# The Role Effectiveness of Audit Committees in Saudi Listed Companies

Dr. Mohammed Alshetwi

College of Business & Economics, Qassim University, Saudi Arabia

#### Abstract

This paper examines the effectiveness of audit committees (AC) in carrying out their role of improving financial reporting quality (FRQ). Based on a cross-sectional sample of 101 Saudi nonfinancial listed companies for the fiscal year of 2014, the current study finds that AC independence and meetings are positively significantly related to improved effectiveness of ACs in improving FRQ. However, size and competency of the AC do not have an impact. The results imply that the governance structure to improve the effectiveness of ACs in Saudi listed companies needs to be revised. The findings shed light on the measurement of AC independence and suggest that a majority of independent directors is an important driver for greater AC effectiveness. **Keywords**: Audit Committee, Competency, Independence, Diligence, Financial Reporting Quality

#### 1. Introduction

In recent years, Audit Committees (hereafter, ACs) have received increasing attention from regulators and researchers due to their role in improving the quality of financial reporting (hereafter, FRQ). For example, the US Security Exchange Committee (SEC) required each US listed company to maintain an AC in the post-Sarbanes-Oxley Act era (Lary and Taylor, 2012). In 2009, the Saudi Capital Market Authority (CMA) started requiring all listed companies to have an AC, indicating the importance of ACs in recent Saudi governance structure (CMA, Corporate Governance report). Prior studies have indicated that ACs play a vital role in improving FRQ (Klein, 2002; Krishnan et al, 2011; Lary and Taylor, 2012).

In all corporate governance models, the AC has an important role in monitoring the financial auditing process. It helps in supervising internal audit units to ensure that they carry out their role in monitoring management's activities, including those relating to financial reporting. Moreover, the AC reviews and supervises the work of external auditors to ensure a high quality auditing process and to reduce financial reporting fraud. In addition, the AC has responsibilities for maintaining the quality of interim and annual financial statements before presenting them to the board of directors. In this context, the AC reviews the accounting policies to ensure that they are consistent with accounting principles.

In contrast to the majority of research studies on AC effectiveness (Bedard et al., 2004; Farber, 2005; Klein, 2002; Krishnan et al., 2011; Lary and Taylor, 2012), which have been carried out in US and other developed countries, this study provides empirical evidence related to this issue from a less-developed setting, namely Saudi Arabia.

Consistent with Klein (2002), the current study assesses the effectiveness of the AC as a means to maintain the quality of financial reporting and uses abnormal accrual as a proxy for effectiveness. In order to specify the main governance characteristics of AC effectiveness that could affect the AC's role in maintaining FRQ, the current study focuses on three elements: AC financial competency, AC independence, and AC diligence.

The underlying assumption is that the greater the AC's effectiveness in terms of greater AC independence, financial competency of AC members, and diligence of the AC, the more effective role the AC plays in improving FRQ.

It is notable that there has been little evidence regarding this issue from emerging economies, such as that of Saudi Arabia. This study extends previous research in the area by examining the link between the principal characteristics of AC effectiveness (namely, the independence of AC members, the financial competency of AC members, and the diligence of AC) and their role in improving FRQ among Saudi listed companies.

Based on a cross-sectional sample of 101 Saudi nonfinancial listed companies for the fiscal year of 2014, the current study finds that AC independence and meeting frequency are positively and significantly related to the ability of the AC to improve the FRQ. However, size and competency of the AC are found to be not significant.

The current study makes the following contribution. First, it adds to the current debate on this issue as it provides evidence from an emerging economy, Saudi Arabia. Second, it sheds light on the role of AC effectiveness and suggests recommendations to design and improve the regulations related to ACs in the Saudi governance system. The results of this study suggest that the presence of a majority of independent directors could enhance the ability of the AC to perform monitoring duties and improve FRQ.

The remainder of this paper is organized as follows: section two provides the background and

development of hypotheses. Next, section three describes the research methods. Section four presents and discusses the results of the study. The final section provides a conclusion, discusses the limitations of the study, and offers suggestions for future research.

