Corporate Governance and Quality of Financial Reporting of Listed Firms: Evidence from Saudi Arabia

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This paper examines the impact of applying corporate governance (CG) mechanisms on the quality of financial reports of listed financial firms in Saudi Arabia. The focus is on how quality of financial reporting (QFR) is affected by board independence, board size, audit committee independence, audit committee size, and ownership structure of listed financial firms. The study uses financial statistics from the annual reports and accounts of a sample of 18 financial firms listed in the Saudi Stock Exchange over the period 2012 to 2017. QFR is measured using discretionary accruals of the modified Jones model (Dechow et al., 1995). The findings revealed a statistically positive significant impact of board independence, audit committee independence and ownership structure on QFR. On the other hand, results showed a statistically insignificant impact of the size of the board and audit committee on QFR. Results support arguments of the stakeholder theory that having high institutional shares in listed firms motivates internal stakeholders to disclose high quality financial reports. The Saudi economy is being opened for large foreign investments in line with its Vision 2030; as a result, potential foreign investors would want to know more about the Saudi CG practice in relation to board governance and quality of financial reports of the listed firms on the SSE. Findings from this study contribute to the literature on the application of CG in Saudi Arabia by encouraging policy makers and regulators to improve the CG code and ensure compliance by the listed firms.

1. Introduction

Financial scandals have recently become a widespread phenomenon around the world. Thus, the quality of financial reports has become an issue of investor concern (Agrawal and Chadha, 2005; Brown, Falaschetti & Orlando, 2010). Major cases of financial and accounting fraud include those of Enron, Bernie Madoff, the Lehman Brothers, and Parmalat, as well as scandals from the Middle East such as those of the AlSanie and Saad groups in Saudi Arabia (Al-Matari et al., 2012). Confronting such frauds practised by large, successful companies reflects the importance of disclosing high-quality financial reports by managers and enforces the issuance of corporate governance (CG) mechanisms and codes (Firth, Fung, & Rui, 2007; Petra, 2007). There are many CG mechanisms that vary among countries, with differences between legal and business environments (Claessens & Yurtoglu, 2013). These mechanisms were designed to influence the performance of the company, increase control, and consequently improve the quality of financial information reporting (Petra, 2007). The impact of CG mechanisms on financial reporting quality (QFR) has been widely studied in developed countries, concentrating on mechanisms applied to boards of directors (Bradbury, Mak & Tan, 2006; Petra, 2007; Lin & Hwang, 2010), audit committees (Felo, Krishnamurthy & Solieri, 2003; Lin & Hwang, 2010), and ownership structure (Kelton & Yang, 2008). These studies focused on features like composition, independence, expertise, and size. Recently, studies of CG & QFR have started to emerge in the literature of developing countries (Bradbury, Mak, & Tan, 2006; Firth, Fung & Rui, 2007).

Saudi CG law, which comprises a set of regulations, was recently issued by the Saudi Capital Market Authority (CMA) in November 2006 and adopted by all listed firms (CMA, 2012). The CG law was issued after the enormous crash of the Saudi Stock Exchange (SSE) that occurred earlier in 2006 (Al-Matari et al., 2012). Saudi CG regulations address characteristics of the board, audit committee, ownership structure, and disclosure of reports, among other items. The law was issued with the purpose of enhancing the efficiency of the capital market, protecting investors' and other stakeholders' rights, and increasing the long-term value of the firm (Al-Shetwi et al., 2011; CMA, 2012). CG regulations in Saudi Arabia are significantly important on matters pertaining to corporate corruption. This is especially important after the discovery of some corrupt practices associated with famous businessmen and large companies in Saudi Arabia, like AlMojel in 2008 (CNN Arabic, 2016).

This paper examines the impact of CG mechanisms on the quality of financial reports of listed financial companies in Saudi Arabia. The study focuses on the 6-year post-CG period (2012–2017) and investigates the impact of board independence (BI), board size (BSZE), audit committee independence (ACI), audit committee size (ACSZE) and ownership structure (OSTR) on QFR of listed financial firms in Saudi Arabia. These CG mechanisms were carefully chosen after finding

that most of them cumulatively represented CG regulations in many prior studies (Mansor et al., 2013; Honu & Gajevszky, 2014; Latif & Abdullah, 2015; Onuorah, Chi-Chi & Friday, 2016; Zia, 2017; Kolsi & Grassa, 2017; Shaheed & Al-Eisa, 2018). Moreover, the variables represent basic regulations in most CG systems around the world, such as CG codes of the United Kingdom, the United States, and Australia (Gillan, 2006).

