

CORPORATE GOVERNANCE AND CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE: EVIDENCE FROM SAUDI ARABIA

Murya Habbash

King Khalid University, Saudi Arabia
murya@hotmail.com

ABSTRACT

Purpose: *This study aims to discover the Corporate Social Responsibility (CSR) disclosure practices and the potential influence of Corporate Governance (CG), ownership structure, and corporate characteristics, in an emerging Arab country, Saudi Arabia. This study extends the extant literature by investigating the drivers of CSR disclosure in a country that lacks research in this area.*

Methodology: *This study examines 267 annual reports of Saudi non-financial-listed firms during 2007-2011 using manual content and multiple regression analyses and a checklist of 17 CSR disclosure items based on ISO 26000.*

Findings: *The analysis finds that the CSR disclosure average is 24%, higher than 14.61% and 16% found by Al-Janadi et al. (2013) and Macarulla and Talalweh (2012) for two Saudi samples during 2006-2007 and during 2008, respectively. This improvement may be due to the application of Saudi CG code in 2007. The analysis also shows that government and family ownership, firm size, and firm age are positive determinants of CSR disclosure, firm leverage is a negative determinant, while effective AC, board independence, role duality, institutional ownership, firm profitability, and industry type are found not to be determinants of CSR disclosure.*

Originality/value: *This study is important because it uses agency theory to ascertain the influence of specific board characteristics and ownership structures on disclosure. As a result it provides important implications for CG regulators and different stakeholders and provides an evaluation of the recently applied Saudi CG code from CSR disclosure perspective.*

Keywords: *Corporate Social Responsibility, Corporate Governance, Ownership Structure, Content Analysis, Saudi Arabia.*

1. INTRODUCTION

The “business is business” culture has been prevalent for centuries. In 1924, Sheldon (1924) introduced the concept of “Corporate Social Responsibility” (CSR) for the first time in the business environment. Since that time, awareness across the globe of the impact of businesses on society has increased significantly and firms have come under greater pressure from society, governments, and other stakeholders to behave responsibly. One driver for the increase in pressure of businesses is the greed of firms in consuming scarce resources in order to realize profits, regardless of the negative implications for society. The negative implications of firms’ operations have been apparent in several social and environmental disasters. For example, a toxic gas release tragedy occurred on 3 December 1984 in India and leaving around 16,000 dead in a few days. Furthermore, on 26 April 1986, the Chernobyl Nuclear Power Plant

in Ukraine exploded causing several deaths, in addition to creating dangerous social and environmental conditions. Accordingly, firms face a greater pressure to act socially and operate responsibly than ever before.

International concerns in relation to the business-society relationship have resulted in the establishment of organizations and standards that aim to monitor and help firms behave socially and responsibly. Examples of these organizations include AccountAbility which is based in London, the African Institute of Corporate Citizenship (AICC), Business for Social Responsibility (BSR) in the USA, and Business in the Community (BiTC) in UK. Furthermore, the International Organization for Standardization (ISO) issued ISO 26000 as an international standard that provides guidelines on social responsibility for all public and private firms. This standard aims to help firms undertake and manage their social responsibility strategies and activities that affect society and the environment.

The rising pressure on firms to behave socially entails measuring and demonstrating how their activities affect different stakeholders including societies and the environment. This extends the accountability of managers to incorporate social and environmental dimensions in their accounting measurements and disclosures. This is based on the assumption that CSR disclosure can play an important role in communicating whether or not firms behave socially and to what extent firms respect society and the environment. Moreover, CSR disclosure can be argued to be one of the most important voluntary disclosure types, since it highlights the influence of firms' operations on world resources and human life and welfare. Accordingly, rising global awareness of the social responsibility of firms has increased the need for high quality CSR disclosure.

Concurrent with the increased concern for CSR disclosure, Corporate Governance (CG) objectives have evolved to accommodate new relationships never previously been deemed necessary, i.e. business-environment and business-society relations. For example, Claessens (2003, p. 7) states, "In its broadest sense, CG is concerned with holding a balance between economic and social goals and between individual and communal goals". Furthermore, CG has developed to incorporate ethics, accountability, disclosure, and reporting (Gill, 2008). Accordingly, the different CG mechanisms, such as boards of directors, audit committees, and auditors are responsible for monitoring and controlling managers' decisions and firms' activities that affect all stakeholders including society. This may reveal a correlation between effectiveness of CG systems and quality of CSR disclosure. An effective CG system is likely to be concerned with disclosure and transparency in general, and with disclosure of material activities that affect society and environment in particular. Empirically, Said et al. (2009) find a positive significant correlation between government ownership and audit committee and CSR disclosure. Moreover, Khan (2010) and Das et al. (2015) find a positive significant correlation between board size, ownership structure, and independent non-executive directors on the board and CSR disclosure. These findings support the hypothesis of a potential positive correlation between CG and CSR disclosure.

The main objective of this study is to determine the extent of CSR disclosure in a sample of Saudi non-financial listed firms and identify the main drivers of CSR disclosure by investigating a comprehensive and diversified set of variables involving CG variables, ownership variables, and corporate characteristics. The analysis finds that the average CSR disclosure is 24% and that government ownership, family ownership, firm leverage, firm size, and firm age are the main drivers of CSR disclosure in Saudi Arabia.

This study is important for the following reasons. First, the study starts to fill the literature gap on CSR disclosure in Saudi Arabia; we find a clear paucity in this research area. Second, the

study evaluates the Saudi Arabian CG reforms, especially after the recent application of the CG code in 2007. Third, Saudi Arabia accounts for 25% of the Arab world's GDP and is one of the largest oil exporters in the world.

This study is organized as follows. The second section reviews the relevant studies and highlights the literature gaps. The third section formulates the study hypotheses. The fourth section reveals the study methodology. The fifth section discusses the results. The final section provides conclusions, implications, limitations and recommended future avenues for research.

2. LITERATURE REVIEW

This study examines the CSR disclosure determinants; therefore, this section reviews studies that focus on investigating these determinants, with a greater focus on emerging countries. Then it discusses the relevant studies conducted on Saudi Arabia.

