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The Association Between Corporate Governance and Online Sustainability Disclosure in Saudi Banks Sector

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Abstract

The main purpose of this study is to examine the association between corporate governance (CG) and online disclosure sustainability for the listed Saudi Banks during the period from 2013 to 2017. To test the main hypotheses, the study employs Ordinary least Square (OLS) model. Online sustainability disclosure is measured by using content analysis for GRI financial services sectors guidelines. The descriptive findings revealed that half of the listed Saudi banks are disclosing online sustainability items. Moreover, the multivariante results indicate a positive association between two of the CG variables and online sustainability disclosure. Banks that have members sitting on more one board and with more board meetings are more likely to disclose online sustainability items. Based on the limited studies applied in the developing countries, this study contributes by examining the association between CG and online sustainability disclosure in banks sectors.

Keywords: Online sustainability disclosure, Accounting IT, Saudi Banks, Corporate governance, Internet based reporing

1. INTRODUCTION

Increased attention has directed toward the issues of economic, social, and environmental activities and their impact on corporate performance by extending the disclosure of these activities through presenting sustainability reporting. Recently, different non-governmental organizations and professional bodies support the increased attitude of these companies (Owen, 2005).

Similarly, increased international trends arise from the response for the Sustainability Reporting Guidelines embraced by the Global Reporting Initiative (GRI). The (GRI) mainly responsible for providing various stakeholders with sustainability reports which aid them in evaluating the quality of companies' sustainability disclosure (Nobanee and Ellili, 2016).

The GRI Sustainability Reporting Guidelines are periodically reviewed to provide the best and most up-to-date guidance for effective sustainability reporting to strengthen the quality and credibility of information that is disclosed in sustainability reports. Many versions are issued to fulfill this goal (e.g. GRI 2, GRI 3, and GRI 4).

Consequently, the global and local demand for preparing a comprehensive sustainability report has increased. In addition, the disclosing of economic, social, and environmental activities becomes a crucial issue to communicate with the companies' stakeholders. Junior (2014) mentioned that sustainability reports are valuable tools to communicate with stakeholders and this should be achieved by assurance process. Based on the Global Reporting Initiative (GRI), the corporate sustainability disclosures defined as "public reports by companies to provide internal and external stakeholders with a picture of the corporate position and activities on economic, environmental and social dimensions .In short such reports attempt to describe the company's contribution toward sustainable development" (GRI, 2006, P. 3).

Many techniques were used to communicate data to stakeholders about a company's affairs. Due to the growth in stakeholders' need, the conventional methods of disclosure still not useful to meet these needs. Simultaneously, the information technology (IT) revolution paved the way for the discovery of new tools that could help in different aspects of life. Elliott (1992), states that "information technology is changing everything. It represents a new, postindustrial paradigm of wealth creation that is replacing the industrial paradigm and is profoundly changing the way business is done…. If the purpose of accounting information is to support business decision-making, and management's decision types are changing, then it is natural to expect accounting to change".

One of the most common IT innovations is the extensive use of Internet. Recently, the internet and its implementation have been used in many contemporary activities. One of the main aspects of the Internet is its commercial uses which have flourished in the recent years.

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Therefore, many companies decide to benefit from the IT revolution and the prevalent use of Internet by disclosing the required information to their users (Isenmannn et al., 2007). Based on the survey related to the State of Global Environment and Social Reporting conducted by CSR network, online reporting ranked among the top priorities for different companies (Line et al., 2002) As financial accounting is responsible for the preparation and distribution of financial information to stakeholders, it should be particularly interested in this shift. Many studies have argued the potential effects of using the Internet in disclosing information and examining the determinants of disseminating that information on companies' websites (e.g.Ashbaugh et al., 1999; Debreceny et al., 2002; Marston and Polei, 2004; Xiao et al., 2004; Bollen et al., 2006; ElSayed, 2008, 2010).

