

# CHARACTERISTICS OF AUDIT COMMITTEES AND BANKING SECTOR PERFORMANCE IN GCC

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## Abstract

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The purpose of this paper is to investigate the association between bank performance and audit committee characteristics for banks in Gulf Cooperation Council (GCC) over the period from 2013 to 2017. Regression of ordinary least squares quantile (OLS) and regression of quantile data are used to test the relationship between bank performance as a dependent variable and certain independent variables. The results revealed that committee size has a significant impact on banks' performance but the presence of women members, independent members, committee meetings, and the existence of qualified members do not. The current study is one of a few studies, which addresses the association between bank performance and audit committee characteristics for banks in GCC.

**Keywords:** Audit Committee Characteristics, Bank Performance, Non-Executive Committee Members, Committee Size, Committee Meetings, GCC Countries

**Authors' individual contribution:** Conceptualization — E.R.E.; Methodology — E.R.E.; Investigation — M.E.B.; Resources — E.R.E.; Writing — Original Draft — E.R.E.; Writing — Review & Editing — M.E.-B.; Supervision — M.E.B.; Funding — E.R.E., M.E.-B., and M.E.B.

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## 1. INTRODUCTION

An audit committee is one of the most important committees in any business as it helps in applying the corporate governance principles effectively. Afify (2009) indicated the role of the audit committee in monitoring and overseeing internal controls, risk management, and corporate governance. In addition, the committee has an oversight role to make sure that the businesses are adherence to policies, rules, procedures, code of conduct, and regulations. Kallamu and Saat (2015) argued the important role of the audit committee in monitoring the management and supervising the firm in which they can preserve owners' interests.

Moreover, an audit committee is important in serving and protecting the shareholders' wealth and the rights of the other stakeholders. The results of

the study of Ashari and Krismiaji (2020) revealed a positive relationship between the company's performance and the characteristics of audit committees. Wild (1996) argued the role of the audit committee in assisting the stakeholders by securing the quality of financial reporting disclosures and this, in turn, enhances the effectiveness and efficiency of the market performance.

The duties of the audit committee "which should meet regularly" are reviewing and assessing all matters related to auditing, corporate governance, risks, and internal control systems. The level of independence and size of this committee will be reflected positively "with a high level of independence and size" or negatively "with a low level of independence and size" on the quality of performing these duties. Pincus, Rusbarsky, and Wong (1989) referred to the involvement of the role

of the audit committee in large firms from monitoring role to oversight and monitoring role and this led to enhancing the quality of corporate disclosure.

Sarbanes-Oxley Act of 2002 referred that an effective audit committee should include some members with good experience about financials, risk management and control, and some independent members, and this reflected in the current study by selecting two variables: one to represent the percentage of qualified members and the other to represent the percentage of non-executive committee members.

From the above discussion, the purpose of this study is to investigate the relationship between banks' performance and a number of characteristics of the audit committees in Gulf Council Countries (GCC). This study is one of a few studies, which investigated the relationship between firm performance and the characteristics of the audit committee in the GCC and hence should contribute to filling the gap in the literature in this context by enhancing the understanding of the nature of this relationship.

The remainder of this paper is structured as follows. Section 2 presents the literature review and hypotheses development. The research design and methodology are presented in Section 3. Section 4 covers the results and discussion. Section 5 provides the conclusions.

## 2. LITERATURE REVIEW

Agency theory and resource dependence theory have been adopted in this study, as they are relevant in achieving its purpose.

The audit committee is responsible for overseeing, improving, and enhancing the operation and the financial performance of the companies. In addition, it assists all stakeholders in taking the best course of action based on the quality of disclosed information.

The role of the audit committee is crucial in mitigating the conflict of interest between the owners and management and this can be explored within the boundaries of the agency theory.

Jensen and Meckling (1976) argued the significant role of the agency theory in explaining and predicting the behavior of the principals and their agents. In a modern business environment, the separation between ownership and management led to the conflict of interest between the principal and its agent. In addition, the agency theory indicated that the good-managed firms are performing better than the poorly-managed firms and are more capable to achieve the strategic and operational objectives of the firms and increase their shareholders' wealth.