To date and to the best of the authors' knowledge, there are no studies in the literature that comprehensively examine the impact of CG mechanisms on QFR of listed firms of the SSE. This study is timely, as the Saudi economy is being opened for large foreign investments in line with its Vision 2030. Therefore, potential foreign investors would want to know more about the Saudi CG practice in relation to board governance and quality of financial reports of the listed firms of the SSE.

The remainder of this paper is organised as follows. Section 2 presents a brief review of the related literature and theoretical framework of the study. Section 3 describes the data and outlines the methods used. Sections 4 discusses the results obtained, and section 5 concludes the paper.

2. Literature Review

Financial Reporting Quality

According to Jonas & Blanchet (2000), auditors and managers are not in agreement about the exact meaning of the quality of financial reporting, as it varies depending on the person and the purpose of using reports. In a later study, Biddle, Hilary & Verdi (2009) defined QFR as the correctness and exactness of information presented in the annual disclosed reports that reflect a corporation's performance, particularly in terms of the expected cash flows and informing equity to investors. However, different researchers use different measurements of QFR, depending on their area of expertise and their experience. Many previous researchers have relied on earnings management, financial restatements, and fraud to determine the level of QFR (Cohen, Krishnamoorthy and Wright, 2004). In addition, Cohen (2003) stated that QFR might be arbitrated from a variety of perspectives, including future performance predictability, the persistence of earnings, earnings variability, and the relationship between cash, income, and accruals.

A vast number of research papers have relied on earnings management to measure QFR (Miko & Kamardin, 2015; Akeju & Babatunde, 2017; Abu Siam, Idris & Nassar, 2017; Shaheed & Al-Eisa, 2018). Islam, Ali & Ahmad (2011) contend that most managers tend to exhibit opportunistic behaviour to benefit themselves economically, making accounting choices in their own interest. According to McKee (2005), earnings management is the opportunistic behaviour that managers

tend to practice by exploiting their knowledge and experience in accounting techniques to creatively manipulate data in the disclosed financial reports to show a positive financial position.

There are many factors that influence the QFR of firms, including governance mechanisms, accounting expertise, economic situation, external and international influences, and finally the culture of the firm (Holder-Webb & Sharma, 2010). Several studies supported the significance of applying CG to monitor the opportunistic activities of managers and limit earnings management (Alzoubi & Selamat, 2012; González & García-Meca, 2014).

Board Independence and QFR

The board is considered independent if it is composed of a majority of non-executive directors (Miko & Kamardin, 2015). A firm's board of directors is an important aspect that contributes to the integrity of its financial system by handling the responsibility of controlling management's performance independently and ensuring the accountability of management's decisions in the interests and benefit of shareholders (Dichev & Skinner, 2002).

A recent study conducted to examine the relationship between CG and earnings management in the Gulf Cooperation Council (GCC) region, tested a sample of Islamic banks in different GCC countries for a 9-year period (Kolsi & Grassa, 2017) and concluded that there is a negative relationship between the independence of the board and earnings management. A different study of all listed companies in the Saudi market also resulted in a negative association between BI and earnings management, demonstrating BI to be a crucial factor in improving QFR (Habbash, 2012). According to Abu-Risheh & Al-Sa'eed (2012), BI is a significant aspect of QFR in Jordanian listed firms. In addition, Abu Siam, Idris, & Nassar (2017) proposed a positive relationship between BI and QFR in Jordanian firms through effective monitoring of firm management. On the other hand, Onuorah, Chi-Chi & Friday (2016) argued that independent boards of directors negatively impact QFR after measuring the discretionary accruals of firms in Nigeria, contradicting the study of Akeju & Babatunde (2017) of the same market, which found evidence of a significant positive relationship between BI and QFR. A similar result was found by Miko & Kamardin (2015), indicating that as the proportion of independent directors on the board increases, earnings management is reduced and QFR increases accordingly.