As compared to hard copy reports, many factors endorsed the internet in disclosing online sustainability items (Rowbottom and Lymer, 2009; Amran 2012; Amran et al., 2015; Mura et al., 2019). Among those factors is the ability to reach to different widespread users dispersed in different area to communicate with them effectively. In addition, disclosing online information is cheaper than hard copy reports. Moreover, online reporting can provide the on time communication and the immediate linkage between companies and their stakeholders. Further, the content of information disclosed online is voluntary which make the companies more flexible when disclosing information in their websites. In addition, the unique characteristics of Internet such as the ability of downloading files, the possibility of interactive communication and uploading audio and video files enable the users to be more in touch with the companies. Finally, the ease of accessibility for required information at any time and from any place.

Consequently, the disclosure of sustainability items has increased as a voluntary method via the web site which led to what is called sustainability online reporting (Rahim and Omar, 2017). Different terms are defined such reporting method (Chapple and Moon, 2005; Castelo Branco and Rodrigues, 2006; Rolland and Bazzoni, 2009; Amran, 2012). However, all various terms refer to the same concept which related to disclosing sustainability items online via web sites

Regarding the bank sector, sustainability is one of the most vital topics in the survival of banks (Carnevale and Mazzuca, 2014). Few studies examine the sustainability reporting in bank sector (e.g. Nobanee and Ellili, 2016; Aras et al., 2017; Amran et al., 2017; Aras et al., 2018; Buallay, 2019). However, these studies call for the need for performing much more studies in this sector. Many reasons justify the importance for examining the online disclosure of sustainability activities in bank sector. First, the key role played by the banks in the economic growth. Beck and Levine (2004) demonstrated the positive association between banks growth and economic growth. Therefore, the quality of banks' sustainability disclosure can increase the confidence about these banks, which in turn increase their growth and hence impact on the overall economy.

Second, the important role played by banks in the community regarding performing their activities in sufficient and ethical way. Banks are under pressure and scrutiny to perform this role (Amran et al., 2017).

Third, banks can affect directly and indirectly the economy, social, and environment activities in the society. The direct effect derived from the financial sustainable investments which have an impact on the stakeholders. Managing the risks surrounded with these investments can guarantee the continuing of banks in the environment which represents a good sign for stakeholders to deal with these banks. Regarding the indirect effect, disclosing the sustainability activities in their reports, banks can differentiate themselves from their counterparts in the society because they become in the public eye which in turn has an impact on the performing activities (Carnevale and Mazzuca, 2014; Aras et al. 2018).

Fourth, the timeliness, interactively and instantaneous communication of banks reporting through the Internet can improve the linkage with stakeholders and hence increase the disclosure quality of Banks which is an interesting area to discover. Therefore, sustainability activities add more pressure on banks to disclose for such activities to their stakeholder to differentiate themselves from other sectors and achieve their role towards their community.

The Saudi banking system has several characteristics which justify the important of the study to assess its role in achieving sustainable development which become one of the most crucial topics in the realization of the Saudi's Vision 2030. Some of these characteristics are:

First, it represents the stronger fifth world banking system with a lower debt ratio of 1.4% and non-existent high efficient capital 17.5% with high capital and high allocations cover both exceed the minimum requirements of Basel.

Second, Banks' asset quality remained high despite the slight increase in non-performing loans. The Saudi banking system is still enjoying with high capital.

Third, Financial sector development program was launched in the year 2018, which aims to promote awareness and increase financial savings, while enhancing stability money.

Fourth, Record the fifth lowest loans stumble (or irregular) to total loans within the Group of 20 Saudi banks profitability remains high despite her work in an environment with low interest rates and oil prices. The record rate of return on assets of 2.1%, the third highest among group of 20, the return on equity ratio 15.0%, and ranking ninth among the G20 countries. Interest margin also increased to total income from 66.5% in 2014 to 67.7% at the end of 2016.

Corporate governance can play crucial role in examining the quality disclosure of sustainable activities. According to stakeholder theory, there are many different stakeholders with different interests and concerns that should fulfill by the banks. Therefore, banks will perform their duties and responsibilities toward their stakeholders by extending in the disclosure of sustainability activities in order to keep with the sustainable association with those stakeholders. (Mori, 2014; Nobanee and Ellili, 2016).

