan, & Sweeney, 1996; Carcello & Neal, 2003). It seems, therefore, that there are opposite views about the relationship between the degree of AC independence and AC meeting frequency. Hence, no directional prediction is made about this relationship, and the study's next hypothesis is stated as follows:

H5: there is a significant relationship between AC meeting frequency and AC independence.

Several prior audit studies (e.g., Dechow et al., 1996; Beđard, Chtourou, & Courteau, 2004; Krishnan & Visvanathan, 2008; Naiker & Sharma, 2009) suggest that the presence of accounting experts on the AC is associated with enhanced quality of financial reporting. Moreover, accounting experts on AC's, who are concerned about protecting their reputation, are expected to be more vigilant when monitoring financial reporting, and hence would be expected to call for frequent AC meetings. Empirical research examining the potential impact of AC's accounting expertise on AC meeting frequency has been very rare. Sharma et al. (2009) study was among very few studies investigating this issue. Using data related to a sample of Australian firms, this study found that the AC meeting frequency is positively related to the presence of accounting experts on AC's. In light of the aforementioned research theories and findings, we would expect AC meeting frequency to be higher when AC members include accounting experts. The study's next hypothesis, therefore, is presented as follows:

H6: there is a significantly positive relationship between AC meeting frequency and AC accounting expertise.

2.2.4 Firm's Characteristics

Prior related research suggests a number of firm's characteristics that may have on AC meeting frequency. The current study considers the impact on AC meeting frequency of a number of firm's organizational characteristics, namely, firm's size, firm's leverage, and firm's profitability. Because larger firms are expected to be more complex to monitor, more AC meetings would be needed to deal with related financial reporting and auditing issues (Yin et al., 2012). Previous related studies (e.g., Raghunandan & Rama, 2007; Mendez & Garcia, 2007; Sharma et al., 2009; Greco, 2011; and Yin et al., 2012) have repeatedly included the relationship between firm's size and AC meeting frequency in their investigations, and have generally found this relationship to be positive. Following these findings, the current study expects the relationship between AC meeting and frequency and firm's size. Therefore, the study's next hypothesis is stated as follows:

H7: there is a positive relationship between AC meeting frequency and firm's size.

The relationship between AC meeting frequency and firm's leverage has been a subject for contradictory opinions (Yin et al., 2012). On the one hand, agency theory suggests that when firm's leverage is high, agency costs become higher, and the need for monitoring is consequently increased. This is particularly true since the chance of earnings manipulation is higher in firms with high leverage (Dechow *et al.*, 1996). On the other hand, firms with high leverage are expected to be subject to more debt covenants, and hence to a closer and more vigilant monitoring by

debt providers. Since firm's management in this case has less free cash flows to abuse, the need for internal monitoring becomes less, and hence we would expect AC meetings to be less frequent (Yin et al., 2012). The study's next hypothesis, therefore, is stated as follows:

H8: there is a significant relationship between AC meeting frequency and firm's leverage.

Based on prior studies (e.g., Raghundanan & Rama 2007; Sharma et al., 2009; Yin et al., 2012), the current study also examines whether AC meeting frequency is influenced by firm's profitability. Previous research (e.g., Beasley, 1996; Dechow et al., 1996; Abbott, Parker, Peters, & Raghunandan, 2003) shows that earnings management and fraudulent reporting are more likely to take place in firms with incurring losses. Hence, when a firm's profitability is low, we would expect the demand for internal monitoring and control to be greater, and hence AC meetings to be more frequent, and *vice versa*. Such conjecture is plausible in light of empirical findings documented in prior research (Abbot et al., 2000) that sanctions related to fraudulent reporting is less likely for firms with AC's that meet more frequently. Therefore, the study's next research hypothesis is:

H9: there is a negative relationship between AC meeting frequency and firm's profitability.