Board Size and QFR

BSZE refers to the number of members within the board of directors (Onuorah, Chi-Chi & Friday, 2016). Referring to previous studies, Kolsi & Grassa (2017) concluded that BSZE of Islamic banks following Sharia in the GCC region have less earnings' management. A negative relationship was

revealed in the study of Habbash (2012) between the size of the board and QFR of Saudi listed companies after measuring earnings management using discretionary accruals. In Nigeria, Miko & Kamardin (2015) measured the relationship between BSZE and earnings management reduction and found a positive relationship that is reflected in the QFR of the listed firms with larger boards. Similar results were found in a more recent study of Nigeria (Akeju and Babatunde, 2017). Honu & Gajevszky (2014) conducted research on six companies for 5 years in Romania to test the relationship between CG and QFR, arguing that BSZE is positively associated with QFR. Contrary to those studies, Ahmed, Hussain & Adams (2006) found that larger boards of directors result in reducing income information and increasing earnings management, resulting in reducing QFR in Singapore corporations.

Audit Committee Independence and QFR

Audit committees were defined to be either independent if the committee members were totally independent external directors with no personal relationships with managers, or active audit committees if they had at least twice-yearly meetings (Abbott & Parker, 2000). Miko and Kamardin (2015) and Akeju & Babatunde (2017) argued that ACI is positively related to the quality of disclosed financial reports after conducting a measurement of earnings management on Nigerian listed corporations. Abu-Risheh & Al-Sa'eed (2012) construed the impact of ACI using a survey that was distributed to experts in Jordanian audit committees and other authorities in the listed companies and carried out regression analyses; they found a significant relationship between the two variables. In the GCC region, Kolsi & Grassa (2017) found that membership in the Accounting and Auditing Organization for Islamic Financial Institutions positively impacts earnings management in the Islamic banks in the region and negatively affects QFR because of the lack of independence of the auditing process. Similarly, Ebaid (2013) studied pharmaceutical companies in Egypt; the author documented a positive effect of independent audit committee members on QFR.

Audit Committee Size and QFR

Audit committees do not have a specific number of directors; rather, it is dependent on the company size (SEC Code, 2011). Felo, Krishnamurthy & Solieri (2003) examined ACSZE in relation to QFR and found some evidence to show a positive relationship between ACSZE and QFR in American listed companies. In a Nigerian study, Miko & Kamardin (2015) argued that there is a positive relationship between ACSZE and earnings management, while Ahmed (2011) reached the conclusion that the size of audit committees had a positive impact on QFR in Egyptian listed medical companies over the period from 2005 to 2008. Parallel results were found by Honu & Gajevszky (2014), who showed a significant association between audit committee size and QFR

in Romania. Salehi & Shirazi (2016) concluded that the size of audit committees in listed firms in Tehran is positively associated with the disclosure of quality financial reports.

Ownership Structure and QFR

Many studies support the relationship between ownership concentration and QFR by concluding that ownership concentration reduces earnings management (Jiambalvo, Rajgopal & Venkatachalam, 2002; Beekes, Pope & Young, 2004; De Bos & Donker, 2004). Bao & Lewellyn (2017) investigated 1200 firms in a total of 24 emerging markets and argued that earnings management is positively affected by controlling ownership that reduces information quality; nevertheless, the relationship was found to be weakened by the minority protection law in some countries.

Many other studies in different countries rejected the impact of OSTR on QFR. Chalaki, Didar & Riahinezhad (2012) claimed that the relationship between ownership concentration and institutional ownership with QFR is rejected in listed companies in Iran. Moreover, Kolsi & Grassa (2017) revealed no impact of institutional ownership structure on earnings management in Islamic banks in the GCC region. Likewise, Honu & Gajevszky (2014), who studied listed companies in Romania, concluded that there is no relationship between institutional ownership, ownership concentration, and QFR.

3. Methodology

This is explanatory research, using a positivist and quantitative approach to elucidate a correlation between the independent variables (BI, BSZE, ACI, ACSZE, and OSTR) and the dependent variable (QFR). Data was obtained from annual reports and accounts of the sample companies in SSE. The research targets a 6-year period (2012–2017), which represents a post-CG period in the Saudi capital market. The sampled firms were drawn from the financial sector of the SSE. The financial sector was chosen in this investigation because it is considered an emerging sector that plays a key role in achieving Saudi Vision 2030. It is a stable sector that is integrated with the main international banking systems and markets, it also encourages financial intermediaries like brokerages and assets management in Saudi Arabia (Invest Saudi, 2018).