# 2. Background and Hypothesis Development

The AC is one of the important components of a corporate governance system. In the context of financial reporting, ACs play a vital role in monitoring management behavior towards implementing sound accounting methods and adopting appropriate accounting principles. They have responsibilities for monitoring the effectiveness of internal control and reviewing the results of internal and external auditing.

An effective AC can be perceived as a good indicator of high quality monitoring and can result in reducing the likelihood of financial statement fraud (Beasley, 1996). Indeed, as the AC is responsible for the enhanced quality of an accounting information system, adequacy of internal control and a good quality of external and internal audit, it helps ensure credible financial statements (Felo et al., 2003), and can be considered as the ultimate monitor of the financial reporting process.

Prior studies provide evidence of the importance of the effectiveness of the AC in improving FRQ (Abbott et al., 2004; Carcello and Neal, 2000; Lary and Taylor, 2012); and, in particular, in reducing financial reporting fraud (Abbott et al, 2000; Beasley, 1996; Farber, 2005; Dechow et al., 1996; Klein, 2002).

Researchers have sought to find proxies to measure the effectiveness of the AC. In a recent study, Lary and Taylor (2012) adopted two measures of quality including FRQ (i.e. financial reporting restatement) and auditor quality (i.e. non-auditor services) as proxies for AC effectiveness. An early study by Beasley (1996) assessed AC effectiveness as the ability to improve FRQ and used fraud disclosure as a proxy for effectiveness.

Klein (2002) contributed to the literature with her use of abnormal accrual as a proxy for AC effectiveness, while Abbott et al. (2000) used incidence of fraudulent financial reporting as measured by financial misstatement. Another study, conducted by Stewart and Munro (2007), focused on external audit quality (i.e. audit fees) as a proxy for effectiveness.

Following Klein (2002), the current study assesses the effectiveness of AC by using a proxy of FRQ, as measured by the level of abnormal accrual. The basic assumption is that when AC effectiveness increases, the level of abnormal accrual decreases, indicating higher FRQ.

The determinants of AC effectiveness include independent and qualified members with authority and resources, in addition to diligent oversight efforts (DeZoort et al., 2002). However, the scope of the current study does not include the authority of AC members due to limitations of data resources. Instead, this study focuses on independence, competency and diligence as three important factors for identifying AC effectiveness.

It is expected that the presence of competent, independent, and diligent members of the ACs is positively related to improved effectiveness of ACs in carrying out their monitoring role. In other words, with more competent, independent, and diligent directors, the AC has a greater capacity to contribute to the financial statement audit and report on internal control system and, in turn, to ensure reliable financial reporting.

In particular, competent members are able to fulfill their responsibilities for monitoring financial reporting as they are more knowledgeable in dealing with audit comments. They would also be more skilled in providing higher self-insight on internal control issues and in dealing with earnings management incentive.

In 2002, the Sarbanes-Oxley Act required that ACs should disclose whether they have experts in financial matters. Further, the Blue Ribbon Committee (BRC) recommends that ACs include at least one member who is qualified in financial issues. In Saudi Arabia, Capital Market Authority (CMA) requires that the AC should consist of at least three members, one of whom is a specialist in financial and accounting matters (CG regulation, 2006).

The literature provides evidence on the positive relationship between competency (as a one important factor of AC effectiveness) and FRQ (Bedard et al., 2004; Krishnan and Visvanathan, 2008; Krishnan et al., 2011; Velte and Stiglbauer, 2011).

In their study, Abbott et al. (2004) found that companies whose ACs include financial experts are less likely to restate their financial statements. In this context, McMullen and Raghunandan (1996) found that the number of financial reporting problems was more likely to decrease in companies whose ACs members hold a CPA qualification. The findings indicate that ACs with qualified members are more knowledgeable in reviewing audit results, leading to higher FRQ.