Previous agency theory-based studies argued that the non-executive directors are more efficient and effective in monitoring and supervising the firms and hence enhance their performance (Anderson, Mansi, & Reeb, 2004; Adams & Ferreira, 2009).

Using the resource dependence theory, Zhou, Owusu-Ansah, and Maggina (2018) argued the benefits of having more insider directors in running the companies' operations as they are more efficient than others due to their experience, and this, in turn, will be reflected in better performance.

As argued earlier, the role of the audit committees in monitoring and overseeing to assure the compliance and adherence of policies, regulations, rules, procedures, and code of conduct. In addition, as argued by Kallamu and Saat (2015), it plays a significant role in monitoring and supervising the management of the firm, and this helps in protecting and preserving the shareholders' interests.

Chen, Duh, Hsu, and Pan (2015) argued that applying the substance over form concept is important to reflect the true figure of the companies' earnings and the existence of the audit committee should help in implementing this concept.

The results of the following previous studies revealed no impact for the existence of the audit committee in the firms on:

- the likelihood of the occurrence of financial fraud (Beasley, 1996);
- the return on equity and operational self-sufficiency (Durgavanshi, 2014);
- the financial reporting timeliness (Akinleyen & Aduwo, 2019);

The results of the study of DeFond and Jiambalvo (1991) showed a positive impact on the existence of the audit committee on mitigating the overstatement of the earnings (DeFond & Jiambalvo, 1991).

The results of the study of Fanta et al. (2013) and Klein (2002) revealed a negative impact on the existence of the audit committee on the firm performance.

### 2.1. Association between directors' independence and bank performance

It has been argued that the role of the non-executive audit committee members in monitoring the performance of their firms is important and helpful in achieving the shareholders' objective representing by maximizing their wealth (Anderson et al., 2004; Adams & Ferreira, 2009).

Ashari and Krismiaji (2020) using a sample of 466 observations of Indonesian companies over the years 2016–2017, studied the relationship between the independence of the audit committee directors' and companies' performance and found a positive association.

Aanu, Odianonsen, and Foyeke (2014) studied for a sample of companies in Nigeria, the association between the firm performance measured by ROE, ROCE, and ROA and the presence of independent members. The results revealed a significant and positive correlation.

The results of the study of Agrawal and Chadha (2005) revealed a negative relationship between independent directors and performance measured by returns and earnings.

Al-Matari, Al-Swidi, and Fadzil's (2017), Kajola's (2008), and Lin, Li, and Yang's (2006) studies concluded insignificant influence of the presence of independent members on the firm performance.

Carcello and Neal's (2000) study showed no influence of the presence of independent members on the firm performance.

Therefore, we adopted the first hypothesis (H1) as follows:

*H1: The relationship between independent directors and bank performance is insignificant.*

## 2.2. Relationship between audit committee (AC) meetings and bank performance

Menon and Williams (1994) argued that the number of audit committee (AC) meetings is important in maximizing the effectiveness and efficiency of the monitoring role of the committee. Their empirical study results revealed that inactive audit committees are poorly correlated with the effective and efficient monitoring role of the committee.

Blue Ribbon Committee (BRC, 1999) advised that the audit committee should meet at least once per quarter in order to discuss financial reporting issues. Ashari and Krismiaji (2020) studied the association between a number of AC meetings and firm performance and found a positive association. The results of the study of Abbott, Parker, and Peters (2004) revealed that the audit committee that does not meet quarterly (at least 4 meetings per year) might need to restate the financial statements of its company. Beasley Carcello, Hermanson, and Lapedes (2000) found that the less frequent AC meetings are associated with a high percentage of fraudulent financial reporting. On the other hand, the results of the study of Al-Matari et al. (2017) showed an insignificant relationship between the number of audit committee meetings and the firm performance.