A sample of 18 listed financial firms in the banking and insurance industry were chosen from the list of quoted firms on the official SSE website after satisfying specific criteria. All listed financial firms had to have operated throughout the whole period of study (2012–2017), have adequate information about all variables of the study in their annual reports and accounts, use the same

accounting system, have not been involved in a merger or acquisition during the period of the study, and have used the same name and identity throughout the study period.

Annual reports and accounts were used to extract secondary data regarding the independent and dependent variables to be measured and analysed. Reports and accounts were found on the Argaam website, because the official SSE website did not provide the required reports for the whole period of study.

Model Specifications

Panel regression analysis was chosen because the study was implemented on a longitudinal data set that comprises cross-sectional data of a sample of 18 companies along a time series of 6 years. The regression model **(1)**:

$$DAcc_{it} = \beta_0 + \beta_{1it} (BI) + \beta_{2it} (BSZE) + \beta_{3it} (ACI) + \beta_{4it} (ACSZE) + \beta_{5it} (OSTR) + \beta_{6it} (FSZE) + \beta_{7it} (LEV) + \varepsilon_i \quad \text{...............} \quad \textbf{(1)}$$

Where:

$DAcc_{it}$ = discretionary accruals at time t	ACSZE = audit committee size
BI = board independence	OSTR = ownership structure
BSZE = board size	FSZE = firm size
ACI = audit committee independence	LEV = firm leverage
β_0 = intercept/constant of the coefficient	β_{6it}, β_{7it} = control variables parameters

β_{1it}, β_{2it}, β_{3it}, β_{4it}, β_{5it} = firms' specific parameters estimates

ε_t = error term

The significance level of accepting or rejecting the hypothesis is 5%.

Equation (2) was used to measure total accruals of listed financial firms in Saudi Arabia throughout the period investigated using the balance sheets of the sampled firms.

$$TAcc_{it} = \Delta A_{it} - \Delta CFO_{it} - \Delta CASH_{it} + \Delta DCL_{it} - DEP_{it} \quad \text{......................} \quad \textbf{(2)}$$

Where:

$TAcc_{it}$ = Total accruals of company i at time t

ΔA_{it} = Change in current assets of company i from year $t-1$ to year t

ΔCFO_{it} = Change in operations cash flow of company i from year $t-1$ to year t

$\Delta CASH_{it}$ = Change in cash of company i from year $t-1$ to year t

ΔDCL_{it} = Change in current liabilities' debt of company i from year $t-1$ to year t

DEP_{it} = Depreciation and amortisation expenses of company i at year t

Then, the non-discretionary accruals were found by using equation (3) that was then applied in equation (4). This is with the purpose of clarifying discretionary accruals as a measure of QFR in this research, following the modified Jones model (Dechow et al., 1995).

$$NAcc_{it} = TAcc_{it}/A_{it-1} = \alpha_1[1/A_{it-1}] + \alpha_2[(\Delta REV_{it} - \Delta REC_{it})/A_{it-1}] + \alpha_3[PPE_{it}/A_{it-1}] + \epsilon_{it} \quad \textbf{(3)}$$
$$DAcc_{it} = TAcc_t - NAcc_t \qquad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \qquad \textbf{(4)}$$

Where:

$DAcc_{it}$ = Discretionary accruals at time t

$NAcc_{it}$ = Non-discretionary accruals at time t

A_{it-1} = Total assets of company i at the beginning of the year t

ΔRev_{it} = Change in sales from year $t-1$ to year t

ΔRec_{it} = Change in receivables from year $t-1$ to t

PPE_{it} = Net plant, property, and equipment of company i at year t

$\alpha_1, \alpha_2, \alpha_3, \alpha_4$ = Firms' specific parameters from the regressions

ϵ = Residual = the firms' specific discretionary portion off accruals

4. Results and Discussion

Table 1 presents descriptive statistics of the dependent and independent variables, through a summary of the data collected and analysed in Stata. This analysis covers the mean, standard deviation, and minimum, and maximum values of each variable. An analysis of Table 1 reveals that DAcc, which measures QFR, has a mean value -0.0014 and a standard deviation of 0.15325, signifying that data are dispersed from the average DAcc value by 15.33%, which is a low dispersion value with a small difference between the minimum value of -0.49 and the maximum value of 0.69.