It is noted that AC financial experts would add value to their companies in terms of having more interactions with auditors, providing greater support to auditors in auditor-management disagreements, and reducing the level of financial reporting problems (DeZoort et al., 2002).

In summary, the findings of prior studies have revealed that ACs with financial experts were more effective in carrying out their monitoring role, leading to lower levels of abnormal accrual and improved FRQ. Thus, competency of members is the first important characteristic identifying AC effectiveness.

Drawing upon the above discussion, the current study proposes that: as the competency of AC members increases, their ability to consider fraud increases, thereby contributing more to the FRQ. Therefore, the first

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hypothesis of this study is stated, in alternative form, as follows:

H1: There is a positive relationship between the financial competency of the AC and the FRQ (i.e. effectiveness in its role to improve FRQ).

Independence is another important factor that helps enhance the effectiveness of ACs in improving the FRQ. Because independent members can fulfill their responsibilities without any conflict of interest, they can offer better insights on control processes and cogent reviews of audit work. Furthermore, most outside members are concerned about their reputation; they present themselves as careful monitors and preserve their reputation through providing superior work to their clients.

In general, the minimum requirements of AC independence should be achieved; otherwise, the coalition between the AC and management might adversely affect the AC's role of maintaining high quality in financial reporting. That is justified as independent members of the AC can play an important role in selecting qualified auditors and providing support to auditors in cases of conflict between auditors and management.

In this context, Lary and Taylor (2012) documented a significant relationship between AC independence and the occurrence of financial restatement, implying that independent members of ACs do contribute positively to the FRQ. A study undertaken by Klein (2002) revealed that AC independence is negatively related to abnormal accrual, indicating the importance of AC independence in vetting the integrity of financial reporting.

Abbott et al. (2000) extended earlier studies by using AC independence and activities as two determinants of AC effectiveness. Their result showed that companies where ACs had independent directors were less likely to be sanctioned for fraudulent or misleading reporting. Carcello and Neal (2000) investigated the relationship between AC composition and the likelihood of receiving going-concern reports. They found that the higher the level of AC independence, as measured by the percentage of affiliated directors on AC, the lower the probability that firms would receive a going-concern report.

To summarize, the literature on AC independence indicates that independence is a driver for greater AC effectiveness, thereby implying that independence will enhance the ability of the AC to maintain better monitoring quality.

Based on the above line of reasoning, the current study proposes that with greater AC independence, the AC would be more effective in carrying out its monitoring duties leading, in turn, to lower levels of abnormal accrual and to higher FRQ. Therefore, the second hypothesis of this study is developed, in alternative form, as follows:

H2: There is a positive relationship between independence of the AC and the FRQ (i.e. effectiveness in its role to improve FRQ).

AC diligence, measured by AC size and the number of AC meetings, is a third significant factor that has been identified as contributing to AC effectiveness. It is noted that ACs with sufficient size and adequate meeting frequency would be more effective in communicating with auditors. Such ACs would also be more knowledgeable about any significant change in accounting methods and be able to respond quickly to audit reports.

Specifically, ACs, through a structured meeting program with the auditors, send signals to all parties concerned with financial reports that they (the ACs) remain informed and vigilant (McMullen and Raghunandan, 1996). In fact, according to Bedard et al. (2004), unless an AC is active in terms of meeting frequency and size, competency and independence alone will not influence its effectiveness.

In a recent study, Lary and Taylor (2012) examined the association between ACs' governance characteristics and their role in monitoring external auditors' independence and in vetting the integrity of financial reporting. They found that AC diligence is positively associated with external auditors' independence, as measured by non-audit fees ratio, implying that AC diligence has a positive impact on the quality of financial reporting. Another study by Lin et al. (2006) documented a negative association between AC size and occurrence of earnings restatements.

However, Farber (2005) found that fraud companies improved their governance characteristics in order to restore investor trust after they reported fraud. His results documented an increase in the number of AC meetings, indicating the role of diligence as another important factor in AC effectiveness; meanwhile, Abbott et al. (2004) found that companies with ACs having regular meetings were less likely to restate their financial statements.