Therefore, we adopted the second hypothesis (H2) as follows:

*H2: The association between the number of AC meetings and bank performance is insignificant.*

## 2.3. Relationship between qualifications of AC members and bank performance

It has been argued that the qualifications of the audit committee members play a significant role in enhancing the performance of the firms (Ashari & Krismiaji, 2020; Abbott & Collins, 2002).

Ashari and Krismiaji (2020) and Aanu et al. (2014) found a positive relationship between the qualification of AC members and the firm performance. The study of Aldamen, Duncan, Kelly, McNamara, and Nagel (2011) concluded that the highly experienced and qualified AC members are positively contributing to the performance of the firm.

The results of the study of Lin et al. (2006) showed an insignificant relationship between earnings management and the existence of audit committee members with financial expertise. Bouaziz (2012) studied the relationship between directors who possess financial experience and firm performance measured by ROA and ROE and found a significant relationship.

Abbott and Collins (2002) argued that the members of the audit committee with no experience in dealing with risk management and finance commit many financial errors and mistakes.

Therefore, we adopted the third hypothesis (H3) as follows:

*H3: The relationship between audit committee members' qualifications and bank performance is significant.*

## 2.4. Relationship between AC size and bank performance

Many studies in the literature argued the influence of AC size on bank performance due to its positive contribution to the performance of the firms (Ashari & Krismiaji, 2020, Aanu et al., 2014; Aldamen et al., 2011).

Ashari and Krismiaji (2020) studied the relationship between firm performance and AC size and found a positive relationship. Be'dard, Chtourou, and Courteau (2004) found that a larger AC size leads to better oversight functions on financial processes and accounting. The results of the study of Anderson et al. (2004) revealed that the larger AC size reflected the better protection and control over financial issues and accounting. Al-Matari, Al-Swidi, Fadzil, and Al-Matari (2012) referred to a significant association between firm performance and committee size in Saudi Arabia. Al Lawati, Hussainey, and Sagitova (2021) concluded that the committee size improves the quality of forward-looking disclosure.

On the contrary, Aldamen et al. (2011) concluded a positive relationship between small committee size and better performance. Lin et al. (2006) concluded a negative correlation between earnings management and audit committee size. Yang and Krishnan (2005) found that the size of the audit committee and earnings management are negatively correlated.

Furthermore, Al-Matari et al. (2017) indicated an insignificant correlation between AC size and firm performance. Aanu et al. (2014) found an insignificant relationship between firm performance and AC size. The results of Xie, Davidson, and DaDalt (2003) showed insignificant between firm performance and AC size.

Moreover, AC size should have a positive influence on the quality of the financial disclosure but the results of the studies of Carcello and Neal, (2003), Klein (2002), Abbott and Parker (2000), concluded that the association between financial disclosure quality and committee size is negatively correlated.

Therefore, we adopted the fourth hypothesis (H4) as follows:

*H4: The relationship between AC size and bank performance is significant.*

## 2.5. Relationship between female directors and bank performance

It has been argued that the gender of the audit committee member is a key factor that influences the performance of the firms (Ashari & Krismiaji, 2020; Carter, D'Souza, Simkins, & Simpson, 2010).

Al Lawati et al. (2021) found that the presence of women members in the audit committee improves the quality of financial disclosure. The results of the study of Ashari and Krismiaji (2020) revealed a positive relationship between female directors and firm performance. Carter, Simkins, and Simpson (2003) indicated the significant correlation between female directors and performance. The results of the study of Campbell and Mínguez-Vera (2008) showed that the presence of women in the AC is positively correlated with firm performance. Erhardt, Werbel, and Shrader (2003) in their studies about the US companies found that the number of female members on the board is positively correlated with

the firm financial performance. On the contrary, the studies of Carter et al. (2010) in the US and Rose (2007) in Denmark showed an insignificant association between the presence of females on the board and firm performance respectively.

