

# Do Corporate Governance Internal Characteristics Affect the Level of Sustainability Reporting in Saudi Arabian Banks?

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## Abstract

The main purpose of our study is to do Corporate Governance Characteristics Affect the Level of Sustainability Reporting in Saudi Arabian Banks? A descriptive research design was employed targeting 12 banks. Secondary data were collected from the banks' annual reports. Time series data comprising three years (2015 to 2017) were used. The study established that the relationship between corporate governance characteristics (board size, independent directors, CSR committee) and sustainability reporting was increasing with time. Regarding control variables firm size and firm age did not have a significant controlling effect on sustainability reporting. The results of our study will be useful for bank managers, government officials, practitioners, and policymakers to provide the opportunity to Saudi banks to expand the globally market liberalization. Our study also contributes to the existing literature, which investigates how Corporate Governance Characteristics Affect the Level of Sustainability Reporting in Saudi Arabian Banks.

**Keywords:** Sustainability reporting, corporate governance, board size, independent directors, CSR committee, banks

## 1. Introduction

The corporate governance attributes under review have been portrayed to positively impact on the well-being of the people of Saudi Arabia (Mahjoub & Ben, 2018). The ability to understand the relationship can dictate the amount and nature of inputs that can be supplied to lead to specific output expectations for better achievements in sustainability reporting. For example, by exploring this relationship, specific issues such as the size of the board, CSR committees, and independence of the board were investigated. This was to exemplify important issues such as whether a specific number of board of members dictates the achievements of banks concerning sustainability reporting; whether the independence of the board determines achievement of the banks concerning sustainability reporting; or whether the presence or absence of the CSR committees have any impact on the achievement of banks about sustainability reporting (Agnihotri & Bhattacharya, 2016). If the researcher achieved such a relationship, this would be significantly beneficial to the government, the ministry/ministries, the regulator (Capital Market Authority -CMA), or individual banks. This is because there would be a specific number of board members recommended for better sustainability reporting; there would be a scope of operation and specific requirements of the board which express their level of independence, and there would be a CSR committee with well-defined roles and responsibilities (or no CRS committee if proven to be of no importance by the researcher) as far as sustainability reporting is concerned (Lopatta, Jaeschke, & Chen, 2017). This shows the ultimate importance of this study in defining specific corporate governance attributes that can lead to the achievement of sustainability reporting, an important component of institutions in achieving revolutionary changes for a better society for the people of Saudi Arabia.

There has been a popular wave of implementation of corporate governance especially in listed companies spearheaded by the CMA in Saudi Arabia, and its impact has been widely felt in institutions in terms of organizational performance and other performance perspectives (Mahjoub & Ben, 2018). However, concerning other organizational responsibilities such as sustainability reporting, the impact of corporate governance has not been felt or has not been adequately reported. This makes the topic an important one to explore, given the importance attached to sustainability reporting and the potential of corporate governance strategies to advance a

company's interests in sustainability reporting. Therefore, the researcher relies on such gaps on research or little information on sustainability reporting to establish whether the increased implementation of corporate governance in institutions across the kingdom has an impact on other organizational responsibilities such as sustainability reporting.

In this case, the researcher focuses on the financial sector, targeting banks as they are in more need of corporate governance and sustainability reporting than other institutions due to the nature of their businesses. Primarily, banks accept deposits on behalf of their customers, make loans, and derive profits from interests (zakat) (Sillah & Khan, 2014). In the economy, banks are the most important intermediaries due to their role in connecting surplus and deficit economic agents, hence their actions, positive or negative, affect the entire economy. It is due to this important function that the researcher targets banks for the study.

More specifically, sustainability reporting concepts of interest include environmental sustainability initiatives, ethical business practices (Social SR), and economic responsibility, which are regarded as the most important perspectives of sustainability reporting (Gill, 2012). In this regard, banks, like other organizations are expected to promote these sustainability reporting aspects as they seek to meet their goals and objectives. In environmental sustainability reporting, organizations are expected to refrain from activities that damage the natural environment and instead develop strategies that promote the protection of the environment (Gill, 2012). Concerning economic responsibility, organizations are expected to create economic value for all stakeholders and meet the economic obligations which are the major objectives of the organizations (Soyka, 2013). Lastly, in ethics reporting, organizations are expected to be good corporate citizens, where operations are conducted in legal and ethical guidelines with well-developed ethics policies and ethical organization culture (Soyka, 2013). Therefore, these are the characteristics of sustainability reporting in banks that may be impacted by corporate governance as discussed in the current study.