Of the independent variables, BI has an average value of 0.4684, which means that the boards of listed Saudi financial firms comprise more than one-third of independent board members. The standard deviation is 0.14034, with dispersed data from the mean value by 14.03%. The minimum

and maximum values of BI were 0.17 and 1.00, respectively. Table 1 reveals that BSZE has a mean value of 8.9630 and a standard deviation of 1.34599, with minimum and maximum values of 5.00 and of 11.00, respectively. The ACI has an average value of 2.4815, which suggests that the sample listed financial firms are complying with the code of CG with a majority of non-executive and independent members in AC. The standard deviation is 0.81437, showing a large dispersion of data, as the minimum and maximum values are 0.00 and 4.00, respectively.

Regarding the control variables, Table 1 reveals that FSZE has a mean value of 10.1382 and a standard deviation of 1.08492, while the minimum and maximum values were 8.34 and 11.54, respectively. The mean of 10.1382 shows the average asset value of the sample listed financial firms in millions of Saudi riyals. The standard deviation of 1.08492 implies that there is a wide deviation of the data from the mean values. Finally, LEV has an average value of 4.4886 and a standard deviation of 1.97629, while the minimum and maximum values are 0.86 and 9.50, respectively. The mean value of 4.4886 reflects that the debt equity ratio of the studied sample is high, showing that they are highly geared toward external sources of finance.

Table 1: Descriptive Statistics

Variable	Mean	Standard Deviation	Minimum Value	Maximum Value
QFR (DAcc)	-0.0014	0.15325	-0.49	0.69
BI	0.4684	0.14034	0.17	1.00
BSZE	8.9630	1.34599	5.00	11.00
ACI	2.4815	0.81437	0.00	4.00
ACSZE	3.7500	0.92852	2.00	5.00
OSTR	48.8796	21.25005	5.00	98.00
FSZE	10.1382	1.08492	8.34	11.54
LEV	4.4886	1.97629	0.86	9.50

Source: Stata Output (2020)

Correlation Analysis

Pearson's correlation analysis was employed to find the strength of the association between the different variables of the study. Table 2 summarises the results of the Pearson correlation statistics.

Table 2: Pearson Correlation Statistics

	DAcc	BI	BSZE	ACI	ACSZE	OSTR	FSZE	LEV
DAcc	1							
BI	-0.100	1						
BSZE	-0.116	0.044	1					
ACI	-0.112	0.047	0.315	1				
ACSZE	-0.181	0.184	0.187	0.556	1			
OSTR	-0.054	-0.273	-0.021	0.142	0.106	1		
FSZE	-0.306	0.198	0.488	0.415	0.535	0.163	1	
LEV	-0.198	0.060	0.330	0.203	0.301	0.190	0.408	1

Source: Stata Output (2020)

Data in the matrix reveal that all correlation values between the independent variables are below 0.75, meaning that their relationship is either weak or moderate, indicating the absence of a multicollinearity problem and avoiding estimation and standard errors.

Moreover, the table indicates negative relationships between all independent variables (BI, BSZE, ACI, ACSZE, OSTR) and the dependent variable (DAcc), as all values are negative. Consequently, the r values between DAcc and BI, BSZE, ACI, ACSZE, and OSTR are -0.100, -0.116, -0.112, -0.181, -0.054, -0.306, and -0.198, respectively. Hence, a positive association exists between the CG variables employed in this study with QFR, which is the initial dependent variable in this research. This relationship between DAcc and QFR resulted from the existence of DAcc in companies, which means that company accounts are being manipulated and the QFR is reduced in firms. The correlational values of the dependent and independent variables are considered small, indicating a weak relationship between DAcc and BI, BSZE, ACI, and OSTR, and a moderate relationship between DAcc and ACSZE.

The nature of data analysed in this research requires a stronger statistical measurement method to provide an accurate result of the relationship between variables and to estimate future direction. Thus, panel regression analysis was used to determine the significance of the relationship between variables.

Panel Regression Analysis

The variables are performed in a longitudinal data pattern, including multiple independent variables (BI, BSZE, ACI, ACSZE, and OSTR) that are linked to one dependent variable (DAcc) along a 5-year period (2012–2017). Hence, we applied panel regression on the data to find the impact of CG proxies on QFR and found the following results (Table 4).