Therefore, we adopted the fifth hypothesis (*H5*) as follows:

*H5: The relationship between female directors and performance is significant.*

### 3. RESEARCH DESIGN

The structure of this section is as follows. Subsection 3.1 presents the sample and data collection, Subsection 3.2 explains the nature of the dependent variable, Subsection 3.3 explains the nature of the independent variable.

$$ROE = \beta_0 + \beta_1 No.Meetings + \beta_2 ComSize + \beta_3 GenDiversity + \beta_4 QualMemb + \beta_5 NECM + \beta_6 GovOwn + \beta_7 BankSize + \beta_8 BankType + \varepsilon \quad (1)$$

$$ROE = \beta_0 + \beta_1 No.Meetings + \beta_2 ComSize + \beta_3 GenDiversity + \beta_4 QualMemb + \beta_5 NECM + \beta_6 GovOwn + \beta_7 BankSize + \beta_8 BankType + \varepsilon \quad (2)$$

### 3.2. Dependent variable

Return on equity (ROE) and return on assets (ROA) have been adopted in this study to represent the bank performance as a dependent variable. ROE measures the recognized return on banks' equity, this ratio is very important to measure how firms employ investments in the best manner to achieve high levels of growth. While the ROA measures how banks efficiently and effectively manage their economic resources and how they can recognize the highest level of returns on assets.

### 3.3. Independent variables

The independent variables are divided into two groups. Group 1 represents the variables that are

### 3.1. Sample and data collection

The study sample contains the data of 68 banks in the GCC over the years 2013–2017. The statistical computer package (Stata) is used to apply the Bivariate and Multivariate tests.

Regression analysis is adopted to test the relationship between the dependent variable and independent variables. In addition, Pearson, Spearman, and variance inflation factors (VIF) were used for the multicollinearity test.

Two study models will be used to test the relationship between the dependent variable and the independent variables as follows:

related to the audit committee characteristics, group 2 represents the control variables. The variables of the audit committee characteristics are the number of committee meetings (*No.Meetings*), the number of committee members (*ComSize*), the percentage of female directors to total directors (*GenDiversity*), the percentage of qualified members to total members (*QualMemb*), and the percentage of non-executive members (*NECM*). The control variables are bank type (*BankType*) (conventional-Islamic), bank size (*BankSize*), and governmental ownership (*GovOwn*).

The definitions and measurements of the variables are shown in Table 1.

**Table 1.** The definitions and measurements of the variables

<i>Variables</i>	<i>Definitions</i>	<i>Measurements</i>
<i>No.Meetings</i>	Number of meetings per year	Total number of meetings per year
<i>ComSize</i>	Number of committee members	Total number of committee members
<i>GenDiversity (female %)</i>	Percentage of female members to total members	The number of female members divided by the total number of members
<i>QualMemb</i>	Qualified members are members who are qualified or experienced in business management, accounting, finance, or auditing	The number of qualified members
<i>NECM</i>	Non-executive committee members	The number of NECM divided by the total number of members
<i>GovOwn</i>	Government ownership	1 if the government owns more than 50% and 0 if otherwise
<i>ROE</i>	Return on total equity	Net income divided by total equity
<i>BankSize</i>	Bank size	The logarithm of total assets
<i>ROA</i>	Return on total assets	Net income divided by total assets
<i>BankType</i>	Bank type	1 if Islamic bank and 0 if conventional

## 4. EMPIRICAL RESULTS AND DISCUSSION

### 4.1. Descriptive statistics

Descriptive statistics is presented in Table 2a and Table 2b. Table 2a shows the descriptive statistics of the following non-dummy variables: the number of AC meetings' range is between one meeting (Min) and 15 meetings (Max) with mean of 5.28. The minimum number of members is 2 members and the maximum is 8 members with mean of 3.66. Regarding the participation of female members in the committee, its maximum is 50%, and sometimes

the participation of female members is zero (0) and the mean is very low (0.03) which means that the female participation in audit committees is low in the GCC banking sector.

In reference to the percentage of the qualified members, it is between 0.00% and 100%, and the mean is 0.56, which means that in the number of committees there are no qualified members and other committees are fully qualified. The percentage of NECM is between zero (0) and 100%, and the mean is 0.93, which means that most of the committee members are non-executive members.