First, Haniffa and Cooke (2002) investigate a sample of 167 Malaysian firms in 1995. The findings indicate a significant negative relationship between independent non-executive directors, chairperson and the proportion of the family members on the boards and the social and environmental disclosure. The authors extended their study in 2005 by examining samples of Malaysian firms for two separate years 1996 and 2002. Each sample comprises the same 139 firms. The analysis finds a significant positive correlation between CSR disclosure and boards dominated by Malaysian directors, boards dominated by executive directors, Chair with multiple directorships and foreign ownership. Furthermore, the analysis finds a significant positive correlation between four corporate characteristics (size, profitability, multiple listing and industry type) and CSR disclosure. The results were similar in both study years. Moreover, Said et al. (2009) examine a sample of 150 firms listed on the Malaysian Stock Exchange in 2006. Authors find the mean for the CSR disclosure index is 13.90 and find a significant positive correlation between government ownership and audit committee and the CSR disclosure level.

In a study conducted on banks, Khan (2010) examines a sample of all private commercial banks for 2007 and 2008 in Bangladesh. The results display no significant correlation between women's representation on the board and CSR disclosure. However, the results indicate a significant positive correlation between the ratio of independent directors on boards of directors, foreign ownership, firm size, and profitability and CSR disclosure. Furthermore, Siregar and Bachtiar (2010) examine 87 publically listed firms on the Indonesian Stock Exchange in 2003. They find a positive and statistically significant correlation between board size, and company size and CSR disclosure. Moreover, Oh et al. (2011) examine a sample of 118 large Korean firms in 2006. The results indicate a significant positive correlation between institutional and foreign ownerships and CSR disclosure. However, the results indicate a significant negative correlation between shareholding by top managers and CSR disclosure, while outside director ownership is found to be not significant.

In addition, Hussainey et al. (2011) examine a sample of 111 Egyptian listed firms during 2005-2010. Authors find that 66% of the sample firms disclose 10-50 CSR statements on average. Furthermore, they find that profitability is the main determinant of CSR disclosure. However, they find no correlation between ownership structure, company size, gearing, and liquidity and CSR disclosure. In another study conducted on Egypt, Soliman et al. (2012) examine a sample of 42 highly active Egyptian firms during 2007-2009. The findings indicate a significant positive correlation between CSR disclosure and institutional ownership and foreign

ownership. However, the authors find a significant negative correlation between top management ownership and CSR disclosure.

In a study conducted in the USA, Mallin et al. (2013) analyze the social and environmental disclosure of the 100 U.S. Best Corporate Citizens during 2005-2007. The empirical results indicate that the stakeholders' orientation of CG is positively correlated with corporate social performance and social and environmental disclosure. In a further study conducted in the USA, Giannarakis et al. (2014) investigate 100 large-sized US firms listed on the Standard & Poor's 500 Index during 2009-2012. The findings indicate that the higher polluting firms tend towards greater CSR disclosure and that CEO duality and presence of women on the board do not affect the CSR disclosure.

One recent study conducted on the banking industry in the Arab Region by Bukair and Abdul-Rahman (2015) investigates a sample of 53 Islamic banks in 2008 from five of the six Gulf Cooperation Council countries. The analysis finds that the average CSR disclosure score is 83.3 sentences. Furthermore, the results indicate insignificant correlation between governance structure variables (board size, board composition, CEO duality) and CSR disclosure level. However, a significant positive correlation was found between bank size and the CSR disclosure level. In another recent study conducted on banks, Das et al. (2015) examine all 29 listed banks in Bangladesh from 2007 to 2011. The authors find that the average CSR disclosure increased gradually from 59.02% in 2007 to 76.87% in 2011. The results indicate a significant positive correlation between bank size, board size, ownership structure, and independent non-executive directors on the board and CSR disclosure. However, a negative significant correlation was found for banks' profitability and age and CRS disclosure.

Finally, the disclosure literature provides very few studies on Saudi Arabia. In one relevant study, Mandurah et al. (2012) examines CSR activities in Saudi Arabia; however, the study does not examine the determinants of CSR. The study surveys a sample of 120 managers to assess their awareness of CSR, the extent of CSR integration in their corporate policies, and the nature and extent of these firms' CSR activities. The response rate was 65%; the results signal a reasonable level of CSR activities in Saudi Arabia, and to an adequate level of integration between social objectives and the strategic objectives of firms. In addition, Macarulla and Talalweh (2012) examine 132 Saudi listed firms in 2008. The findings indicate a very low level of CSR disclosure (16%) and that the main CSR determinants are firm size, firm profitability and industry type. Moreover, Khasharmeh and Desoky (2013) evaluate online-CSR disclosure in the Gulf Cooperation Council (GCC) countries including 44 Saudi firms representing 26.99% of total sample. The results find that the average online-CSR disclosure in Saudi Arabia is 21.86%; the second highest after Qatar (22.50%). The results indicate that firm type, firm profitability, firm size, and firm risk could be main determinants of online-CSR disclosure. Furthermore, Al-Janadi et al. (2013) investigate annual reports of 87 firms listed on the Saudi stock market during 2006-2007. The authors find that the average CSR disclosure is very low, at only 14.61%. The authors also find a significant positive correlation between non-executive directors, board size, CEO duality, audit quality, government ownership and the voluntary disclosure levels including social and environmental disclosure.

To conclude, this study finds a paucity of studies conducted on Saudi Arabia in relation to CRS and CG. Furthermore, the studies conducted on Saudi Arabia suffer from several limitations. First, although Mandurah et al. (2012) examine CSR activities in Saudi Arabia, they do not examine any of the CSR determinants. Second, Macarulla and Talalweh (2012) focus on only corporate characteristics as determinants of CSR disclosure with no investigation of CG or ownership variables, and examine only 132 annual reports during 2008. Third, Al-Janadi et al.

(2013) examine only two years (2006-2007) both of which are date and use a small sample size of only 87 annual reports. Accordingly, our study contributes by filling these gaps through investigating a comprehensive set of variables across CG, ownership, and corporate characteristics, during a larger study period (2007-2011), and with a larger sample size of 267 annual reports.

3. HYPOTHESES DEVELOPMENT

3.1. Audit Committee

The audit committee (AC) is supposed to ensure the integrity of financial reporting through monitoring and control (Fama, 1980; Fama & Jensen, 1983; Abdel-Fattah, 2008). However, this aim cannot be achieved unless the AC is effective. AC effectiveness depends on its composition and characteristics. According to Section 14 of the 2006 Saudi CG code, each firm should construct an AC of at least three non-executive directors, with at least one director specialized in financial and accounting affairs.