Regarding legitimacy theory, banks are in the public eye which resulted from the implied contract toward the society in which they performed their activities. According to this contract, banks should disclose their sustainability activities to the society to be accepted and to accomplish their duties. (Nobanee and Ellili, 2016; Aras et al.,2018)

In addition, disclosing sustainable activities can mitigate the conflict between management and shareholders which arise due to agency problem. Therefore, banks can mitigate this conflict through the extending in sustainable activities which lead to increasing the sustainable investments and the return of investors and in turn lead to reduce the conflict in interests

Consequently, the main objectives of this study are: First, explore the quality of online disclosing sustainability activities in the Saudi banks from 2013 to2017. Second, investigate the association between corporate governance variables and the online sustainability disclosure in the Saudi context.

The study contributes to the existing literature by: first, extend the literature examined the online sustainability disclosure in bank sectors for developed countries by investigating such topic in developing countries and in specific in one country that embraced the online sustainability concept in its vision, namely Saudi Arabia. Second, the association between corporate governance variables and online sustainability disclosure in the context of banking system has rarely investigated in the developing countries. This study seeks to fill the gap in this area.

Given the importance of the banking sector in contributing to the achievement of sustainable development and the importance of online sustainability reports achieve financial inclusion and improving economic growth and increased employment, reduced size risk to her bank, and expand your customer base and lower rates of customers stumbling turnover as well as increased profits. Contributing to the realization of the Vision 2030, the present study aims to assess the effectiveness of online sustainability reports in the banking sector in Saudi Arabia in light of the global reporting initiative, GRI 4.

The rest of the paper is organized as follows: the next section discusses the prior studies related to sustainability disclosure for banks. Then, in the third section, the authors discuss the hypotheses formulation. Section four presents the research methodology. After that, section five shows the results of the study. And finally, section six presents the conclusion.

2. LITERATURE REVIEW

The growing interest by various stakeholders with the importance of sustainability reporting increases the importance of such reporting in the banking sector to examine the impact of social and environmental practices on the performance of the banks sectors and their ability to mobilize savings and attract customers to survive (Fassin and Gosselin, 2011). Few studies explore the evaluation of sustainability reporting in the commercial banks.

Habib and Khan (2010) investigated the disclosure of sustainability information in the annual reports for the commercial banks in Bangladesh. In addition, the study examined the association between such disclosure and corporate governance. The findings indicated a remarkable variety in the disclosing sustainable items, however the level of disclosing sustainability items is moderate. Further, the study demonstrated that non-executive directors and the existence of foreign members are the only corporate governance variables affected the sustainability reporting.

In a different context, Hassan and Harahap (2010) concerned with the inconsistency with the disclosure of sustainability items in the annual reports of seven Islamic banks in different seven countries; namely: Bahrain, Bangladesh, Indonesia, Malaysia, Saudi Arabia, Kuwait and the U.A.E at 2006. By using a content analysis, the empirical results demonstrated that the disclosure of sustainability items is not the major concern for the majority of most Islamic banks.

By considering both the corporate websites and the annual reports, Sobhani et al. (2012) investigated the status of sustainability disclosure for the banking industry in Bangladesh. The study classified twenty nine Bengali listed banks into three generations to examine the variations in disclosure practices. The findings illustrated that the sustainability disclosure in the annual reports of the listed banks exceed that of corporate websites in all items except product responsibility disclosure.

Akano et al. (2013) examined the different types of sustainability information disclosed in the annual reports of thirteen commercial banks in Nigeria. The findings revealed that Commercial banks in Nigeria disclosed more information on human resources, and community involvement to satisfy stakeholder interest. Further, the findings revealed that Islamic banks are not consistent in reporting on corporate social responsibility information. In addition, it is indicated that the banks’ size is the only determinants of the disclosure of sustainability information.

In the Gulf region, Nobanee and Ellili (2016) explored the level of sustainability disclosure for the listed banks in the UAE during the period from 2003 to 2013. In addition, the study aimed to examine the impact of corporate sustainability disclosure on the performance of sixteen listed banks. The results found the level of sustainability disclosure is overall low. When comparing the conventional banks with those of Islamic banks, it was revealed that the level of sustainability disclosure of conventional banks is higher than those of Islamic banks in annual reports for Islamic banks. Similarly, the impact of sustainability disclosure on the performance of sampled banks empirically proved in the conventional not the Islamic banks.