Overall, the results show that AC diligence is considered to be an important attribute signifying the effectiveness of AC. The current study proposes that when an AC is more diligent in carrying out its work, it would be more effective in monitoring financial reporting. Therefore, the third hypothesis of this study, in alternative form, is stated as follows:

H3: There is positive relationship between the diligence of the AC in terms of meeting frequency and size, and the FRQ (i.e. effectiveness in its role to improve FRQ).

# 3. Methodology

# 3-1.Sample

The initial sample of this study consisted of all listed Saudi nonfinancial companies in 2014<sup>4</sup>. The reason for selecting a single fiscal year (2014) was to enhance the validity of the study, when data of both independent and dependent variables are accounted for in the same observation. Financial companies (specifically, banks and insurance companies) were excluded from the sample because of their unique control system (Klein, 2002; Velte and Stiglbauer, 2011).

The total sample included 116 companies listed in 2014, excluding banks and insurance companies. Two companies were deleted due to incomplete financial data. However, for the purpose of using the cross-sectional version of the modified Jones model, the sample is split into 8 industries based on TADAWL (Saudi stock market) classification system. In some cases, Global Industry Classification Standard (GICS) is applied to increase the sample size to the limit recommended by DeFond and Jiambalvo (1994) (i.e. 6 observations in each industry). This requirement resulted in the deletion of 5 companies.<sup>5</sup> Eight outliers were removed. The final sample, therefore, consists of 101 companies as summarized in Table 1.

#### 3-2. Measurement of variables

3-2-1. Dependent variable

The dependent variable of this study is the effectiveness of ACs. The current study assesses the effectiveness of ACs based on their ability to improve FRQ. Following Klein (2002), abnormal accrual is adopted as a proxy for AC effectiveness (i.e. the ability to improve FRQ). A lower level of abnormal accrual indicates greater effectiveness of ACs in maintaining good quality of financial reporting; however, since the current study estimates coefficients in a given year (2014), the cross-sectional version of the modified Jones model (Bartov et al., 2000; DeFond and Jiambalvo, 1994) is used to measure abnormal accrual based on the absolute value of discretionary accrual.

Panel A: Sample size						
Initial sample						
Less: companies with incomplete financial data						
Less: companies cannot be attributed to specific sector						
Less: outliers <sup>6</sup>						
Total companies removed						
Final sample						
Panel B: Analysis of sample by TADAWL industries						
Industry	Sample					
(1) Petrochemical	14					
(2) Cement	13					
(3) $\operatorname{Retail}^7$	18					
(4) Agriculture	13					
(5) Multi-investment	6					
(6) Industrial investment <sup>8</sup>	15					
(7) Building & Construction	15					
(8) Real estate development	7					
Total	101					

Table (1) Sample selection

3-2-2. Independent Variables

The independent variables of the current study include the governance attributes of AC effectiveness. Among other attributes, competency, independence, and diligence have been identified by prior studies (Abbott et al., 2002; Bedard et al., 2004; Farber, 2005; Krishnan and Visvanathan, 2008; Klein, 2002; Lary and Taylor, 2012; Lin et al., 2006) as the determinants of AC effectiveness.

The first attribute of AC effectiveness is a competency. A competent member of AC, as defined by CMA, is an AC member who specializes in accounting or finance. It is measured using dummy variables, signified by "1" if the AC includes at least one financial expert and by "0" if there is no financial expert in the AC. The relationship between ACs' competency and their effectiveness in improving the FRQ is positive,

<sup>&</sup>lt;sup>4</sup> All financial data are obtained from the official website of Saudi stock market (TADAWL).

<sup>&</sup>lt;sup>5</sup> Including energy and hotel companies.

<sup>&</sup>lt;sup>6</sup> Data are tested for outliers using box-plot, histogram, normal probabilities plots, detrended normal probabilities plots, and case wise diagnosis.

<sup>&</sup>lt;sup>7</sup> Based on GICS; it includes: retail, media, and telecommunication.