The literature finds that effective AC is likely to affect positively the disclosure quality. For example, Soliman and Ragab (2014) find that effective AC, characterized by frequently meetings, improves the financial reporting quality. Furthermore, Xie et al. (2003) and Soliman and Ragab (2014) find that effective AC, measured by a high number of experts on the committee, enhances the reporting quality. In addition, Madawaki and Amran (2013, p. 1072) state: "It is expected that independent AC members will be more objective and less likely to overlook possible deficiencies in the misappropriation and manipulation of financial reporting". This argument is congruent with agency theory that argues that independent directors on boards and committees reduce information asymmetry. Accordingly, this study believes that effective AC could be a successful monitoring tool for managers' decisions, especially those related to the business social responsibility, which will be reflected in high quality CSR disclosure. Therefore, the study's first hypothesis is:

H1: There is a positive correlation between audit committee effectiveness and CSR disclosure.

3.2. Board Independence

Boards play an essential role in monitoring and directing managers to satisfy the interests of stakeholders. However, the boards' monitoring effectiveness depends on its composition. Independent boards are more likely to inspire managers towards high transparency and disclosure quality levels (Forker, 1992; AbuRaya, 2012). Agency and stakeholder theories argue that a high ratio of independent directors on the board could be an important element of the CG structure that would help to resolve agency problems and advance the interests of other stakeholders, such as employees and local communities (Amran et al. 2009; Chen & Roberts, 2010). Empirically, a large number of studies, including Barako and Brown (2008) and Khan et al. (2013) find that appointing non-executive directors on the board positively affect CSR disclosure. Accordingly, this study believes that non-executive directors on the board are more likely to encourage managers to act socially, and thus, provide high quality CSR disclosure. Congruent with the agency theory, the study second hypothesis is:

H2: There is a positive correlation between board independence and CSR disclosure.

3.3. Role Duality

Role duality occurs when the Chief Executive Officer (CEO) also holds the Chairman position at the same time. Role duality could impair the boards' governance role regarding disclosure policies (Li et al., 2008; Elzahar & Hussainey, 2012). Generally, segregation of duties is a principle for several internal control systems. Regarding disclosure, several studies argue that CEO/Chairman segregation is more likely to optimize voluntary disclosure quality including the CSR disclosure (e.g. Forker, 1992; Haniffa & Cooke, 2002; Abdel-Fattah, 2008; Said et al., 2009). Furthermore, agency theory suggests that role duality increases the concentration of decision-making power and that an independent Chairman provides strong power to the boards, which is reflected positively on the disclosure quality (Al-Janadi et al., 2013). Congruent with agency theory, this study believes in a negative correlation between role duality and CSR disclosure. Accordingly, the study's third hypothesis is:

H3: There is a negative correlation between role duality and CSR disclosure.

3.4. Government Ownership

Generally, governments have political, economic, and social goals to achieve. The nature of governments' work is socially-oriented. This orientation could result in conflict between goals of governments, as owners, and the goals of profit maximization of private investors (Ntim et al., 2013). However, this study argues that government ownership could maintain a degree of balance between the two competing goals, which may improve the profits of firms and effectively influence the society. Moreover, governments set and regularly issue regulations that protect society and therefore governments could be a good example of sponsoring and complying with these regulations through their ownership in firms. Furthermore, Eng and Mak (2003, p. 327) state: "The government sees corporate governance and disclosure as necessary measures to protect shareholders". Consistent with the arguments of Eng and Mak (2003), Said et al. (2009), AbuRaya (2012), Ntim et al. (2013) and Al-Janadi et al. (2013) that government ownership could promote good governance, social responsibility, transparency, and disclosure practices, the study's fourth hypothesis is:

H4: There is a positive correlation between government ownership and CSR disclosure.

3.5. Institutional Ownership

The literature provides two competing hypotheses, active and passive, explaining the influence of institutional ownership on monitoring and disclosure (Al-Fayoumi et al., 2010; Alves, 2012). First, the efficient-monitoring hypothesis suggests that institutional investors are sophisticated investors which have experience and resources, thereby enabling the effective monitoring of managers' decisions including disclosure-related decisions (Abdel-Fattah, 2008; AbuRaya, 2012). Moreover, agency theory suggests that institutional investors have extra incentives to closely monitor disclosure policies (Jensen & Meckling, 1976; Elzahar & Hussainey 2012; Ntim et al., 2013). In contrast, the passive hands-off hypothesis suggests that institutions are passive and short-term investors which prioritize their interests (Al-Fayoumi et al., 2010; Alves, 2012). This implies that those investors will be less interested in social activities and related disclosure. Based on these contrasting views, the study's fifth hypothesis is:

H5: There is a correlation between institutional ownership and CSR disclosure.

3.6. Family Ownership

The ownership structure in Saudi Arabia is family-concentrated (Albassam, 2014). In relation to social responsibility, Block and Wagner (2014) argue that family firms are more interested in social responsibility and are more open to considering social responsibility issues. Furthermore, the literature suggests that family firms foster social responsibility initiatives (e.g. Deniz & Suarez, 2005; Block & Wagner, 2014). However, Ho and Wong (2001) and Haniffa and Cooke (2002) find that family firms are less likely to disclose information voluntarily. This study believes that family firms could gain several social benefits from their shares in firms in addition to the financial gains, such as building a strong social image, prestige, good reputation and social position for their families. This approach should reflect in greater concern for and respect to society, and thus, in high quality CSR disclosure. Accordingly, the study's sixth hypothesis is:

H6: There is a positive correlation between family ownership and CSR disclosure.

4. METHODOLOGY

4.1. Sample and Data

The study population is all firms listed on the Saudi Stock Exchange during 2007-2011. Thus, this study starts with the year after the Saudi CG code was issued in November 2006. Table 1 exhibits the distribution of firm-year observations across the study years. First, the total initial sample comprises 694 observations distributed across the five years. Second, this study discards 172 observations which belong to financial and insurance companies. Third, this study excludes 255 observations with missing data on the study variables. Thus, the final sample comprises 267 observations. This study notices that the number of observations has increased gradually across the study period which in part may be due to the application of the Saudi CG code starting from 2007. In relation to the data sources, this study depends mainly on the firms' annual reports published on the firms' websites and on the website www.tadawual.com.sa.