Table 2b shows the descriptive statistics of the following dummy variables: 76.4% of the sample represents conventional banks and the remaining 23.6% represent Islamic banks. Additional to the above, 79.4% represents private banks and the remaining 20.6% represents government banks.

**Table 2a.** Descriptive statistics of the non-dummy variables

Variables	Observations	Minimum	Maximum	Mean	Std. Dev.	Kurtosis	Skewness
No.Meetings	340	1.00	15.00	5.28	1.88	0.00	0.00
ComSize	340	2.00	8.00	3.66	0.88	0.00	0.00
GenDiversity %	340	0.00	0.50	0.03	0.13	0.00	0.00
Qualified members %	340	0.00	1.00	0.56	0.35	0.00	0.01
NECM %	340	0.00	1.00	0.93	0.24	0.00	0.00
BankSize	340	10.08	20.51	16.56	2.40	0.03	0.00
ROA	340	-0.37	0.10	0.01	0.03	0.00	0.00
ROE	340	-0.40	0.29	0.10	0.07	0.00	0.00

**Table 2b.** Descriptive statistics of the dummy variables

Variables	Criteria	N	%
BankType	Conventional	260	76.4
	Islamic	80	23.6
		340	
GovOwn	Private	270	79.4
	Government	70	20.6
		340	

As shown in Table 2a, the skewness is closer to 0.00 in our entire sample, which means that the study data is symmetric distribution whereas the left tail and the right tail of the distribution are roughly equally balanced around the mean.

#### 4.2. Multicollinearity test

The potential existence of the multicollinearity problem among the independent variables has been tested through the variance inflation factors (VIF). The results of the test showed that the value of VIF for all variables is between 1.05 and 1.29 and this means that the multicollinearity problem does not exist in the current study as per Gujarati (2003) who indicates that the multicollinearity problem does not occur if the VIF is lower than 10.

Pearson and Spearman tests have been adopted in this study to explore the associations among all

study variables (dependent and independent) to get a better understanding of the nature of the relationship among the study variables and to help in testing the potential occurrence of multicollinearity problems among the independent variables.

Table 3a presents Pearson correlation coefficients, while Table 3b presents Spearman correlation coefficients. In Table 3a, Pearson coefficients indicate that bank size and percentage of qualified members are significantly associated with ROA, however, bank type, bank size, and committee size are associated significantly with ROE.

In Table 3b, Spearman coefficients indicate that bank type, committee size, percentage of qualified members, and bank size are significant with ROA, however, bank size, committee size, and bank type are significant with ROE.

**Table 3a.** Correlation matrix (Pearson)

Variables	BankType	BankSize	GovOwn	No.Meetings	ComSize	GenDiversity	QualMemb	NECM	ROA	ROE
BankType	1									
BankSize	-0.0808	1								
GovOwn	-0.111**	0.177***	1							
No.Meetings	-0.0059	0.0934*	0.0087	1						
ComSize	-0.0984*	0.2154***	0.3483***	0.1604***	1					
GenDiversity	-0.1249**	-0.0557	0.0058	0.1099**	0.1586***	1				
QualMemb	0.0906*	-0.1216**	-0.0571	0.2057***	0.0249	0.1473***	1			
NECM	-0.0335	-0.1131**	-0.0046	0.1796***	0.1402***	0.0651	0.3812***	1		
ROA	-0.0073	0.322 ***	0.0327	-0.0341	0.088	0.0029	-0.1279**	-0.0405	1	
ROE	-0.0935*	0.4627***	0.0514	0.0149	0.1695***	0.0098	-0.0127	-0.0548	0.6679***	1

Notes: \*\*\* at 0.01 level (2-tailed), correlation is significant. \*\* at 0.05 level (2-tailed), correlation is significant. \* at 0.10 level (2-tailed), correlation is significant.