Audit research (e.g., DeAngelo, 1981) has typically associated the external audit type (i.e., Big-4) with increased quality of audit. For example, Dechow et al. (1996), suggest that financial reporting problems are less likely in the presence of high quality audits. Doyle, Ge, & McVay (2007) also suggest a positive relation between high audit quality and the effectiveness of internal controls. Sharma et al. (2009) suggest that AC members may find it more convenient to shift their monitoring and control duties to external auditors when the audit firm is a Big-4 one. In this sense, we would expect AC meetings to be less frequent when the external auditor is a Big-4 audit firm. Empirical results reported in other studies (e.g., Yin et al., 2012), however, suggest a positive relationship between AC meeting and Big-4 audit firms. Hence, no specific directional predication is made for this relationship, and the study's next hypothesis is stated as follows:

H10: there is a significant relationship between AC meeting frequency and external audit firm type.

Previous research (e.g., Maletta & Wright, 1996) suggests that firms' internal monitoring and governance processes are influenced by the kind of risks their industry is exposed to. In the Kuwaiti market, firms operating in the finance industry are uniquely subjected to a double supervision by both the Capital Markets Authority and Kuwait Central Bank. Hence, they face relatively higher compliance risks. Additionally, accounting research (e.g., Beasley et al., 1999) suggests that the likelihood of financial reporting misstatements is higher for financial institutions. Therefore, we would expect firms operating in this industry to be more concerned about the diligence of their monitoring and governance activities, including AC meetings. Hence, we would expect AC meetings to be more frequent for firms in the finance industry. Hence, the study's next research hypothesis is:

H11: there is a positive relationship between AC meeting frequency and firm's affiliation to the finance industry.

3. Research Methodology

3.1 Study Sample

For the purpose of gathering data pertinent to the current study, almost all firms listed on Kuwait Stock Exchange (KSE) in 2012 were contacted. Data related to the study's variables were requested through a data gathering form sent to a particular individual of the management of each of these firms. The data of interest were information related to firm's ownership structure, board characteristics, AC characteristics, and certain organizational characteristics. These data were then combined with financial statement information obtained from each firm's annual report. To augment firms' participation, follow up phone calls and visits were made by research assistants. The study's initial sample consisted of observations related to 122 firms. Due to missing data, however, 79 were discarded. The study's final sample, therefore, consisted of 43 firms, representing about 21% of the total number of firms listed on KSE.

3.2 Model

To examine the study's research questions, the following OLS regression equation is estimated:

$$\begin{aligned} AC_MEET &= \beta_0 + \beta_1 CONCENTR + \beta_2 BD_SIZE + \beta_3 BD_INDP + \beta_4 AC_SIZE + \beta_5 \\ AC_EXP &+ \beta_6 AC_INDP + \beta_7 SIZE + \beta_8 LEV + \beta_9 ROE + \beta_{10} BIG4 + \beta_{11} FINANCE + \varepsilon \end{aligned}$$

Where:

AC_MEET = number of audit committee meetings during 2012.

CONCENTR= percentage of share ownership of the largest individual shareholder.

BD_SIZE = number of firm's board members.

BD_INDP = percentage of board members who are independent from the firm.

AC_SIZE = number of audit committee members.

AC_EXP = dummy variable taking the value of 1 if any of the audit committee members have accounting education, and 0 otherwise.

AC_INDP = dummy variable taking the value of 1 if most of the audit committee members are independent from the company, and 0 otherwise.

SIZE = natural log of the firm's total assets.

LEV = firm's long-term debt to total assets ratio.

ROE = firm's 2012 net income/total owners' equity.

BIG4 = dummy variable taking the value of 1 if the firm's external auditor is Deloitte, Ernst & Young, KPMG, or PwC, and 0 otherwise.

FINANCE = dummy variable taking the value of 1 if the firm's belongs to the finance industry, and 0 otherwise.

ε = error term.