<sup>&</sup>lt;sup>8</sup> Based on GICS; it includes: industrial investment and transport.

implying that ACs having qualified members in accounting and finance are more likely to be effective in improving the FRQ.

The second independent variable is the independence of the AC. According to CMA, independence is achieved when there is no tie between AC members and their companies, including both business and non-business relationships. This variable is measured by the dummy variable, coded "1" if the AC has a majority of independent directors (Klein, 2002), and "0" if otherwise.

The relationship between ACs' independence and their effectiveness in vetting FRQ is positive, implying that the more independent directors on the AC, the more effective it would be in performing its monitoring duties and improving FRQ.

AC diligence is the third attribute contributing to AC effectiveness. It refers to the willingness of AC members to work together as needed to fulfill their monitoring functions (DeZoort et al., 2002). Two dimensions are used in this study to define AC diligence: they are frequency of AC meetings, and AC size. The variable, AC meeting, is measured by the number of AC meetings held in a year (2014), while AC size is measured by the number of members on the AC (Farber, 2005). The relationship between ACs' diligence (i.e. meetings and size) and their effectiveness in improving FRQ is positive. ACs with higher levels of diligence (in terms of size and meeting frequency) are more likely to be effective in carrying out their monitoring role (i.e. to improve the FRQ).

# 3-3. Control Variables

Several control variables are employed in this study, consistent with previous research (Bedards et al., 2004; Klein, 2002; Krishnan et al., 2011; Lary and Taylor, 2012). First, company size (SIZE) is adopted to control for the effect of company size on the incentive to manipulate accounting numbers. This variable is measured by the natural log of assets at the beginning of the year. The relationship between company size and abnormal accrual is negative, implying that larger companies are less likely to manipulate earnings. Second, leverage (LEV) is adopted in the model to control for the effect of leverage on the hypothesized relationship. It is measured by the ratio of total liabilities to total assets. The relationship between leverage and the incentive to manage accrual is positive. Third, board independence (BIND) is adapted to control for the effect of board independence on the relationship between independent and dependent variables. It is measured by a dummy variable, coded "1" if the board of directors has at least a majority of independence increases, the level of abnormal accrual decreases. Fourth, audit quality (AUQUAL) is used to control the effect of Big4 auditors on abnormal accrual. It is measured by a dummy variable (coded 1= Big4; 0= non-Big 4). The current study, in line with prior studies, expects a negative relationship between audit quality and the level of abnormal accrual.

# 3-4. Model specification

The proposed model of this study is developed as follows:

AbsDAC=  $\beta 0+\beta 1ACCOM+\beta 2ACIND+\beta 3ACMEET+\beta 4ACSIZE+\beta 5SIZE+\beta 6LEV+\beta 7BIND+\beta 8AUQUAL+e$ 

Where, AbsDAC= the absolute value of discretionary accrual as measured by the cross-sectional version of the modified Jones model; and

- ACCOM = A dummy variable with the value of "1" when the AC includes of at least one financial expert;
- ACIND = A dummy variable coded "1" if the AC has a majority of independent directors;
- ACMEET = Number of AC meetings in 2014;
- ACSIZE = Number of AC members in 2014;
- SIZE = The natural log of beginning year's asset;
- LEV = The ratio of total liabilities to total asset;
- BIND = A dummy variable with the value of "1" when the board of directors has a majority of independent directors; and
- AUQUAL = A dummy variable with the value of "1" when the auditor is a Big4 audit firm.

# 4. Results and Discussion

# 4-1. Descriptive Statistics

The descriptive information on independent variables is presented in Table 2. The results indicate that most AC units have at least one financial expert, the mean (median) is .62(1). The number of AC units having a majority of independent directors is high: the mean (median) is .80(1). On average, the frequency of AC meetings is 5 meetings in a year (2014); while, the average number of AC members is 3. Table 3 shows that the independent variables are not strongly related to each other (none of the correlation coefficients is greater than .1).