Table 1: The Study Sample

	2007	2008	2009	2010	2011	Total
Initial Sample	111	129	146	152	156	694
Less: Financial and Insurance firm-year	(28)	(32)	(36)	(38)	(38)	(172)
Less: Firm-year observations with missing data	(64)	(58)	(52)	(44)	(37)	(255)
Final Sample	19	39	58	70	81	267

4.2. Regression Model

This study employs the following Ordinary Least Squares (OLS) regression model to examine the study hypotheses:

$$CSR_{it} = \beta_0 + \beta_1 ACscore_{it} + \beta_2 Brdind_{it} + \beta_3 DulRol_{it} + \beta_4 Govown_{it} + \beta_5 Instown_{it} + \beta_6 Famown_{it} + \beta_7 Levrg_{it} + \beta_8 Asst_{it} + \beta_9 ROA_{it} + \beta_{10} Age_{it} + \beta_{11} Ind_{it} + \epsilon$$

4.3. Dependent Variable

The extent of CSR disclosure is the model's dependent variable. To measure its extent, this study follows four steps derived from previous studies (e.g., Botosan, 1997; Rizk et al., 2008; Said et al., 2009; AbuRaya, 2012). First, this study prepares a checklist comprises 17 disclosure

items of CSR based on ISO 26000. ISO 26000 is an international standard issued by ISO and provides guidelines on social responsibility for all public and private firms. It is noteworthy that the number of checklist items differs among studies; Rizk et al. (2008) state that the checklist items range from 17 to 224 items. Second, this study applies manual content analysis to analyze the sample firms' annual reports and identify the actual CSR disclosure items compared to the checklist. Third, this study follows the dichotomous scoring procedure by assigning one if the item is disclosed and zero otherwise. Fourth, this study sums the total number of items actually disclosed for each annual report and divide this number by the maximum number of the checklist items to get the ratio of CSR disclosure by applying the following equation:

$$CSR_{it} = \frac{\sum \text{Actual Items Disclosed}_{it}}{\text{Maximum Checklist Items}}$$

Content analysis is a common reliable and valid approach to measure the disclosure quantity and quality (Abdel-Fattah, 2008; Branco & Rodrigues, 2008; Elzahar & Hussainey, 2012; Krippendorff, 2013). Moreover, Krippendorff (2013) argues that content analysis ensures repeatability and valid references from data. Content analysis can be computerized (e.g. Hussainey et al., 2003; Kothari et al., 2009) or manual (e.g. Linsley & Shrivies, 2006; Abraham & Cox, 2007; Elzahar & Hussainey, 2012). Although computerized content analysis could save time, cost, reduce subjectivity and analyze large samples, this study employs manual analysis, since a number of requirements for the computerized analysis are not available in many of the sample annual reports. For example, the computerized analysis requires the availability of annual reports in the same language; English in most cases (Abdel-Fattah, 2008), which is not available in most Arab countries including the Saudi Arabia. Thus, similar to Abdel-Fattah (2008), this study employed manual analysis primarily due to the language barrier.

4.4. Independent Variables

This study presents a comprehensive diversified set of eleven independent variables to examine different CSR disclosure determinants. The first three are audit committee effectiveness, board independence, and the dual role of CEO and chairperson. The second three are ownership structure variables: government ownership, institutional ownership, and family ownership. The remaining variables are corporate characteristics presented as control variables: leverage, firm size, firm profitability, firm age, and industry type. It is noteworthy that this study measures audit committee effectiveness by an aggregate score similar to that used by Brown and Caylor (2006) and Jiang et al. (2008). This study also depends on the characteristics of audit committees recommended by the Saudi 2006 CG code. Table 2 summarizes the measurements and definitions of the study variables.

(Table following on the next page)

Table 2: Definitions and Measurements of the Variables

Symbol	Definition	Measurement
Dependent Variable:		
CSR _D	CSR Index	The ratio of CSR items disclosed by a firm <i>i</i> for the year <i>t</i> to the maximum number of social disclosure items in the prepared checklist.
Independent Variables:		
ACscore _{it}	Audit Committee Score	A proxy for AC effectiveness that takes the value one if the AC of the firm <i>i</i> and the year <i>t</i> , consists of fully independent members, with at least three members, one of whom is a financial expert, and holds at least three meetings a year, and zero otherwise.
Brdind _{it}	Board Independence	Board independence is measured by the ratio of outside directors to total number of directors on the board for the firm <i>i</i> during the year <i>t</i> .
DulRol _{it}	Role Duality	A dummy variable that equals one if the board chairman is also the CEO of the firm <i>i</i> and the year <i>t</i> , and zero otherwise.
Govown _{it}	Government Ownership	The ratio of shares held by the Saudi government or any of its agencies to the total number of outstanding shares of the firm <i>i</i> and the year <i>t</i> .
Instown _{it}	Institutional Ownership	The ratio of shares held by institutional investors to the total number of outstanding shares of the firm <i>i</i> and the year <i>t</i> .
Famown _{it}	Family Ownership	The ratio of shares held by family members to the total number of outstanding shares of the firm <i>i</i> and the year <i>t</i> .
Control Variables:		
Levrg _{it}	Firm Leverage	Total debts divided by the total assets of the firm <i>i</i> and the year <i>t</i> .
Asst _{it}	Firm Size	The natural logarithm of total assets of the firm <i>i</i> during the year <i>t</i>
ROA _{it}	Return on Assets	It is a proxy for firm performance, that is the ratio of total net income to the total assets of the firm <i>i</i> and the year <i>t</i> .
Age _{it}	Firm Age	The natural Logarithm of period from first establishment of the firm <i>i</i> to the year <i>t</i> .
Ind _{it}	Industry Type	This variable is divided into three dummy variables, each equals one if the firm <i>i</i> during the year <i>t</i> belongs to one of the following industries: Cement, petrochemicals and engineering, and real estate, and zero otherwise. The three selected industries are the biggest industries in the Saudi Arabia.