The dependent variable in the model (AC_MEET) is the number of AC meetings during the 2012 fiscal year, and is used as a measure of AC meeting frequency. The CONCENTR variable is included in the study's model as a measure of firm's ownership concentration, and is added to the regression equation to test H1. As indicated, no prediction is made about the *sign* of the regression coefficients of these two variables. The BD_SIZE and BD_INDP variables are included in the model to measure board size and the degree of board independence, respectively. These two variables are included to test H2, and H3. These variables are expected to be significantly related to AC meeting frequency, but no prediction is made with regard to the sign of these variables' coefficients. The next three variables, AC_SIZE, AC_INDP, and AC_EXP are added to the regression model as measures of AC size, AC independence, and AC accounting expertise, respectively. These variables are included to test H4, H5, and H6. While no prediction is made about the sign of the AC_SIZE and AC_INDP variables, the AC_EXP variable is predicted to have a positive regression coefficient. The SIZE variable is added to the research model to test for any potential impact of firm's size on AC meeting frequency (H7). This variable is measured as the natural log of firm's total assets at the end of 2012, and as indicated earlier, the regression coefficient of this variable is expected to show a positive sign. To test H8, the LEV variable is added to the model. This variable is measured as the ratio of firm's long-term debts to its total assets. As indicated earlier in the study, no prediction is made about the sign of the regression coefficient of this variable. The ROE variable is used as a measure of firm's profitability, and is included in the model to test H9. As indicated, the regression coefficient of this variable is expected to have a negative sign. Additionally, and similar to several earlier studies (e.g., Yin et al., 2012; Sharma et al., 2009; Raghunandan & Rama, 2007), the BIG4 variable is added to the model to investigate the impact of the type of the external audit firm on AC meeting frequency, H10. No prediction is made about this variable. Similarly, the FINANCE variable is added to the model to examine the effect of firm's affiliation to the finance industry on AC meeting frequency, H11.

4. Results

Table 1 shows some descriptive statistics of the study's variables. As shown, the mean total assets of the sampled firms is about KD292,409,415 and ranges from KD5,976,684,000 to KD4,600,71 (Note 2). The mean long-term debt to assets (LEV) is approximately 0.15, while the mean return on equity (ROE) is about 0.069. The results also indicate that about 45 percent of the sampled firms were audited by a Big-4 audit firm, and that about 37 percent of firms belong to the finance industry. The mean number of AC meetings for 2012 is 3.37, with a range from 1 to 6 meetings, and a standard deviation of 1.113. In comparison to results of prior related studies, the mean AC meetings per year reported in the current study is somehow lower than the mean number of AC meetings per year reported for the Spanish market (4.77), and the Italian market (4.56) as reported by Mendez and Garcia (2007) and Greco (2011), respectively, but is quite smaller than that (7.2) reported for the US market as reported in Raghunandan & Rama (2007) study. These differences in means are consistent with differences in regulatory settings related to AC requirements among the different studies' markets. For example, while the formation of AC has been mandatory in US, Spain, and Italy for several years, it has been voluntary in Kuwait until the time this study is conducted. The

results also show that the mean AC size is 4.35 members, while the mean board size is 5.6 members. The mean percentage of outside independent board members in the sampled firms is approximately 32 percent, while most of AC members are independent in about 63 percent of the sampled firms. The results also show that firm's AC included at least one member with accounting education in about 88 percent of the sampled firms.

Table 1. Descriptive Statistics

Panel A: continuous variables:					
	N	Minimum	Maximum	Mean	Std. Deviation
AC_MEET	43	1	6	3.37	1.113
CONCENTR	43	8.55	58.30	22.7726	10.72964
BD_SIZE	43	3	10	5.60	1.400
BD_INDP	43	.00	1.00	.3154	.35592
AC_SIZE	43	1	10	4.35	1.950
Total Assets (2012) in KD	43	4,600,717	5,976,684,000	292,409,414.6	936,623,627.4
LEV	43	.00	.75	.1510	.19861
ROE	43	-.558	1.214	.06876	.219632

Panel B: categorical variables:

	Value	Frequency	%
AC_INDP	0	16	37.2
	1	27	62.8
AC_EXP	0	5	11.6
	1	38	88.4
BIG4	0	24	55.8
	1	19	44.2
FINANCE	0	27	62.8
	1	16	37.2

The Pearson correlations among the study's variables are shown in Table 2. The results show that AC meeting frequency is significantly correlated with only two independent variables; the board independence (-.392), and ownership concentration (.372). Correlations among the independent variables are generally low, with only few significantly correlated. For example, the board size appears to be significantly correlated with firm size (.600), firm's leverage (.509), and the audit firm type (.414). The correlation results, therefore, show that all the correlations between the independent variables are below 0.60, and hence, do not appear to present a threat of biased regression estimates.