**Table 3b.** Correlation matrix (Spearman)

Variables	BankType	BankSize	GovOwn	No.Meetings	ComSize	GenDiversity	QualMemb	NECM	ROA	ROE
BankType	1									
BankSize	-0.0877	1								
GovOwn	-0.111**	0.199***	1							
No.Meetings	-0.0188	0.1464***	-0.0313	1						
ComSize	-0.092*	0.2367***	0.31***	0.1586***	1					
GenDiversity	-0.1627***	-0.0926*	0.1365**	0.1855***	0.3153***	1				
QualMemb	0.0845	-0.1583***	-0.0527	0.1554***	-0.021	0.2091***	1			
NECM	-0.064	-0.1516***	0.0308	0.2091***	0.1641***	0.0928*	0.2714***	1		
ROA	-0.11**	0.4277***	-0.0036	-0.0404	0.1328**	-0.0669	-0.1198**	-0.0418	1	
ROE	-0.0996*	0.3944***	0.0442	0.0097	0.1771***	-0.0194	0.0127	-0.0621	0.6396***	1

Notes: \*\*\* at 0.01 level (2-tailed), correlation is significant. \*\* at 0.05 level (2-tailed), correlation is significant. \* at 0.10 level (2-tailed), correlation is significant.

### 4.3. Multivariate analysis

Two models of regression analysis have been used to test the relationship between the dependent variables (performance) and the independent variables (AC characteristics) and these are ordinary least squares (OLS) and regression of quantile data.

The OLS is a simple linear multiple regression approach that investigates the impact of a number of explanatory variables on the dependent variable. The quantile regression approach is a robust analysis that assists in estimating the other quantiles of the response variable or conditional median.

Tables 4 and 5 present the OLS and quantile tests results respectively. The results in these tables show that the committee size is significantly and positively correlated with ROA and ROE, but its association with ROA using the OLS is insignificant. These results are in line with the results of Be'dard et al. (2004), Anderson et al. (2004), Al-Matari et al. (2012), Ashari and Krismiaji (2020), and Al Lawati et al. (2021) but are contrary to the results of Aldamen et al. (2011), Yang and Krishnan (2005) Aanu et al. (2014), Al-Matari et al. (2017) and Xie et al. (2003).

The results in Table 4 showed that the number of meetings is significantly and negatively correlated with ROA but insignificant correlated with ROE. This result is in line with the results of Al-Matari et al. (2017) and Aanu et al. (2014) but is contrary to the results of Ashari and Krismiaji (2020).

The participation of female members in the audit committees is insignificant in the two tests, which means that the participation of women in the audit committees does not explain the

changes in bank performance. This result is consistent with the result of Carter et al. (2010) and Rose (2007) and is contrary to the results of Al Lawati et al. (2021), Ashari and Krismiaji (2020), Carter et al. (2003), Campbell and Mínguez-Vera (2008), and Erhardt et al. (2003).

The relationship between bank performance and the existence of qualified members in the audit committee is insignificant and this result is in line with the result of Abbott and Collins (2002) who indicated that the audit committee members without background experience in risk management and financial management are correlated significantly with higher volumes of financial errors and mistakes. This result is not in line with the results of Ashari and Krismiaji (2020), Aldamen et al. (2011), Lin et al. (2006), Bouaziz (2012), and Aanu et al. (2014).

The existence of non-executive committee members is insignificantly correlated with ROA and ROE. This result is in line with the results of Kajola (2008), Lin et al. (2006), Al-Matari et al. (2017), and Carcello and Neal (2000). The result is contrary to the results of Ashari and Krismiaji (2020), Aanu et al. (2014), Adams and Ferreira (2009), and Anderson et al. (2004) which showed a positive and significant relationship. In addition, the result is not in line with the results of Agrawal and Chadha (2005) which indicated a negative correlation between the independent directors and returns.

The results for the control variables are as follows: The relationship between bank performance and bank size is significant and positive for the two tests. The relationship between bank performance and bank size is insignificant for the two tests.