Table 4: Regression Results

DAcc	Coefficients	Standard Error	t-statistic	*P*-value	Confidence Interval	
BI	-1.479936	.6634278	-2.23	0.028	-2.799468	-.1604052
BSZE	-.997868	13.04174	-0.08	0.939	-26.93737	24.94164
ACI	-2.060946	0.702074	-2.94	0.004	.6645493	3.457343
ACSZE	7.811638	16.60772	0.47	0.639	-25.22044	40.84372
OSTR	-5.755138	2.088003	-2.76	0.007	-9.908092	-1.602184
FSZE	791.5266	69.82016	11.34	0.000	652.6571	930.3961
LEV	-10.20007	7.082408	-1.44	0.154	-24.2867	3.886549
Constant	-7568.465	706.951	-10.71	0.000	-8974.562	-6162.368
R-square	0.64484					
F-statistic	31.18			0.0000		

Source: Stata Output (2020)

Results reveal a coefficient of determination of 0.64484, showing that 64.48% of the variation in the dependent variable (QFR) is caused by the independent variables of the sample listed financial firms in the Saudi stock market. Moreover, having an F-statistic of 31.18 and a *p*-value of 0.0000, less than the specified 5% significance level, makes the model fit and refering to a mutually significant variable.

Coefficient values in the panel regression analysis indicate the direction of the relationship between independent and dependent variables, considering the negative association between the dependent (DAcc) and independent (QFR) variables. As DAcc increases, managers manipulate financial data, and consequently QFR decreases. The level of significance indicates the strength of the impact of each independent variable on the dependent variable.

Table 4 shows -1.4799 as the coefficient of BI with a *p*-value of 0.028 at a 5% significance level. This indicates a negative but statistically significant relationship between BI and DAcc, and hence a positive significant association between BI and QFR. The table also reveals that BSZE is not significantly associated with DAcc, and thus it has no impact on QFR; the coefficient was -0.9979, with a *p*-value of 0.939, which is considerably higher than the specified 5% significance level. In terms of ACI, the coefficient was -2.0609 with a *p*-value of 0.004. Therefore, there is a positive significant impact of ACI on QFR for the listed financial firms in Saudi Arabia. The ACSZE was found to have no impact on QFR because the *p*-value of 0.639 for this variable is higher than the 5% significance level. Further, the results in Table 4 indicate that OSTR has a coefficient of -5.7551, which means there is a negative association with DAcc, hence a positive relation with QFR. The *p*-value of 0.007 is less than the specified significance level, which suggests that OSTR has a significant impact on DAcc and QFR.

Regarding the control variables, Table 4 reveals a negative significant effect of FSZE on QFR of quoted Saudi financial firms (with a coefficient of 791.5266 and a *p*-value of 0.000). LEV results indicate a negative coefficient (-10.20007) and a significant *p*-value higher than 5% (0.154). Therefore, LEV has a statistically insignificant impact on QFR of listed financial firms in Saudi Arabia.

The relationship between BI and QFR in listed financial firms in Saudi Arabia is found to be consistent with the results of many studies that found significant impact of BI on QFR (Abu-Risheh & Al-Sa'eed, 2012; Habbash, 2012; Miko & Kamardin, 2015; Akeju & Babatunde, 2017; Kolsi & Grassa, 2017). On the other hand, it contradicts findings of other studies, such as those of Abdul Rahman & Ali (2006), Klai & Omri (2011), Honu & Gajevszky (2014), and Latif & Abdullah (2015), who failed to find a significant impact of BI on QFR. Our findings imply that a higher proportion of independent and non-executive board members reduce earnings management, thus increasing QFR and avoiding agency problems.

The foregoing result contradicts the assumption that having a smaller BSZE would reduce quality of decisions due to lack of experience, and having a larger BSZE would increase the agency problem and promote the stakeholders' theory. The result is consistent with Chalaki, Didar & Riahinezhad (2012), Latif & Abdullah (2015), and Zia (2017).

The relationship between ACI and QFR is in line with the findings documented by Mansor et al. (2013), Miko & Kamardin (2015), Salehi & Shirazi (2016), and Kolsi & Grassa (2017). Having a majority of independent members in the audit committee would lead to objective auditing of the financial accounts and unbiased decisions regarding hiring of external auditors. However, the

result of the current study is contrary to the findings of Felo, Krishnamurthy & Solieri (2003) and Abdul Rahman & Ali (2006).