Concerning the current situation in Saudi Arabia regarding sustainability reporting; policies, practices, and leadership are not quite developed. In most cases, the disclosure of product responsibility information and the information for human rights are rather scarce especially in banks (Alsahlawi, 2016). The problem is deeper especially about specific disclosures, with only a few out of 16 requirements being disclosed by all banks (Mandurah, Khatib, & Al-Sabaan, 2012). The few commitments reported include environmental sustainability initiatives, direct philanthropic giving, ethical business practices, and information on the economic responsibility of the company.

This research makes several contributions to the literature pertaining to sustainability reporting and corporate governance. First, the vision 2030 in Saudi Arabia is anchored on corporate social responsibility of various organizations, in which banks play a major role (Ali & Al-Aali, 2012). While many studies have been conducted to establish factors that influence the ability of organizations to adopt SR as institutional culture, but little is known about the role of corporate governance characteristics on sustainability reporting in the banking industry, yet many banks continue to lag in implementing sustainability reporting (Razak, 2015; Vo, 2018). Second, this study will significantly contribute to the existing literature because few studies have been conducted especially about recent changes in the financial sector, such as the implementation of the corporate governance code and its effect on sustainability reporting is minimal. Therefore, by focusing on aspects of sustainability reporting among banks in Saudi Arabia, this study offers researchers and academicians a wider scope of literature to refer to in matters about corporate governance in Saudi Arabia. Third, in the competitive business environment, banks are looking for better and more effective ways of remaining competitive and sustainable. Many banks have applied a holistic approach, applying economic and non-economic strategies to ensure they remain relevant to their customers and other stakeholders (Mandurah et al., 2012). We used in our study one of the most recent strategies is sustainability reporting, which is an approach aimed at ensuring that a business is accountable to stakeholders through the assessment and reporting of the impact of its activities in economic, social, and environmental perspectives (Chen et al., 2020; Islam, Fatima, & Ahmed, 2011). This approach has also been an important tool for top-level management, as it acts as an accountability mechanism that tremendously influences decision making.

The remainder of the paper is organised as follows. The theoretical framework, literature review and research hypotheses are covered in part two while part 3 describes the research methodology and data. Part 4 of the paper covers the empirical results and discussion and the conclusion and implications for future research are covered in part 5.

## 2. Theoretical Background, Literature Review and Research Hypotheses

### 2.1 Theoretical Background

#### 2.1.1 Stakeholder Theory

Edward Freeman's stakeholder theory posits that stakeholders in a company refers to anyone who is impacted by the company and its activities. Dr Freeman describes stakeholders as 'those groups and individuals without whose support the organization would cease to exist' (Bonnafous-Boucher & Rendtorff, 2016,pp3). Customers, suppliers, members of staff, political groups, environmentalists, media, financial institutions, local communities, government and regulatory bodies all fit into these groups (Crane & Ruebottom, 2011). Consequently, the corporate environment is an ecosystem of different groups with interests in the long term performance, health and success of the company. (Bonnafous-Boucher & Rendtorff, 2016,pp3).

In this study, the stakeholder theory is both appropriate and applicable due to its impact on corporate governance. This is in line with the growing role and significance of stakeholders, which ensures that they are involved in every aspect of the organization to promote issues such as accountability, transparency, and performance to avoid the catastrophic experiences of companies in the recent past (Argandoña, 2011). This is because businesses are no longer profit-making machines that can be operated by shareholders, who can make decisions regardless of their impacts on other stakeholders. For instance, other stakeholders in banks and other institutions are affected differently by the organization in different ways according to their different capacities.

Stakeholder thinking as proposed by stakeholder theory is a comparatively new approach in the corporate governance and regulation landscape, but its impact has been substantially observed in the performance of different roles of banks, such as sustainability reporting (Argandoña, 2011). Stakeholder thinking contributes towards redefining the purpose of business and its mode of response to non-economic factors; hence, it is suited to respond to almost every eventuality, expected or unexpected, unlike in past business operations, where the role of shareholders was solely recognized. It has challenged the traditional view that corporate activities should only be reflected by market signals and the economic system, without the input of the key players in the business operations. While corporate governance is restricted to its shareholders and is meant for profit maximization, the approach offers an alternative to both business and government institutions regarding the very purpose of a business. As such, the application of stakeholder theory ensures that the company – in this case, banks – has to establish and adhere to guidelines on all aspects that affect its stakeholders (Glinkowska & Kaczmarek, 2015). In this case, corporate governance becomes necessary, and its implementation triggers the achievement of sustainability reporting due to the need to demonstrate the bank's CSR in terms of its environmental, social, and economic impact.