5. RESULTS

5.1. Descriptive Analysis

Table 3 shows the descriptive statistics of the study variables. First, the mean value of *CSR_D* variable is 4.114, indicating that the average *CSR_D* of the sample firms is about 24% (4/17). This average is higher than the averages for two samples of Saudi firms of 16% and 14.61% found by Macarulla and Talalweh (2012) and Al-Janadi et al. (2013), during 2008 and 2006-2007, respectively. This signifies an improvement in *CSR* Disclosure which may be linked to the application of the Saudi CG code in 2007. Second, the mean value of *ACscore* is 0.26, indicating that, on average, 26% of the sample audit committees meet the criteria to be effective, i.e., they consist of fully independent directors, at least three directors, one of whom is a financial expert, and meet at least three times a year. Third, the mean value of *Brdind* variable is 0.52, implying that, on average, more than half of the sample boards' directors are independent. This average is lower than the 68.14% found by Elzahar and Hussainey (2012) for a UK sample and 83.52% found by Al-Janadi et al. (2013) for a sample of Saudi firms. Fourth, the mean value of *DulRol* is 0.85, indicating that, on average, 85% of the sample boards' Chairmen are also CEOs. This indicates that the majority of our sample boards' Chairmen have a dual role. This average is very high, compared with 0.04 found by AbuRaya (2012) for a UK sample. Fifth, the mean value of *Govown* is approximately 0.08, lower than 11.19% found by Al-Janadi et al. (2013) for a sample of Saudi firms, while the mean value of *Famown* is 0.15 and the mean

value of *Instown* is 0.13. Furthermore, the maximum value of *Famown* is 95%, higher than 83% for *Govown* and 66% for *Instown*. This implies that family ownership dominates the ownership of Saudi firms, as argued by Albassam (2014).

Table 3: Descriptive Statistics (N= 267)

Variable	Mean	Min	Max	SD.	Median
CSR	4.114	0.000	17.000	0.4505	3.000
ACscore	0.260	0.000	1.000	0.814	0.330
Brdind	0.525	0.000	1.000	0.223	0.500
DulRol	0.852	0.000	1.000	0.356	1.000
Govown	0.077	0.000	0.830	0.172	0.000
Instown	0.132	0.000	0.660	0.194	0.000
Famown	0.151	0.000	0.950	0.238	0.000
Levrg	0.085	0.000	0.596	0.136	0.022
Asst	9.242	7.185	11.047	0.685	9.216
ROA	0.075	-0.108	0.310	0.090	0.071
Age	1.207	0.000	1.740	0.394	1.279
Indcmntit	0.115	0.000	1.000	0.319	0.000
Indptroenrg	0.129	0.000	1.000	0.336	0.000
Indrelstat	0.169	0.000	1.000	0.375	0.000

5.2. Pearson Correlation Test

The Pearson correlation test shows the strength and direction of correlations between the study variables and helps diagnose for any Multicollinearity problem. Table 4 shows that the highest independent variables' correlation is 0.46, which is between firm age and institutional ownership, followed by 0.40, between governmental ownership and cement industry.

Table 4: Pearson Correlation Test

Varia	CSR	ACsc	Brdi	DulRol	Govo	Insto	Fam	Levr	Asst	ROA	Age	Indcm	Indptr	Indr
CSR	1.00													
ACscore	0.29	1.00												
Brdind	-0.04	0.20	1.00											
DulRol	0.16	0.17	0.01	1.00										
Govown	0.35	0.03	-0.04	0.07	1.00									
Instown	-0.05	-0.01	-	0.06	-	1.00								
Famown	0.16	0.07	-	0.18**	-	0.24	1.00							
Levrg	-0.05	0.00	-	0.01	0.06	0.22	0.01	1.00						
Asst	0.46	0.16	-	0.16*	0.37	0.17	0.20	0.33	1.00					
ROA	0.09	-0.06	-0.05	0.17**	0.39	0.14	-0.02	0.06	-0.03	1.00				
Age	0.03	0.10	0.25	-0.08	0.15	-	-	-	-	0.17	1.00			
Indcmnt	0.17	0.01	0.22	0.16*	0.40	-	-	-	0.08	0.36	0.13	1.00		
Indptroenr	-0.04	-0.04	0.11	-0.16*	-0.05	0.15	-	0.34	0.20	-	-0.09	-0.14**	1.00	
Indrelstat	-0.08	-0.06	-	-0.06	-	0.25	0.15	-0.10	0.02	-0.04	-	-0.16*	-0.17*	1.00

*significant at 1%, ** significant at 5%, ***significant at 10%

However, this correlation does not represent a serious Multicollinearity problem between the independent variables, because is lower than 50%. For example, Hossain and Hammami (2009) do not consider a correlation of 52% to be a serious Multicollinearity problem. Furthermore, Bryman and Cramer (2001) argue that the correlation between independent variables represents a serious problem only if exceeds 80%. Nevertheless, the table shows that *Asst*, *Govown*, and *ACscore* variables are highly and positively correlated with *CSR* at 0.46, 0.35, and 0.29, respectively.

5.3. Regression Results

This study estimates the study model using the OLS analysis. Table 5 highlights the results. Overall, the study model is statistically significant, where $F\text{-value} = 6.600$ and $Prob>F = 0.000$. Furthermore, the study model explains about 38% of the total variation of CSR disclosure, where $adjusted R^2 = 0.38$. In relation to the first set of variables, *ACscore*, *Brdind*, and *DulRol*, the analysis finds that none is statistically significant. First, the coefficient of the *ACscore* variable is negative, but statistically insignificant ($\beta_1 = -0.358$, $t\text{-statistic} = -0.840$), which implies the existence of an effective AC may not be a determinant of CSR disclosure. This result contradicts those of Xie et al. (2003), Said et al. (2009) and Soliman and Ragab (2014) who find that existence of effective AC could play a positive role in enhancing the disclosure quality.