Recently, Aras et al. (2018) examined the multidimensional value relevance of sustainability disclosure for seven banks whose sustainability reports are published for the year 2013. The study applied both content analysis and TOPSIS method to evaluate the performance of various multidimensional of sustainability items. The findings indicated that the Spearman rank correlation coefficient between the overall sustainability performance scores of sampled banks and the market value is insignificant. However, the financial sustainability performance presented a positive significant impact on market value.

In addition, Buallay,(2019) examined the impact of sustainability reporting on the performance of European banking sector during 2007 to 2016. The results varied depending on the measurement of sustainability disclosure. When using the total measure of the sustainability disclosure, there is significant positive association with banks performance. Further, when using individual measures, the results varied. Environmental disclosure associated positively with two measures of performance, namely return of assets and Tobin's Q. While, social disclosure has a negative impact on all the performance measures. However, corporate governance disclosure has a mixed effect. It associated positively with Tobin's Q and negatively with both return on assets and return on equity measures.

Regarding the studies that examine the online sustainability disclosure, few studies are conducted (Isenmann et al., 2007; Rowbottom and Lymer, 2009; Amran, 2012; Amran et al., 2015; Rahim and Omar, 2017; Mura et al., 2019). However, few studies have explored the using of Internet as a medium for disclosing sustainability items via companies' websites (Kilic, 2015)

Branco and Rodrigues (2006) used content analysis to compare between the disclosing of social responsibility information via website with similar disclosure in traditional annual reports for Portuguese Banks in 2003 and 2004. The findings indicate that legitimacy theory justified the reason behind online disclosure social responsibility items by Portuguese Banks. Those Banks aimed to improve their image by disclosing more social responsibility items on their websites.

Hinson et al.(2010) investigated the online corporate social responsibility reporting practices In Ghana. They seek to ascertain whether Banks operating in Ghana disseminate their social responsibility information via their web sites in an effective way. The study employed content analysis for 16 banks in Ghana. The findings revealed that there are major challenges encountered the banks operating in Ghana regarding using Internet as a disclosure medium.

Similarly, Hinson (2011) compare between two banks won corporate social responsibility industry awards in Ghana and other two banks which have not won this awards. The aim is to investigate whether disclosing social responsibility items via the websites is common for banks in Ghana. Based on Hinson et al. (2010) online CSR framework, a case study is adopted to analysis the online reporting of the four sampled banks. The results demonstrated that the most socially responsible bank of year awards, has suffer from online disclosure. This result is compatible with Hinson et al.'s (2010) result.

Vilar and Simao (2015) explored the usage of web sites in disclosing social responsibility activities for banks operated in different regions. Based on geographic and cultural criteria, the study applied a content analysis for the websites of the ten major banks belongs to different 11 regions. The findings demonstrated that, as compared to banks operated in less-developed regions, banks that operated in developed regions disclose more social responsibility items via their websites.

In Turkey, Kilic (2015) aimed to investigate first the level of online sustainability disclosure and second examine the key determinants of online CSR reporting for Turkish banks. The study employed a content analysis for the websites of 25 banks in Turkey that including four categories: environment and energy, human resources, products and customers, and community involvement. The results indicated that most of the sampled banks disclosed the information related to products and customers on their websites. In addition, the findings demonstrated that size, ownership structure, and multiple exchange listing are the key determinants of online SCR disclosure for sampled banks in Turkey.

It can be noted that there are few studies investigated the impact of corporate governed variables on sustainability disclosure of banking sector. Further, limited studies explore the sustainability disclosure in the Gulf area. Therefore, as a responding for the changing economy for the Saudi community regarding the future vision, and due the unique characteristics for the Saudi market regarding corporate governance and sustainability, the current study will investigate the impact of corporate governance on sustainability disclosure for the listed Saudi banks during the period from 2013 to 2017.

3. HYPOTHESIS FORMULATION

3.1 Board size

Board size plays critical role in the performance of one company. According to agency theory, larger board size characterized by different experiences and skills that enable it to perform a monitoring role and mitigate the agency problem that can lead to increase the performance of the company. One way to do this is by extend the voluntary disclosure of sustainable activities (Mahmood et al., 2018). On the other hand, larger board size may cause poor coordination and communication due to the differences in opinions in the board which may decrease the performance of the company.