Therefore, companies are also responsible for coordinating stakeholder interests and for meeting the claims of each of the stakeholders, who are affected by corporations' actions, not just concentrating on shareholder profitability. This eventually promotes the achievement of sustainability reporting through the implementation of corporate governance.

#### 2.1.2 Stewardship Theory

The stewardship theory posits that people are intrinsically motivated to work towards the goals and responsibilities they have been entrusted with by the people and organizations they work for (Mallin, Michelon, & Raggi, 2013). The theory explains that people are more likely to derive more satisfaction from attaining collective, organizational or societal goals hence they tend to be more societal or pro-organizational than individualistic (Mallin et al., 2013). Stewardship theory thus defines one framework on which the motivations of managers in different organizational structures can be based where the goal is more to promote the organization as a unit in the social system, not just a profit-oriented entity.

The theory originates from different fields in society, in which different stewardship concepts have been previously applied before their application from the business perspective. One such school of thought is rooted in the belief that humans have a duty and a responsibility to the world and their fellow human beings (Young, 2010). Therefore, their primary objective should be to solve problems affecting other people as well as the entire world. As such, if an act is aimed only at benefitting oneself, it does not motivate an individual to perform; further, from a moral and ethical perspective, humans are ethically and morally obligated to use natural resources wisely and adhere to a code that balances an individual's rights with those of others and ensures environmental preservation. For example, Emmanuel Kant's moral theory of categorical imperative describes how everyone must do what is morally right regardless of the situation (Höffe, 2010). Religious traditions and several philosophical schools of thought underscore the role of humans in societal and environmental preservation. Further, religious traditions emphasize

stewardship, with religious texts such as the Bible and the Quran urging people to do what is good for others rather than what is good for the self. The Hindu Vedas also encourage the responsible use of resources as well as acting for the benefit of humanity rather than for the self, while Buddhist texts highlight the importance of selfless charity and ethics, as well as integrity (Cooper & Cunningham, 1980).

From the above concept, the stewardship theory was applied and proved immensely helpful in determining the role of corporate governance in sustainability reporting. According to this theory, every shareholder in a bank works to achieve goals that go beyond self-benefits. Therefore, employees work to achieve goals beyond their salaries, while stakeholders work to achieve more than profits. In this case, they must serve their customers. As such, they are bound by this theory to do what is considered ethical and aim to achieve better goals for the growth of the society at large. In turn, this can impact sustainability reporting, which is a form of organizational accountability to all stakeholders. The development of sustainability reports shows that the organization is committed to achieving their mandates to society, to the environment, and the economy as a whole. Therefore, from the concept of this theory, the organization and the employees responsible for these roles are intended to carry them out based on their inherent motivation to do so.

## 2.2. Literature Review and Research Hypotheses

Corporate governance has been found to play a key role in enhancing sustainability reporting and financial performance in banks (Khandelwal & Aljifri, 2016) However since the level of adoption of corporate governance structures differs depending on the bank, the impact of corporate governance is not the same across different banks.

### 2.2.1 Board Size and Sustainability Reporting

The influence of board characteristics, such as the size of the board of directors, has been widely studied to establish any positive correlations. For instance, Bhatia and Tuli (2017) sought to understand board characteristics by focusing on corporate attributes that affect sustainability reporting from an Indian perspective. Therefore, the researchers used content analysis on 158 sampled institutions, while multiple regression was used to identify the statistical effect of each corporate characteristic on sustainability reporting. According to this study, there was significant evidence linking corporate attributes, such as the size of the board of directors, with sustainability reporting. This included evidence that institutions with bigger boards of management reflected better results in terms of sustainability reporting.