#### 4-2 Regression Analysis

Table 4 summarizes the results for the regression model. The overall model is significant (p<.05) with low explanatory power (R-square is .16). Results of tests for multi-colinearity and heteroskedasticity reveal that these are not a critical problem for this analysis.

Table 2. Descriptive statistics											
Variable	Minimum	Maximum	Mean	Standard deviation	Median						
AbsDAC	.00	2.07	.60	.55	.45						
ACCOM	0	1	.62	.49	1						
ACIND	0	1	.80	.40	1						
ACMEET	3	16	5.70	1.97	5						
ACSIZE	2	5	3.32	.56	3						
SIZE	4.95	8.53	6.43	.65	6.34						
LEV	.00	.84	.38	.21	.36						
BIND	0	1	.38	.49	0						
AUQUAL	0	1	.72	.45	1						

Table 2: Descriptive statistics

Note: see model specification in section iii for definitions of variables.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
AbsDAC(1)	1.00	.078*-	.193*-	.188-	011	$.000^{*}$	.099	.066	.248
ACCOM(2)		1.00	.127	.018	.147	03*	.067	.044	141
ACIND(3)			1.00	037	.015	.129	030	.055	032
ACMEET(4)				1.00	09	028	.064*	.211	034
ACSIZE(5)					1.00	.035*	.231	.136	.289*
SIZE(6)						1.00	295	17*	25*
LEV(7)							1.00	.388	.303*
BIND(8)								1.00	.315*
AUQUAL(9)									1.00

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

Variables are as defined in model specification in section iii.

#### Table 4: Regression results AbsDAC= $\beta 0+\beta 1ACCOM+\beta 2ACIND+\beta 3ACMEET+\beta 4ACSIZE+\beta 5SIZE+\beta 6LEV+\beta 7BIND+$ β8AUQUAL+e VIF Variables в p-value $\overline{*}$ Exp sign t-value Intercept -.033 -.051 .960 Control BIND .136 1.19 .25 1.15 1.34 AUQUAL .09 .52 .65 \_ LEV + .13 1.32 .44 .66 SIZE .23 1.35 2.39 .02 -Experimental .96 ACCOM .01 1.10 .06 \_ ACIND -.286 1.045 -2.112 .037 ACMEET -.059 1.074 -2.127 .036 \_ ACSIZE -.130 1.206 -1.266 .209

\**p*-values represent one-tailed tests when direction of coefficient is consistent with expectations.  $R^2 = .157$ 

F-ratio = 2.135

Signif. *F* < 0.05

n =101

Variables are as defined in model specification in section iii.

Contrary to expectations, the results do not support the first hypothesis of this study (p=.96) implying that AC competency is not significantly related to the enhancement of ACs' effectiveness in carrying out their monitoring role. A possible reason for this result may relate to the lower percentage of qualified members who attended AC meetings in 2014 (i.e. they may have been absent or passive "inactive").

Adjusted  $R^2 = 0.083$ 

The results, however, reveals that AC independence is significantly positively related to a reduced level of abnormal accrual (i.e. improved FRQ) (p<.05); thus, supporting the second hypothesis. This result implies that with greater AC independence, ACs would be more effective in carrying out their monitoring activities, contributing to higher FRQ.

Hypothesis three is partially supported, since the meeting frequency of ACs is found to be significant at the 5 percent level of significance (p<.05). This result implies that AC meeting frequency is significantly related to an enhanced ability of ACs to improve the FRQ (decreasing the level of abnormal accrual).

However, size of ACs is not significant (p=.21). This finding reveals that while ACs are more diligent in terms of meeting frequency, size of the AC does not have an impact. However, this result may explain the weak relationship between AC competency and the ability of the AC to improve FRQ. It indicates that companies lack skills to manage and organize meetings. Instead, they increase the frequency of meetings to achieve the target level of productivity.