The association between board size and the voluntary sustainability disclosure has mixed results. While the majority of the studies reported a significantly positive association (e.g. Kathy Rao et al. 2012; Esa et al. 2012; Majeed et al. 2015), Htay et al. 2012 indicated a negative association. Further, (Said et al., 2009) found a week impact for the board size on sustainability disclosure. Based on the above arguments, this study proposes the following hypothesis:

***H1*: There is a significant relationship between board size and sustainability development disclosure**

3.2 Board Independence

Increasing the number of independence members can aid in increasing the monitoring role of the board and protect the interests of stakeholders. Therefore, based on stakeholder theory, companies with large number of independence members can differentiate themselves from other counterparts by increasing the level of sustainability disclosure to protect and achieve the different stakeholders' interests.

Some prior studies demonstrated a significant positive association between board independence and sustainability disclosure (e.g. Jizi et al. 2014; Cuadrado-Ballesteros et al. 2015. While the other reported the negative association (e.g. Haniffa and Cooke, 2005; Said et al., 2009. Consequently, the second hypothesis is:

***H2*: There is a significant relationship between independent directors and sustainability development disclosure.**

3.3 Board meetings

The number of board meetings represents an essential variable in performing the control over the management practices effectively. Increasing the number of board meetings can lead to increase the monitor role of the directors on the one of the management practices i.e. disclosing voluntary information which alleviated the agency problem. Therefore, increasing board meetings can have positive association with sustainability disclosure (Anis et al., 2012). Accordingly, the third hypothesis will be:

***H3*: There is a significant relationship between board meetings and sustainability development disclosure**

3.4 Cross directorship

When one director sits on more than one board it is represented cross directorship. In this case, these directors will have the experience from sitting on more than one board to influence on the disclosure practices of the company. These directors will seek to let the company, according to reputation management and legitimacy strategy, like their counterparts which they sit on (Haniffa and Cooke, 2005). Accordingly, the final hypothesis is:

***H4*: There is a significant relationship between cross directorship members on the board and sustainability development disclosure**

4. METHODOLOGY

4.1 Sample

The sample of the study includes all the websites of banks listed on the KSA from 2013 to 2017. All the data are extracted from the online financial statements of the sampled banks from TDAWEL website. No missing observations are found. Therefore, the total sample consists of 60 observations.

4.2 Research design

4.2.1 Measurement of sustainability disclosure

The online disclosure of sustainability items in the annual reports of Saudi listed banks is measured by using content analysis. This study employs GRI financial services sectors guidelines to measure the sustainability disclosure. Items are checking by using dichotomous analysis. When the item is disclosed in the website, it will take "1", otherwise it takes "0".

4.2.2 Independent and control variables

Four corporate governance variables are used to test the impact corporate governance mechanism on the sustainability disclosure of sampled banks. Table 1 presents these variables and their proxies.

Table 1: The variable definitions and their proxies

Variable	Acronym	Proxy
Dependent Variable:		
Sustainability disclosure level	Dis	Dis score
Independent Variables:		
Board size	*BS*	The total number of the members on the board
independent members	*Ind*	The ratio of non-executive members to total members on the board.
Boards Meetings	*Meet*	The actual number of board meetings
Cross directorship	*cross*	
Control variables:		
Size	*size*	Natural logarithm of total assets
Profitability	*Prof*	Total equity /net profit
Risk	*Lev*	Total liabilities/total assets

In addition, this study includes three main control variables which previously examined extensively in association with sustainability disclosure. These variables are: company size (size), company Profitability (Prof), risk (Lev), and company risk (Lev). The proxies of the control variables are also illustrated in table 1.

4.2.3 Research Model

To test the hypotheses, an ordinary least squares (OLS) model is constructed as follows:

$$Dis = \beta_0 + \beta_1 BS + \beta_2 Ind + \beta_3 Meet + \beta_4 cross + \beta_5 Size + \beta_6 Prof + \beta_7 Lev + \varepsilon$$

5. RESULTS AND DISCUSSION

5.1 Descriptive and univariant analyses

Table 2 exhibits the descriptive findings. On average, half of the Saudi listed banks are disclosed sustainability items. In addition, The mean of the sampled banks have boards consisting of nine members who are more likely sitting on other boards and non-executive and that meet approximately six times per year.