Further, Shamil, Shaikh, Ho, and Krishnan (2014) sought to identify whether sustainability reporting is affected by this relationship by investigating its impact in Sri-Lankan firms. The analysis used a representative sample drawn from 148 listed firms. In its findings the study revealed that the size of the board has a positive impact sustainability reporting where larger board sizes result in higher adoption of sustainability reporting in firms. It was found that firms with larger boards were more likely to adopt sustainability reporting. However, the limits on what can be described as too small or too large concerning the size of the board were not explored, hence the need for studies on what constitutes an optimal board size, one that can lead to the most acceptable outcomes concerning sustainability reporting and other related activities in banks.

In another study, Velte (2019) used a meta-analysis to understand whether board characteristics influenced sustainability reporting in banks. The meta-analysis was conducted on 51 empirical-quantitative studies and included important aspects, such as the size of the board, the independence of the board, and duality, as the key attributes. According to the findings of this study, the size of the board and other factors affected sustainability through the quality of decisions made, where a larger board size reflected the better implementation of sustainability reporting. However, the use of primary data could have given more current findings and inspired more timely, relevant recommendations.

A similar conducted in the Saudi Arabia context yielded similar results. In the Saudi Arabia study, Grassa, Chakroun, and Hussainey (2018) investigated the factors that impacted sustainability reporting in banks using computer-based analysis. Using a sample of 78 banks with operations in Saudi Arabia and 13 other countries, annual reports from between 2004 and 2012 were used to calculate the number of sustainability reports over that period. The study found that board size was one of the factors that had a direct impact on sustainability reporting. It was found that banks that had larger boards had better sustainability reporting practices including adoption, implementation and monitoring. However, the extent to which a board can be described as large has not been clearly identified, hence the need to empirically determine the recommended board size that can lead to a balance in all outcomes of bank operations. On the basis on above discussion we develop our 1<sup>st</sup> hypothesis as follow

**H1:** There exists a positive relationship between board size and the level of sustainability reporting.

### 2.2.2 Board Independence and Sustainability Reporting

Some studies have established a relationship between the independence of the board and sustainability reporting in banks. For instance, in a systematic review, Dienes, Sassen, and Fischer (2016) examined existing studies and analysed drivers of sustainability reporting using a qualitative approach in the context of German banks. This was intended to reveal gaps in the existing studies and propose ways through which these gaps could be closed. In this review, several factors were observed to affect sustainability reporting. For instance, the review suggested that firm size, media visibility, ownership structure, size of the board, independence of the board, and the presence of sustainability reporting committees are the most important determinants of the disclosure of sustainability reports. However, other factors, such as the profitability of the institution, existing capital structure, or the age of the institution as an indicator of corporate governance, do not exhibit a significant influence on sustainability reporting. Further, a systematic review only explores what has been *already* studied, an indication of the need to develop more current studies that address changes in the operations of banks.

The concept of board independence has also been investigated in Sri Lanka to ascertain its performance implications. In a study conducted by Mudiyanse (2018), data were collected from a sample of 100 listed Sri Lankan companies, banks included, for a four-year period from 2012 to 2016. The study was based on agency and resource dependence theories. Data analysis was carried out using binary logistic regression was performed for the data analysis. The findings of the research indicated that in firms with larger boards, more independent directors and more female directors the adherence to sustainability disclosure policy was higher; an indication of the significance of the role of board independence concerning sustainability reporting. However, the study did not definitively identify the contributions of board independence, hence the need to ascertain these contributions in a study focused on more than one attribute of the board.

In Saudi Arabia, Zerban and Madani (2018) analysed how factors such as board independence and size impacted the overall efficacy of the board in executing its responsibilities. This was achieved through a close analysis of the various Saudi Arabian Monetary Authority (SAMA), Capital Market Authority (CMA), and International Financial Reporting Standards (IFRS) guidelines on the role and expectations of the board concerning bank operations. According to the researchers, the role of the board includes decision making on important policy matters, such as CSR or sustainability reporting, alongside other growth and development policies. However, in banks in Saudi Arabia, the ability of the board to make such decisions is significantly affected by issues such as duality, in turn affecting the board's ability to achieve the required independence. On the basis on above discussion we develop our 2<sup>nd</sup> hypothesis as follow

**H2:** There is a positive relationship between the independent directors and the level of sustainability reporting.

### 2.2.3 Corporate Social Responsibility Committees and Sustainability Reporting

Pérez and del Bosque (2015) Studied the role of CSR committees in banks and their impact on customers in terms of their perception and behavioural responses. The study utilized a sample of 648 savings banks customers and 476 commercial bank customers drawn from banks in Qatar. The study found that customers identified more with banks where the CSR committees were more effective. However, this effect was different depending on the type of bank, with savings banks having fewer positive reviews compared to commercial banks.