Table 5: Regression Analysis Results

Symbol	Definition	Coef.	t- statistic	P> t	
Cons.	Model Constant	β_0	-29.485*	-5.050	0.000
ACscore	Aggregated AC score	β_1	-0.358	-0.840	0.401
Brdind	Board Independence	β_2	0.565	0.490	0.622
DulRol	Role Duality	β_3	1.576	1.560	0.120
Govown	Governmental Ownership	β_4	4.621***	1.710	0.090
Instown	Institutional Ownership	β_5	0.960	0.540	0.591
Famown	Family Ownership	B6	3.014***	1.790	0.075
Levrg	Firm Leverage	β_7	-5.978**	-2.370	0.019
Asst	Firm size	B8	3.102*	5.000	0.000
ROA	Firm Profitability	B9	-0.764	-0.180	0.854
Age	Firm Age	β_{10}	2.809*	2.630	0.009
Indcmnt	Cement Industry	β_{11}	0.688	0.700	0.482
Indptoenrg	Petro-engineering Industry	β_{11}	0.379	0.380	0.706
Indrelstat	Real Estate Industry	β_{11}	-0.409	-0.480	0.633
Additional Statistics					
N= 267	F-value = 6.600	Prob>F = 0.000	Overall Adj. R-sq = 0.3773		

*Significant at 1%, **Significant at 5%, ***Significant at 10%

Second, the analysis finds that the coefficient of the *Brdind* variable is positive, but statistically insignificant ($\beta_2 = 0.565$, $t\text{-statistic} = 0.490$), indicating that board independence may not affect the CSR disclosure, and thus, could not be deemed a CSR disclosure determinant. This result is not in line with our second hypothesis and that of agency theory that independent directors on boards ought to play a positive role in reducing information asymmetry, and thus, increase the disclosure quality. However, this result is congruent with that of Haniffa and Cooke (2002) and Bukair and Abdul-Rahman (2015) who find insignificant correlation with CSR disclosure, and with that of Ho and Wong (2001) and Elzahar and Hussainey (2012) who find insignificant correlation between board independence and disclosure quality in general.

Third, the analysis finds that the coefficient of *DulRol* variable is positive, but statistically insignificant ($\beta_3 = 1.576$, $t\text{-statistic} = 1.560$). This result concludes that CEO/Chairman separation may not be a determinant of CSR disclosure, which contradicts our arguments and those of agency theory that separation of board chairman and CEO roles could improve the disclosure quality. Our results agree with Giannarakis et al. (2014) and Bukair and Abdul-Rahman (2015) who find that CEO/Chairman separation does not affect the CSR disclosure, and with Ho and Wong (2001) and Elzahar and Hussainey (2012) who find insignificant

correlation between role duality and voluntary disclosure in general. Accordingly, based on the results of the first set of variables, this study concludes that the three examined CG variables may not be beneficial in supporting and inspiring firms' managers towards greater CSR disclosure, and thus, could not be considered to be determinants of CSR disclosure.

Regarding the second set of variables, ownership variables, Table 5 shows that there is a significant positive correlation between the *Govown* variable and CSR disclosure at 10% ($\beta_4=4.621$, $t\text{-statistic}=1.71$), indicating that firms with higher government ownership are more likely to disclose greater levels of social information than other firms do. This result confirms the arguments and findings of Said et al. (2009), Ntim et al. (2013), and Al-Janadi et al (2013) that government ownership could promote social responsibility, transparency, and disclosure practices. The result confirms our argument that governments are socially-oriented, and thus, are more likely to be socially responsible in firms in which they hold ownership, which is expected to reflect positively on CSR disclosure. Accordingly, this study accepts the fourth hypothesis.

The results also show a positive but statistically insignificant correlation between the *Instown* variable and CSR disclosure ($\beta_5=0.960$, $t\text{-statistic}=0.540$), which implies that institutional ownership could not be deemed a determinant of CSR disclosure. This result contradicts agency theory and the efficient-monitoring hypothesis that institutional investors ought to provide a strong CG mechanism that has a positive impact on monitoring and disclosure quality. However, our result is consistent with those of Eng and Mak (2003) and Elzahar and Hussainey (2012) who find insignificant correlation between the two variables. Accordingly, this study rejects the study's fifth hypothesis.

Furthermore, the results show a statistically significant and positive correlation between *Famown* and CSR disclosure at 10% ($\beta_6=3.014$, $t\text{-statistic}=1.790$), concluding that firms with a high percentage of family ownership are more likely to disclose higher levels of CSR information. This result is consistent with our argument and that of Deniz and Suarez (2005) and Block and Wagner (2014) that family firms are more likely to play a positive socially responsible role, which could be reflect positively on CSR disclosure. Based on results of the ownership set of variables, this study concludes that governmental and family ownerships could be determinants of CSR disclosure; however, institutional ownership could not be a CSR disclosure determinant.

Regarding the third set of variables, corporate characteristics, the analysis shows that only firm leverage, firm size, and firm age could be determinants of CSR disclosure, while profitability and industry type are not. First, the coefficient of *Levg* variable is negative and statistically significant at 5% ($\beta_7=-5.978$, $t\text{-statistic}=-2.370$), implying that firms with higher leverage ratio are less likely to disclose more social information. One explanation for this result may be that highly leveraged firms may trade-off between two alternatives: (1) undertaking social voluntary activities and disclosure with additional costs or (2) paying existing debts. Choosing to reduce high debt levels instead of undertaking costly voluntary activities may appear to be a rational decision for majority of firms, which will be reflected negatively on the CSR disclosure.

Second, the coefficient of the *Asst* variable is found to be statistically significant at 1% and positively correlated with CSR disclosure ($\beta_8=3.102$, $t\text{-statistic}=5.000$), which implies that larger firms are more likely to disclose higher levels of CSR information. This result is consistent with agency theory that larger firms need to disclose more information in order to reduce the larger information asymmetry and agency costs (Elzahar & Hussainey, 2012). Another possible

explanation may be that larger firms have sufficient resources to afford to undertake voluntary social activities, and thus, additional CSR disclosure.

Third, the coefficient of the *Age* variable is positive and statistically significant at 1% ($\beta_{10}=2.809$, $t\text{-statistic}=2.630$), indicating that older firms tend to disclose higher levels of social information than do newer firms.

However, the analysis shows that both firm profitability and industry type variables are statistically insignificant in correlation with CSR disclosure, indicating that they are not determinants of CSR disclosure.