Table 2: Descriptive analysis of variables

Variables	Mean	Min.	Max.	Std. Dev.
Panel A: Dependent V.				
Dis	.50	.29	.79	.13
Panel B: Independent and Control V.				
BS	9.62	7	11	.85
Ind	. 50	.22	.40	.47
Meet	5.72	4	10	2.01
Cross	6.90	4	11	1.72
Size	8.16	7.56	8.65	.28
Prof	.13	.20	.13	.03
Lev	. 85	.73	.91	.03

Table 3 reports the correlation matrix. Sustainability disclosure is positively correlated with only bank size.

Table 3: Pearson coefficient correlation matrix

	Dis	BS	Ind	Meet	Cross	Size	Prof
BS	.01						
Ind	-.01	.24*					
Meet	.16	. 02	-.01				
Cross	.04	.23	.16	.53**			
Size	.42**	.08	-.10	.14	.30***		
Prof	.16	.16	-.05	.19	.32***	.46***	
Lev	.09	.21	-.07	.11	.29***	-.11	.51***

5.2 Multivariate analysis

Table 4 presents the OLS results of the association between corporate governance variables and sustainability disclosure. The adjusted R^2 is 20.5%. The results indicates that only two corporate variables; board meetings and cross directorship are significantly associated with sustainability disclosure. Increasing the number of board meetings will increase the level of sustainability disclosure of the sampled banks. According to the agency theory, companies with more board meetings are more likely to increase their monitoring role on management which in turn led to effective duties by the directors. This will have an impact on increasing the level of sustainability disclosure. This result is consistent with (Anis et al., 2012; Laksamana, 2008). Accordingly, ***H3*** is accepted.

Similarly, the more the directors who sitting in other board, the more the sustainability disclosure level. Board members who sit on other board will have more experience and may have the willing to let their companies like the other companies in which they sit. This finding is interpreted with reputation management and legitimacy strategy and is consistent with (Haniffa and Cooke, 2005). Therefore, ***H4*** is accepted. The current study fails to find an empirical evidence for the impact of both board size and independent members on the sustainability disclosure. Consequently, both H1 and H2 are rejected.

Regarding the control variables, the findings reveal that large banks that have high risk levels are more likely to disclose sustainability items on their annual reports. This finding is consistent with (Habbash, 2016; Al-Janadi et al., 2016; Al-Bassam et al., 2018).

Table 4: Regression results

	OLS Model
Constant	**-3. 802*****
BS	-.183
Ind	.921
Meet	**1.815***
Cross	**2.084****
Size	**4.291*****
Prof	-1.651
Lev	**2.341****
Other statistics	
F-Ratio (sig.)	**3.176**
Adj. R^2	**.205**
Max. VIF	**1.918**

Note: *, ** and * indicate significant at 10per cent, 5per cent and 1per cent, respectively, No serious multicollinearity.**

6. CONCLUSION

This study extends the previous studies of sustainable disclosure for bank sectors by examine the impact of corporate governance variables on the disclosure of suitability reports for listed Saudi banks during the period of 2013 to 2017. The study uses OLS analysis to test the formulation hypotheses by using a content analysis to measure the level of sustainability disclosure.

The descriptive results demonstrate that on average, half of the listed bank discloses sustainable items in their reports. In addition, the regression analysis reveals that both board meetings and cross directorship has significant impact on sustainability disclosure. Banks with frequent board meetings increase their level of sustainability disclosure. Further, banks with members who sit on more than one board of director are more likely to disclose more sustainable items. Moreover, the findings indicate that bank size and leverage as control variables have associated positively with suitable disclosure.

These findings provide important implications. First, CG regulators should aware about the impact of cross-directorship on sustainability disclosure which implied the importance of organized the process of appointment those members on other companies. Second, stakeholders may benefit from the disclosing of sustainable items by listed banks to determine the attitude of these banks in the upcoming periods.

The study has some limitations. First, the study sample includes only the banks sector. Future research may extend this study by applying on all the listed Saudi companies. Second, the study examines few CG variables. Future research may examine the impact of some additional CG variables like family member on the board and audit committee on sustainability.

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