According to Kılıç and Kuzey (2017), companies listed on Borsa Istanbul (BIST) during the years 2004 to 2015 were investigated to identify their sustainability reporting practices. CSR was identified as one of the major factors influencing sustainability reporting in these organizations, since their mandate and duties are aimed at achieving important targets, such as profitability, and other important operational benefits; thereby, their efficiency and effectiveness would predict the implementation and impact of sustainability reporting.

A similar study conducted by Al Mubarak, Hamed, and Al Mubarak (2019) emphasized the role of CSR committees in promoting their actions concerning corporate image. In this study, a model was applied to pinpoint the impact of different CSR factors on corporate image According to this study, customers perceived that CSR was an important aspect when deciding on their level of satisfaction with banks. This implied that CSR committees play a role in promoting customer perceptions concerning sustainability reporting by banks in Bahrain. However, the response rate of 155 questionnaires out of a possible 250 was quite small, which affected the credibility of the findings to some extent in relation to the representativeness of the target population.

In Saudi Arabia, Al-Malkawi and Javaid (2018) investigated the role and effectiveness of CSR committees in promoting CSR reporting, with a specific focus on Zakat's contribution, which is a form of charity that is believed by Muslims to bring blessings on the remaining wealth. The study used a sample of 107 financial institutions that kept records of at least 10 years since they started operations. The findings of this study revealed a positive

correlation between CSR committees and CSR reporting. The effectiveness of the Zakat contribution in turn indicates the effectiveness of CSR committees in promoting CSR reporting, hence demonstrating the overall positive effects on firm performance. However, since Zakat only represented one perspective of CSR reporting, there remains a need for an investigation into other indicators of CRS reporting. On the basis on above discussion we develop our 2<sup>nd</sup> hypothesis as follow

**H3:** There is a positive relationship between a company's CSR committee and its level of sustainability reporting.

### 3. Research Methods and Data

#### 3.1 Sample and Data

This study set out to establish whether corporate governance has an impact on sustainability reporting in banks in Saudi Arabia. The study population used in this study was 12 banks with the choice of banks being based on institutions that were founded and developed in similar environments. Table 1 represents the sample of banks used in the study.

Table 1. Sample of Saudi Arabian banks

1	The National Commercial Bank (NCB)
2	Arab National Bank
3	Bank Al Bilad
4	Bank Al Jazira
5	Al Rajhi Bank
6	Saudi Hollandi Bank
7	SAMBA Financial Group
8	Riyad Bank
9	Banque Saudi Fransi
10	Alinma Bank
11	Saudi Investment Bank
12	Saudi British Bank (SABB)

#### 3.2 Variables Measurements

##### 3.2.1 Dependent Variable

Sustainability reporting aspects represent the dependent variable in this context. Therefore, the effectiveness of sustainability reporting primarily depends on corporate governance, as shown by the model. This is in relation to reporting on the environmental responsibility, social responsibility and economic responsibility of the organization. To measure sustainability reporting, a dichotomous procedure or a binary scale system was used where a value of 1 was used to indicate items that were disclosed and a value of 0 used for items that were not disclosed.

##### 3.2.2 Independent Variables

Our first independent variable is board size. A larger board of directors constitutes a more representative sample in relation to the ability to make decisions (2008). In such a setting, decisions about important organizational responsibilities, such as sustainability, have a higher probability of being discussed in detail, hence reaching the best possible decisions (2009). Conversely, a small board size will lead to poor quality, rushed, and narrow ideas that might overlook important organizational responsibilities, such as suitability reporting. We measured the board size (Board.S: by taking the total number of board members in each bank board. Our second variable is board independence and defines how the independence of the board of directors affects sustainability reporting. This relationship arises from the fact that independence offers the board the ability to make decisions without conflicts of interest (Moezaque & Daito, 2020). We measured the board size by taking the percentage of independent boards of directors from the total number of directors. Our third independent variable is the CSR committee. This refers to committees whose members are tasked with maintaining corporate social responsibility. The existence of such a committee ensures that the needs of corporate social responsibility/sustainability are monitored, recorded, prioritized and addressed (Forcadell & Aracil, 2017). CSR committees. In the study, a value of 1 was assigned to boards with a CSR committee and a value of 0 used for boards without a CSR committee.