6. CONCLUSION

Although Saudi Arabia comprises 25% of the Arab world's GDP and is one of the world largest oil exporters, this study finds very few studies that examine CSR disclosure in the Kingdom. In order to fill this gap in the literature, this study aims to determine the extent of CSR disclosure and its main determinants in one of the emerging Arab countries, Saudi Arabia. The study examines a comprehensive set of 11 variables across CG, ownership structure and corporate characteristics in order to determine the CSR disclosure determinants. This study is important since it evaluates the impact of the Saudi CG code which was applied in 2007, but from a voluntary disclosure perspective. This study employ a self-constructed checklist comprising 17 items relating to CRS disclosure based on ISO 26000. The research uses both the manual content and multiple regression analyses to examine a sample of 267 annual reports during 2007-2011. The results indicate that the CSR disclosure average is about 24% which is higher than the 14.61% and 16% found by Al-Janadi et al. (2013) and Macarulla and Talalweh (2012) for 2006-2007 and 2008 in Saudi Arabia, respectively, implying an improvement in the CSR disclosure level. This may be due to the application of the Saudi CG code at the beginning of 2007. Moreover, the analysis finds significant positive correlations between government ownership, family ownership, firm size, and firm age and CSR disclosure, and a significant negative correlation with firm leverage and CSR disclosure. However, the analysis finds no evidence of correlation between an effective AC, board independence, role duality, institutional ownership, firm profitability, and industry type and CSR disclosure. The study results provide a number of important implications. First, for CG regulators, the results confirm that the application of the Saudi CG code in 2007 may be one of the reasons for the improvement in CSR disclosure. Furthermore, CG regulators should also recognize the positive role that governments and families could play in enhancing the CSR disclosure through shareholdings. Second, for stakeholders, the findings suggest that they should exert greater pressure on managers to disclose extra social information, since the CSR disclosure average is relatively low. Moreover, stakeholders should not expect a high level of CSR disclosure from highly leveraged firms, since these firms appear to prefer to save the costs of extra disclosure in order to repay debts and reduce their high leverage rates. However, this study suffers from a number of limitations. First, the study sample is relatively small. This is due to the use of manual content analysis that requires a considerable time and effort. Second, the study evaluates the period after the application of the Saudi CG code in 2007 and neglects the earlier period. Third, this study measures the quantity of CSR disclosure rather than the qualitative characteristics of the disclosed information. Fourth, the self-constructed checklist comprises a small number of CSR disclosure items, only 17 items. Rizk et al. (2008) state that the checklist items in previous studies range from 17 to 224 items; this means that this study applies the minimum. Future research could overcome these limitations by enlarging the sample size and undertaking a comparative study between the periods before and after the application of the

Saudi CG code in 2007. Moreover, it would be interesting to use computerized content analysis which is more accurate and valid. Furthermore, future studies could fill the voluntary disclosure literature gap by examining the economic consequences of CSR disclosure, i.e., the influence of CSR disclosure on the cost of capital, analyst following, or firm value. Finally, a cross-country study would be beneficial to understand the influence of differences in regulations and cultures on CSR disclosure practices.

LITERATURE

1. Abdel-Fattah, T. M. H. 2008. Voluntary disclosure practices in emerging capital markets: the case of Egypt. PhD Thesis. Durham University.
2. Abraham, S. and P. Cox. 2007. Analyzing the determinants of narrative risk information in UK FTSE 100 annual reports. *The British Accounting Review* 39 (3): 227-248.
3. AbuRaya, R. K. 2012. The relationship between corporate governance and environmental disclosure: The UK evidence. PhD Thesis, Durham University.
4. Albassam, W. M. 2014. Corporate governance, voluntary disclosure and financial performance: an empirical analysis of Saudi listed firms using mixed-methods of research design. PhD Thesis. University of Glasgow.
5. Al-Fayoumi, N., B. Abuzayed and D. Alexander. 2010. Ownership structure and earnings management in emerging markets: the case of Jordan. *International Research Journal of Finance and Economics* 38 (1): 28-47.
6. Al-Janadi, Y., R. A. Rahman and N. H. Omar. 2013. Corporate governance mechanisms and voluntary disclosure in Saudi Arabia. *Research Journal of Finance and Accounting* 4 (4): 25-36.
7. Alves, H., A. M. Rodrigues and N. Canadas. 2012. Factors influencing the different categories of voluntary disclosure in annual reports: an analysis for Iberian Peninsula listed companies. *Review of Applied Management Studies Journal* 10 (1): 15-26.
8. Amran, A., A. M. R. Bin and B. C. Hassan. 2009. Risk reporting: an exploratory study on risk management disclosure in Malaysian annual reports. *Managerial Auditing Journal* 24 (1): 39-57.
9. Barako, D. G. and A. M. Brown. 2008. Corporate social reporting and board representation: evidence from the Kenyan banking sector. *Journal of Management and Governance* 12 (4): 309-324.
10. Block, J. H. and M. Wagner. 2014. The effect of family ownership on different dimensions of corporate social responsibility: evidence from large US firms. *Business Strategy and the Environment* 23 (7): 475-492.
11. Botosan, C. A. 1997. Disclosure level and the cost of equity capital. *The Accounting Review* 72 (3): 323-349.
12. Branco, M. C. and L. L. Rodrigues. 2008. Factors influencing social responsibility disclosure by Portuguese companies. *Journal of Business Ethics* 83 (4): 685-701.
13. Brown, D., and L. Caylor. 2006. Corporate governance and firm valuation. *Journal of Accounting and Public Policy* 25 (4): 409-434.
14. Bryman, A., and D. Cramer. 2001. *Quantitative data analysis with SPSS Release 10 for windows: A guide for social scientists (1st Ed.)*. Routledge, London.
15. Bukair, A. A. and A. A. Rahman. 2015. The effect of the board of directors' characteristics on corporate social responsibility disclosure by Islamic banks. *Journal of Management Research* 7 (2): 506- 519.