Table 2. Correlations Matrix

	AC_MEET	CONCENTR	BD_SIZE	BD_INDP	AC_SIZE	AC_EXP	AC_INDP	SIZE	LEV	ROE	BIG4	FINANCE
AC_MEET	1											
CONCENTR	.372*	1										
BD_SIZE	-0.136	0.179	1									
BD_INDP	-.392**	0.025	0.252	1								
AC_SIZE	0.028	-0.225	-0.01	-0.239	1							
AC_EXP	0.127	0.171	0.167	0.064	0.097	1						
AC_INDP	-0.061	-0.254	-0.125	0.183	0.107	0.01	1					
SIZE	-0.158	0.153	.600**	0.193	-0.205	-0.073	-0.008	1				
LEV	-0.016	.384*	.509**	0.02	-0.155	0.243	-0.182	.596**	1			
ROE	-0.055	-0.053	-0.052	-0.132	0.125	0.171	0.053	0.046	0.186	1		
BIG4	0.095	0.028	.414**	0.144	0.087	0.039	-0.026	0.223	.379 [†]	0.139	1	
FINANCE	0.079	0.051	0.182	-0.031	0.294	-0.176	-0.079	.316 [†]	0.233	0.008	-0.026	1

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

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

Table 3 shows the results from the study's regression model. As shown, the overall regression model is significant ((F-value = 2.590, p-value < .018), and the R² is approximately 0.48). The regression results also show that with respect to the examined variables related to AC meeting frequency, the regression coefficient of the CONCENT variable is significant (p-value < .01) and has a positive sign, suggesting that AC's meet more often when ownership is more concentrated. This result provides support to H1, and is consistent with the argument provided by some prior studies (e.g., Shleifer & Vishny, 1986; Mendez & Garcia, 2007) that majority shareholders would demand more monitoring on management actions (e.g., more AC meetings). The results also show that the regression coefficient of the BD_SIZE variable is statistically not significant, whilst the coefficient of the BD_INDP variable is statistically significant ((p-value < .01) and has a negative sign. The negative relationship between AC meeting frequency and board independence is similar to that documented by Yin et al. (20102) and provides support to the argument provided by Sharma et al. (2009) that more independent board members need less time for discussion and debates and in turn less AC meetings. The results therefore provide empirical support to H3 but not H2. The regression results also show that all the AC characteristics variables; AC_SIZE, AC_EXP, and AC_INDP, have no significant relation with the number of AC meetings. Hence, the results do not provide support to H4, H5, or H6. The results also show that the regression coefficients of the LEV, BIG4, and FINANCE variables are statistically significant at the 0.10 level at least, while the coefficients of the SIZE, and ROE variables are not. The results, therefore, provide evidence that AC's meet more frequently in firms with less debt ratios, in support of H8, when firms are audited by 'Big-4' audit firm, in support of H10, and when firms belong to the finance industry, which provide support to H11. The results however, do not support H7 and H9.

5. Conclusion and Discussion

The current study examines the association between AC meeting frequency and a number of board, AC and firm characteristics in the Kuwait market where this kind of empirical investigation has not been explored by previously. This research is important since it provides empirical evidence about this research topic in a setting where the market is quite small and corporate governance rules and culture are emergent and still immature, and where data used in the analysis pertain to periods when firms' formation of AC's in Kuwait is done on a voluntary basis. The empirical results of the current study show that AC meeting frequency is positively associated with ownership concentration, the size of the audit firm (i.e., Big4), and firm's affiliation to the finance industry. The results also show that AC meeting frequency is negatively related to board independence and firm's financial leverage. The results of the current study, however, do not show a significant relationship between AC meeting frequency and board size or any of the examined AC characteristics. The empirical findings provided by the current study not only present for the first time some empirical evidence about factors related to AC meeting frequency in the context of a small

developing Middle Eastern market, but also are useful for benchmarking and comparative analyses by international audit researchers as well as future policies by Kuwaiti authorities of the impact of the newly introduced governance rules related to listed companies' AC formation and operation.