Overall, the results of the current study reveal that ACs having a majority of independent directors and an adequate number of meetings are more effective in carrying out their monitoring functions, leading to enhanced FRQ. In contrast, the size of the ACs and the financial competency of their members do not have a significant impact.

#### 4-3. Sensitivity Test

An additional analysis was performed to test the stability of the initial analysis. It addressed two critical issues: testing alternative definitions of independent variables, and testing whether there is any interaction between two independent variables.

In terms of the first testing, the model regression was re-run using alternative definitions of the variables. AC meetings and size were measured using a different threshold level of size and meeting frequency. Specifically, AC meetings was measured using a dummy variable coded "1" if the AC meets at least 4 times for the year (2014), and coded "0" otherwise (Abbott et al., 2004; Lin et al., 2006); while, AC size was measured using a dummy variable coded "1" if the AC had at least 3 members in 2014, and coded "0" otherwise (Abbott et al., 2004; Lary and Taylor, 2012). The results reveal that there is no change in additional analysis (p values for AC size and meetings are .58 and .44, respectively) indicating that the original model is stable.

In another substantive test, the percentage of independent directors on the audit committee (i.e. number of independent directors divided by the total number of AC members) was used to measure AC independence (Lin et al., 2006). The result shows that AC independence measured by the percentage of independent directors on the AC is not significant (p=.15). Overall, the results remained the same, indicating that the original model is not sensitive to alternative measures of independent variables.

With respect to interaction, the variable MEET\*IND is created to test the interaction that might exist between AC meetings and independence (Collier and Gregory, 1999)<sup>9</sup>. Both AC meetings and independence are significant when interacted variables are added, indicating that the results have no change (p value for MEET\*IND is .25).

# 5. Conclusion

In recent years, researchers have been focusing on AC as one of the important factors that ensure good quality of financial reporting. This paper examines the effectiveness of AC in carrying out their role of improving FRQ. Overall, the findings of this study show that independence is an important factor in AC effectiveness and plays a significant role in improving FRQ in the Saudi listed companies that were studied. The results also show that AC meetings contribute positively to enhance the effectiveness of AC and, in turn, to improve FRQ.

The results of this study reinforce the findings of prior studies (Bedard et al., 2004; Klein, 2002; Lary and Taylor, 2012) who found that the independence of the AC has a significant monitoring role. The findings also provide additional support for previous studies (Abbott et al., 2004; Farber, 2005) that found evidence of the positive impact of meetings on AC effectiveness and FRQ.

However, the current study provides no evidence that other AC variables (namely, competency and size) are related to improvements in the effectiveness of the AC. A possible explanation for this is that listed companies lack the skills needed to manage and organize AC resources.

The results of this study add to the growing body of literature through providing insights on the link between characteristic variables of ACs and their effectiveness in improving FRQ.

From a practical perspective, companies should take actions to ensure sufficient qualified personnel are

<sup>&</sup>lt;sup>9</sup> As cited in DeZoort et al (2002).

appointed as members of ACs in order to ensure their effectiveness in carrying out their role to improve FRQ. Furthermore, the results of this study provide feedback to policy makers (e.g. CMA) on the need to issue specific regulations that support the independence of ACs. In this regard, it is suggested that the composition of ACs should include a majority of independent directors.

The current study has a number of limitations. While selecting a specific fiscal year (in this case, 2014) was necessary to enhance the validity of the study, this technique resulted in a small sample size. Furthermore, since the sample was split into different sectors, each of which required at least 6 observations, several observations had to be excluded from the sample because the number of observations was less than 6. The relatively small sample size limits the generalizability of the results.

In addition, the results of this study are based on the use of abnormal accrual as the measurement of earning quality. It would be useful if future research examined alternative proxies of earnings quality. Further, future research is needed to investigate the impact of other factors on the effectiveness of ACs and their role in FRQ. For example, it is suggested that researchers consider the impact of multi-directorship and ownership on AC effectiveness. Finally, it is suggested that future research could focus on alternative measures of AC characteristics as variables, such as levels of governance or the presence of legal experts on ACs. Notes

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