##### 3.2.3 Control Variables

M. Sial et al. (2018); Sial, Zheng, Khuong, Khan, and Usman (2018) stipulate that variables such as firm size and

age also have an impact on sustainability reporting.

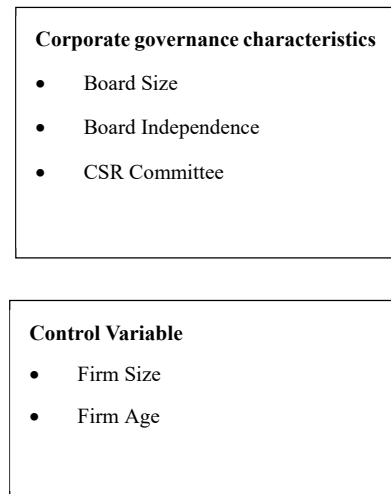
### 3.3 Model

The below model was applied to establish the relationship between sustainability reporting and corporate governance. According to Leone, Minutti-Meza, and Wasley (2019), a multiple regression model helps in establishing singular and multiple effects of a set of variables on the dependent variable.

$$SR_{it} = \beta_0 + \beta_1 Board.S_{it} + \beta_2 Board.I_{it} + \beta_3 CSR.C_{it} + \beta_4 Firm.S_{it} + \beta_5 Firm.A_{it} + \beta_8 YearDum_{it} + \beta_{13} Industry Dum_{it} + \epsilon_{it}$$

Where *SR* is the sustainability reporting measured by using the dichotomous procedure, which is also referred as the binary scale system. A value of 1 was given if the item was disclosed, and 0 was given if is the term was not disclosed.  $\beta_0$  is the constant of the equation,  $\beta_1$  to  $\beta_3$  are the coefficients of the independent variables and control variables. Board size (Board. S, measured by total number directors in the board.) Board independence (Board.Ind, measured by taking the ratio of an independent board of directors to the total number of directors), CSR committee (CSR.Comm measured by taking the value of one if board with a CSR committee, and zero was assigned to boards without a CSR committee.), Firm size (Firm. S, measured by taking the natural log of total assets). Firm age (Firm. A measured on the basis of listing year of firm)

#### Independent Variable



#### Dependent Variable

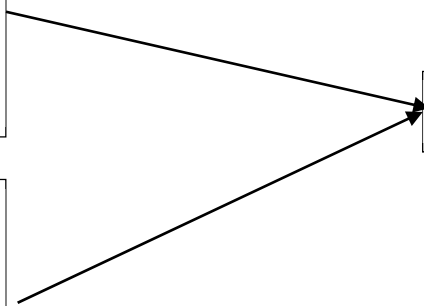
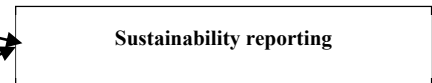


Figure 1. Conceptual framework

## 4. Results

### 4.1 Descriptive Statistics

Table. 2 represents the descriptive statistics with year-wise of all variables used in the study. In 2015, banks report 58.3% of social and environmental sustainability reporting. The same proportion was reported in 2016 but increased to 75% in 2017, an indication of increased sustainability reporting in the Saudi Arabian banking industry. Regarding the board size, it can be observed from (Table 2) that most of the banks maintained between 9 and 10 board members over the three-year time. On average, the banks had a mean of 9.75 board members, or approximately 10 board members, with a standard deviation of 1.02, an indication that there was little variation in board members across the local banking industry of Saudi Arabia. Considering this trend, it can be explained that, in general, membership on the board increased gradually over the three years. This could be an indication that banks were expanding with time in the country. On average, banks had at least four independent boards of directors ( $m = 4.14$ ), with a standard deviation of 1.01, an indication that there was again little variation across the industry. It can also be observed that the scenarios in 2015 and 2017 were the same ( $m = 4.00$ ).