16. Chen, J. and R. Roberts. 2010. Toward a more coherent understanding of the organization-society relationship: theoretical considerations for social and environmental accounting research. *Journal of Business Ethics* 97 (4): 651-665.
17. Claessens, S. 2003. Corporate governance and development. Global Corporate Governance Forum, Washington, DC.
18. Das, S., R. Dixon and A. Michael. 2015. Corporate social responsibility reporting: a longitudinal study of listed banking companies in Bangladesh. *World Review of Business Research* 5 (1): 130-154.
19. Deniz, D. and M. K. C. Suarez. 2005. Corporate social responsibility and family business in Spain. *Journal of Business Ethics* 56 (1): 27-36.
20. Elzahar, H. and K. Hussainey. 2012. Determinants of narrative risk disclosures in UK interim reports. *Journal of Risk Finance* 13 (2): 133-147.
21. Eng, L. and Y. Mak. 2003. Corporate governance and voluntary disclosure. *Journal of Accounting and Public Policy* 22 (4): 325-345.
22. Fama, E. 1980. Agency problems and the theory of the firms. *Journal of Political Economy* 88 (2): 288-307.
23. Fama, E. and M. Jensen. 1983. Separation of ownership and control. *Journal of Law and Economics* 26 (2): 301-325.
24. Forker, J. J. 1992. Corporate governance and disclosure quality. *Accounting and Business Research Journal* 22 (86): 111-124.
25. Giannarakis, G., G. Konteos and N. Sariannidis. 2014. Financial, governance and environmental determinants of corporate social responsible disclosure. *Management Decision* 52 (10): 1928-1951.
26. Gill, A. 2008. Corporate governance as social responsibility: a research agenda. *Berkeley Journal of International Law* 26 (2): 452-478.
27. Haniffa, R. M. and T. E. Cooke. 2002. Culture, corporate governance and disclosure in Malaysian corporations. *ABACUS* 38 (3): 317-349.
28. Haniffa, R. M. and T. E. Cooke. 2005. The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy* 24: 391-430.
29. Hossian, M. and H. Hammami. 2009. Voluntary disclosure in the annual reports of an emerging country: the case of Qatar. *Advanced in Accounting, Incorporating Advances in International Accounting* 25 (2): 255-265.
30. Ho, S. S. M. and K. S. Wong. 2001. A study of the relationship between corporate governance structures and the extent of voluntary disclosure. *Journal of International Accounting, Auditing and Taxation* 10 (2): 139-156.
31. Hussainey, K., M. Elsayed and M. A. Razik. 2011. Factors affecting corporate social responsibility disclosure in Egypt. *Corporate Ownership and Control Journal* 8 (4): 432-443.
32. Hussainey, K., T. Schleicher and M. Walker. 2003. Undertaking large-scale disclosure studies when AIMR-FAF ratings are not available: the case of prices leading earnings. *Accounting and Business Research* 33 (4): 275-294.
33. Jensen, M., and W. Meckling. 1976. Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3 (4): 305-360.
34. Jiang, W., P. Lee and A. Anandarajan. 2008. The association between corporate governance and earnings quality: Further evidence using the GOV-Score. *Advances in Accounting* 24 (2): 191-201.

35. Khan, M. H. 2010. The effect of corporate governance elements on corporate social responsibility (CSR) reporting: empirical evidence from private commercial banks of Bangladesh. *International Journal of Law and Management* 52 (2): 82-109.
36. Khan, A., M. B. Muttakin. and J. Siddiqui. 2013. Corporate governance and corporate social responsibility disclosures: evidence from emerging economy. *Journal of Business Ethics* 114 (2): 207-223.
37. Khasharmeh, H. A. and A. M. Desoky. 2013. On-line corporate social responsibility disclosures: the case of the Gulf cooperation council countries. *Global Review of Accounting and Finance* 4 (2): 39-64.
38. Kothari, S. P., X. Li and J. E. Short. 2009. The effect of disclosures by management, analysts, and business press on cost of capital, return volatility, and analyst forecasts: a study using content analysis. *The Accounting Review* 84 (5): 1639-1670.
39. Krippendorff, K. 2013. *Content Analysis: An Introduction to its Methodology*. Third Edition. Sage Publications, Inc. USA.
40. Li, J., R. Pike and R. Haniffa. 2008. Intellectual capital disclosure and corporate governance structure in UK firms. *Accounting and Business Research* 38 (2): 137-159.
41. Linsley, P. and P. Shrivies. 2006. Risk reporting: a study of risk disclosure in the annual reports of UK companies. *The British Accounting Review* 38 (4): 387-404.
42. Macarulla, F. L. and M. A. Talalweh. 2012. Voluntary corporate social responsibility disclosure: a case study of Saudi Arabia. *Jordan Journal of Business Administration* 8 (4): 815-830.
43. Madawaki, A., and N. A. Amran. 2013. Audit committees: How they affect financial reporting in Nigerian companies. *Journal of Modern Accounting and Auditing* 9 (8): 1070-1080.
44. Mallin, C., G. Michelon and D. Raggi. 2013. Monitoring intensity and stakeholders' orientation: how does governance affect social and environmental disclosure? *Journal of Business Ethics* 114 (1): 29-43.
45. Mandurah, S., J. Khatib and S. A. 2012. Corporate social responsibility among Saudi Arabian firms: an empirical investigation. *The Journal of Applied Business Research* 28 (5): 1049-1058.
46. Ntim, C. and T. Soobaroyen. 2013. Black economic empowerment disclosures by South Africa listed corporations: the influence of ownership and board characteristics. *Journal of Business Ethics* 116 (1): 121-138.
47. Oh, W. Y., Y. K. Chang and A. Martynov. 2011. The effect of ownership structure on corporate social responsibility: empirical evidence from Korea. *Journal of Business Ethics* 104 (2): 283-297.
48. Rizk, R., R. Dixon and A. Woodhead. 2008. Corporate social and environmental reporting: a survey of disclosure practices in Egypt. *Social Responsibility Journal* 4 (3): 306-323.
49. Said, R., Y. H. Zainuddin and H. Haron. 2009. The relationship between corporate social responsibility disclosure and corporate governance characteristics in Malaysian public listed companies. *Social Responsibility Journal* 5 (2): 212-226.
50. Sheldon, O. 1924. *The philosophy of management*. Sir Isaac Pitman and Sons Ltd: London, England.
51. Siregar, S. V. and Y. Bachtiar. 2010. Corporate social reporting: empirical evidence from Indonesia Stock Exchange. *International Journal of Islamic and Middle Eastern Finance and Management* 3 (3): 241-252.

52. Soliman, M. M., M. B. El-Din and A. Sakr. 2012. Ownership structure and corporate social responsibility: an empirical study of the listed companies in Egypt. *The international Journal of Social Sciences* 5 (1): 63- 74.
53. Soliman, M. M. and A. A. Ragab. 2014. Audit committee effectiveness, audit quality and earnings management: an empirical study of the listed companies in Egypt. *Research Journal of Finance and Accounting* 5 (2): 155-166.
54. Xie, B., W. N. Davidson and P. J. DaDalt. 2003. Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance* 9 (3): 295-316.