The number of audit committee members does not affect the threat of earnings management of the sampled firms. ACSZE was found to have a statistically insignificant relationship with QFR, confirming the findings of some previous studies (i.e., Latif & Abdullah, 2015; Musa, Oloruntoba & Oba, 2014), while contradicting the majority (such as Honu & Gajevszky, 2014; Miko & Kamardin, 2015; Onuorah, Chi-Chi & Friday, 2016; Salehi & Shirazi, 2016).

Results from the current study reveal that QFR is significantly affected by OSTR of the listed firms. This is in line with several studies like Firth, Fung & Rui (2007), Habib & Jiang (2015), Latif & Abdullah (2015) and Zia (2017). However, the current study contradicts findings from Chalaki et al. (2012), Honu & Gajevszky (2014), and Kolsi & Grassa (2017), who found no significant association between OSTR and QFR.

5. Conclusion

This study examines the impact of CG on QFR of listed financial firms in Saudi Arabia. The overall result revealed that CG has a significant impact on QFR of listed financial Saudi firms. Results of the panel regression analysis indicate that BI has a significant positive impact on QFR. Having more independent directors on the board leads to a reduction of conflicts of interest between managers and directors and decreases agency problems within the company. BSZE has an insignificant impact on QFR, indicating that the quality of financial reports of the sampled firms is not dependent on board size.

ACI and its relationship with QFR revealed a statistically significant association between variables. Having more independent directors on the audit committee would boost internal control and improve decisions about hiring external auditors, thus disclosing high-quality financial reports. The impact of ACSZE on QFR was found to be similar to BSZE, with insignificant association between the number of members on the committee and report quality.

Finally, a statistically significant impact of OSTR on QFR was found. Companies can adopt the recommendation of the stakeholders' theory by increasing institutional ownership shares. Having high institutional shares in the listed financial Saudi firms motivates internal stakeholders to disclose quality reports to satisfy external institutional investors, who in turn would fund the company, keep it running, and satisfy internal stakeholders with secured and profitable jobs. Additionally, the resulting quality financial reports support the signalling theory by representing the company to the public in the best way.

This study has some limitations that can be overcome with further research. First, limiting the study to the financial sector makes it somewhat difficult to generalise its findings. Second, this research relied on extracting quantitative data from annual reports and accounts without using other research instruments like surveys for qualitative data. Finally, this research is limited to the impact of five elements of CG on QFR, opening space for future studies to include other items of CG, like internal control and the disclosure and transparency of reports.

However, the abovementioned limitations are not weaknesses that affect the results of the empirical findings in this research. This study provides adequate evidence of data reliability resulting in supportive findings for future use and policy formulation. These results encourage all Saudi listed companies to apply CG in order to gain investors' trust and avoid records manipulations and fraud. Companies should appoint more independent directors to their board and audit committees and have more institutional owners. Moreover, it is recommended that regulatory agencies and policy makers, like CMA and the Saudi organisation for certified public accountants (SOCPA), should improve the Saudi CG code by emphasising the role of independent directors and institutional ownership and to encourage non-listed companies to comply with it.

Notes

1. The last major modification in the CG regulations of boards and audit committees was issued in 2011 (CMA, 2012).
2. Tehran, Salehi and Shirazi (2016) found a positive association between audit committee independence and QFR after conducting a panel data analysis of quoted companies.
3. All companies in the non-financial sector are vastly dependent on the financial sector to obtain funds, save cash, make transactions, and obtain insurance services.
4. The validity and reliability of the data set were tested using normality tests (Appendix 2). Followed with the variance inflation factor (VIF) for multicollinearity and model fit and the Breusch-Pagan test to check the heteroskedasticity problem in the model (Appendix 3). Results of the VIF revealed that the mean of VIF is 1.40, which is much less than 10, and all the VIFs of the variables are below 10. Moreover, the 1/VIF values exceed the 5% significance level. These results indicate the absence of the multicollinearity problem in the model, hence approving the model fit. In the Breusch-Pagan test, results reveal a significance level of 0.0506, indicating absence of a heteroskedasticity problem amongst variables, and showing that the standard error is distributed independently in an identical way.

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