Table 2. Descriptive statistics

Variable	2015	2016	2017	Mean	S.D
SR	58.3	58.3	75.00	63.86	3.04
Board.S	09.50	09.83	09.91	09.75	1.02
Board.Ind	04.00	04.41	04.00	4.138	1.01
CSR.Comm	16.67	16.67	16.67	16.67	1.58
Firm.S	11.99	12.00	12.01	12.00	2.74
Firm.A	15.72	16.35	18.52	16.86	1.58

#### 4.2 Regression Diagnostics

To generate the regression model, the researcher first sought to establish whether the basic assumptions of regression were met. In this case, the study used the VIF method to establish the presence of multicollinearity, while the Durbin-Watson test was conducted to test the presence of serial auto-collinearity in the time series data. According to Born and Breitung (2016), time-series data are said to be free from serial autocorrelation if the Durbin-Watson test falls between 1 and 4. As such, the data used in this analysis were not serially autocorrelated. When identifying multicollinearity, Akinwande, Dikko, and Samson (2015) argued that data are free from multicollinearity if the VIF falls between 1 and 10. It can therefore be explained that none of the independent variables in this study were multicollinear (Table 3).

Table 3. Diagnostic tests

Variable	1/VIF	VIF
Board.S	0.964	1.037
Board.Ind	0.669	1.495
CSR.Comm	0.659	1.517
Firm.S	0.634	1.583
Firm.A	0.617	1.623
Durbin-Watson	1.777	

#### 4.3 Regression Analysis and Discussion

Regression results are presented in Table 3. Results show that board size positively affects sustainability reporting ( $b=0.098$ ,  $P \text{ value}=0.075 < 0.1$ ), Thus our first hypothesis (H1) is accepted. It means a large board size put more influence on the firm to report sustainability reporting. The proportion of independent directors carried more weight in influencing sustainability reporting ( $b = 0.458$ ,  $p = 0.024 < 0.05$ ). Thus our second hypothesis (H2) is accepted. This can also be seen in Hamdan's (2017) study of Saudi Arabian banking institutions, where it was shown that firms with bigger and more constituted independent firms were more effective in executing their duties, leading to higher social responsibility reporting. Dienes et al. (2016) found that several factors affect sustainability reporting in German banks. Third the CSR committee significantly affect the sustainability reporting ( $b = 0.097$ ,  $p = 0.081 < 0.01$ ). This our third hypothesis(H3) is accepted. Results show that the CSR committee improves the chances of effective implementation of sustainability reporting. Conversely, banks without CSR committees or with ineffective CSR committees will not address issues about sustainability reporting effectively, thereby hindering the implementation of sustainability reporting. From the findings, the board size, independent directors, and CSR committee were all important factors that determine the disclosure of sustainability reporting.

Table 4. Corporate governance characteristics sustainability reporting

Variable	SR		SR	
	Coefficient	P-Value	Coefficient	P-Value
Board.S	0.098*	0.075	1.461*	0.061
Board.Ind	0.458*	0.024	2.451*	0.081
CSR.Comm	0.097*	0.081	1.276**	0.042
Firm.S	-----		3.170	0.362
Firm.A	-----		2.145	0.324
Industry		YES		YES
Year		YES		YES
R <sup>2</sup>		27.5%		22.5%



## 5. Conclusion and Future Research

The findings of this study have shown that sustainability reporting among banks in Saudi Arabia is positively related to larger board membership, a higher proportion of independent board members, and the availability of CSR committees. It has also been established that there was a trend of an increasing proportion of banks adopting sustainability reporting in their annual board reports. While in 2015 a 58.3% proportion of banks included sustainability reporting, in 2017 the proportion increased to 75%, which is an indication that the management of the banks had started to value the importance of sustainability reporting in Saudi Arabia. It can also be concluded that, if the observed trend of an increasing relationship between corporate governance characteristics and sustainability reporting over the three years continues in the future, banks that intend to be socially and environmentally responsive will need to consider increasing their board sizes, increasing the proportion of independent board members and introducing CSR committees in their management.

Our study has some limitations. The findings of our study can be generalized to all local banks in Saudi Arabia, international banks in the country may require a separate study due to differences in banking culture and regulatory frameworks. The findings of this study can also not be generalized to non-bank institutions due to differences in business frameworks. Having considered a time series of only three years, the findings may not provide a complete picture of the effect of corporate governance characteristics on sustainability reporting. Thus, future studies should consider the longer time series to make a more concrete conclusion. Future studies would also consider a wider scope in terms of period and include other non-bank financial institutions.

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