Table 3. Regression Results

$$AC_MEET = \beta_0 + \beta_1 CONCENTR + \beta_2 BD_SIZE + \beta_3 BD_INDP + \beta_4 AC_SIZE + \beta_5 AC_EXP + \beta_6 AC_INDP + \beta_7 SIZE + \beta_8 LEV + \beta_9 ROE + \beta_{10} BIG4 + \beta_{11} FINANCE + \varepsilon$$

Variable	Estimated Coefficient	Standard Error	t-statistic	p-value
Intercept	3.416	2.611	1.308	.200
CONCENTR	.050	.016	3.123	.004***
BD_SIZE	-.215	.148	-1.456	.156
BD_INDP	-1.282	.456	-2.812	.008***
AC_SIZE	-.092	.095	-.964	.343
AC_EXP	.885	.531	1.667	.106
AC_INDP	.282	.320	.882	.384
SIZE	-.022	.152	-.142	.888
LEV	-2.153	1.160	-1.856	.073*
ROE	-.592	.714	-.829	.413
BIG4	.823	.347	2.375	.024**
FINANCE	.684	.367	1.866	.072*

Model:
R-Square = .479
F-statistic = 2.590
Signif. F < .018
n = 42

***, **, * p-value of statistical significance at the 0.01, 0.05, and 0.10 levels, respectively

AC_MEET = number of audit committee meetings during 2012.

CONCENTR= percentage of share ownership of the largest individual shareholder.

BD_SIZE = number of firm's board members.

BD_INDP = percentage of board members who are independent from the firm.

AC_SIZE = number of audit committee members.

AC_EXP = dummy variable taking the value of 1 if any of the audit committee members have accounting expertise, and 0 otherwise.

AC_INDP = dummy variable taking the value of 1 if most of the audit committee members are independent from the company, and 0 otherwise.

SIZE = natural log of the firm's total assets.

LEV = firm's long-term debt to total assets ratio.

ROE = firm's 2012 net income/total owners' equity.

BIG4 = dummy variable taking the value of 1 if the firm's external auditor is Deloitte, Ernst & Young, KPMG, or PwC, and 0 otherwise.

FINANCE = dummy variable taking the value of 1 if the firm's belongs to the finance industry, and 0 otherwise.

ε = error term.

The current study is subject to a number of limitation. First, due to the sensitive nature of the data and the fact that this kind of information is not publically available in the Kuwaiti market, the data used in the current study pertain to a small number of listed companies and is based on observations related to only one year. The limited sample size and horizon have undoubtedly reduced the statistical power of the statistical tests performed, and limited the generalizability of the results reported. The one-year small sample size used here, however, is comparable to that of many prior related studies (e.g., Mendez & Garcia, 2007; Raghundanan & Rama, 2007). Future research, nonetheless, is needed to pursue similar investigation using larger sample sizes and data related to more years. Longitudinal analyses could be carried out to investigate the impact of the newly introduced corporate governance rules in the Kuwait market on AC practices. Second, due to the infancy and the still-emerging theoretical background of this line of audit research, the current study may have omitted some relevant variables. More research will certainly be useful in exploring this kind of omitted factors of relevance. Third, the dependent variable used in the current study merely measures the number of AC meetings, and hence is an imperfect surrogate of AC diligence. Future research therefore is needed to employ other measures, such as the content of the AC meetings (e.g., length of meeting time, nature of debates, or type of discussions), which better reflect and provide more insights about AC diligence and effectiveness.

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Notes

Note 1. In particular, Article 5-5 in Module 15 of CMA's Executive Bylaw mandate in each firm listed on KSE "the board of directors shall form an audit committee consistent with the nature of the company activity and having the full independence, in addition to the necessity of provision of human personnel of specialized experience at the committee, in order to perform their duties." (Capital Markets Authority, 2015, p. 5-6)

Note 2. Using the prevailing exchange rate at the time of analysis; KDI = \$3.3.