**Table 4.** Regression results of ROE

Variables	Quantile		OLS	
	Coef.	P > t	Coef.	P > t
No.Meetings	-0.00171	0.398	-0.00205	0.3090
ComSize	0.012629	0.008	0.008339	0.0710
GenDiversity	0.001186	0.964	0.006179	0.8250
QualMemb	0.013693	0.247	0.013805	0.2310
NECM	0.012897	0.446	-0.011	0.510
BankSize	0.012289	0.000	0.014302	0.0000
BankType	-0.00822	0.359	-0.01062	0.224
GovOwn	-0.02955	0.003	-0.0123	0.2030
_cons	-0.14968	0.000	-0.15384	0.000
R <sup>2</sup>			0.2125	
Pseudo R <sup>2</sup>	0.1052			

**Table 5.** Regression results of ROA

Variables	Quantile		OLS	
	Coef.	P > t	Coef.	P > t
No.Meetings	-0.00053	0.002	-0.00091	0.271
ComSize	0.001241	0.002	0.001157	0.540
GenDiversity	0.001786	0.418	0.008264	0.470
QualMemb	0.001047	0.284	-0.00844	0.074
NECM	-5.2E-05	0.971	0.004727	0.489
BankSize	0.001921	0.000	0.003868	0.000
BankType	-0.00062	0.406	0.002239	0.531
GovOwn	-0.00379	0.000	-0.00274	0.488
_cons	-0.01949	0.000	-0.05145	0.000
R <sup>2</sup>			0.1982	
Pseudo R <sup>2</sup>	0.1174			

**Table 6a.** The summary of the results: ROE's associations

Independent variables	Bivariate analysis				Quantile	OLS
	Pearson	Spearman	Mann Whitney	T-test		
BankType	(-)*	(-)*	(+)*	(+)**	(-)	(-)
BankSize	(+)**	(+)**			(+)**	(+)**
GovOwn					(-)**	(-)
No.Meetings					(-)	(-)
ComSize	(+)**	(+)**			(+)**	(+)*
GenDiversity					(+)	(+)
QualMemb					(+)	(+)
NECM					(+)	(-)

**Table 6b.** The summary of the results: ROA's associations

Independent variables	Bivariate analysis				Quantile	OLS
	Pearson	Spearman	Mann Whitney	T-test		
No.Meetings					(-)**	
ComSize		(+)**			(+)**	
GenDiversity						
QualMemb	(+)**	(-)**				(-)*
NECM						
BankType		(-)**	(+)**			
BankSize	(+)**	(+)**			(+)**	(+)**
GovOwn					(-)**	

## 5. CONCLUSION

The purpose of this study is to investigate the relationship between AC characteristics named committee meetings, committee size, qualified members, percentage of female members, and the existence of non-executive members and bank performance. Three control variables represented by bank size, bank type (conventional and Islamic), and government ownership have been chosen in this study. The study sample consists of 68 banks located in GCC with 340 observations over the years 2013-2017.

The empirical results of this study showed that the number of audit committee meetings does not significantly affect the performance which means that the change in the number of meetings does not explain the change in performance and, in turn, a piece of advice can be given to the audit committee members in GCC banks to be more dedicated, efficient and effective in their meetings to affect the performance positively.

The higher returns are correlated with larger committee size, this indicates that the increased number of committee members adds value to the bank performance especially if they possess good experience and qualifications in the area of finance, risk, and governance.

The participation of the female members in audit committees in the GCC region is very weak. In addition, the correlation between performance

and the existence of female members is insignificant. Based on this result, we recommend the encouragement of the participation of females in such committees with the hope of improving the effectiveness and efficiency of the bank performance.

The relationship between the percentage of qualified members and bank performance is insignificant which means that the qualified members in the audit committees do not add values to enhance the bank performance.

The association between the existence of non-executive members and bank performance is insignificant and this reflects that the independent members do not play their expected role in managing the risks, finance, the operation to enhance the bank performance.

There are some limitations to this study. First, using primary data through questionnaires/interviews rather than secondary data might help in getting a better understanding of the study model. Second, relying on both quantitative and qualitative data might add more empirical value and enrich the results of the research.

Further research can apply the present study model for the GCC banks in years after 2017 to explore the maturity and evolution of the characteristics of the audit committees in these banks or select more measures for bank performance such as liquidity, productivity, and marketability and compare the results.

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