Board Gender Diversity and CSR Reporting: Evidence from Jordan

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Abstract

This study investigates whether board gender diversity influences corporate social responsibility (CSR) reporting in Jordan, where there are no gender board balance regulatory requirements. Data was examined from all non-financial Jordanian listed companies for the period of 2006 to 2015. This longitudinal data results in balanced panel data of 800 observations. A content analysis method was used to obtain the reporting index of CSR disclosure in the annual reports. Ordinary least square regression showed that the presence of female directors on a board has a significantly positive effect on the level of CSR reporting. The presence of female directors on the board appears to play a significant role in enhancing compliance with corporate governance best practices. These results provide motivations for companies to consider gender balance on boards. Further, these results reinforce the decision making of regulators in countries where policies have been adopted to increase female representation on corporate boards. In countries where no such regulation exists the inclusion of gender balance practices within boards of directors may increase the level of CSR reporting practices. This study can be considered as one of the few empirical studies that have evaluated the impact of board gender diversity on the level of CSR reporting in a context where there are no gender balance strategies or policies.[6]

JEL classification: M40, G10.

Keywords: Board gender diversity, CSR Reporting, Jordan, Middle East, Legitimacy Theory

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1. Introduction

Corporate boards play an important role in shaping internal corporate governance mechanisms. The primary responsibility of the board is controlling and monitoring managers' decisions and overseeing company activities (Said et al., 2009; Habbash, 2016). The board acts as the stakeholder's representative in implementing effective corporate governance mechanisms to improve accountability, monitoring, and transparency within the companies. Hence, effective corporate governance depends on the level of activity of the board of directors in addressing these functions (Esa and Zahari, 2016). In addition, the board of directors perform an important role in the decision making process, particularly in regard to the level and quality of corporate social responsibility (CSR) reporting (Rao and Tilt, 2016a). This is a result of the board influencing disclosure policies and practices to ensure effective control mechanisms for reporting.

Corporate boards with diverse directors are more likely to improve control and monitoring of managers in the companies and enhance disclosures practices to manage the interest of various shareholder groups (Liao et al., 2016). This type of board structure is expected to be more likely to engage in CSR activities and reporting (Bear et al., 2010; Liao et al., 2016). This is because CSR reporting is an important communication instrument which can deliver voluntary information, greater corporate transparency, and facilitate better engagement with all stakeholders' groups (Golob and Bartlett, 2007). As CSR reporting is voluntary in nature, it provides an appropriate setting to examine the role of board diversity in reporting CSR information.

This study examines the impact of board gender diversity on the level of CSR reporting in Jordan. Board characteristics is an important corporate governance factor that determines the level of social and environmental disclosures. The extant literature suggests that the presence of female directors on the board may increase a company's connection with stakeholders (Bear et al., 2010; Willows and van der Linde, 2016). In this regard, Liao et al. (2016) argued that stakeholders might view boards with gender diversity as an indicator that these companies have higher levels of social responsibility and management accountability. Bear et al. (2010) supports this argument and suggests that companies with more than one female director on the board will engage in more CSR activities and related disclosures.

Female directors may enhance board diversity in a manner consistent with the propositions of social role theory. Social role theory (Eagly, 2009) suggested that males and females play different roles in society and that there is a gender-based expectation according to the role they play. Females are thought to be more communal, for example; unselfish, caring, and emotionally expressive, while males are thought to be agentic, for example; competitive and dominant (Eagly, 2009). Resource dependence theory has been suggested by Cruz et al. (2018) to explain how women provide different and non-traditional professional experiences and backgrounds. This concept is supported by Singh et al. (2008) who suggest that these different experiences and backgrounds enhance decision-making and enable the board to better perform its tasks, including CSR tasks. Cook and Glass (2018) used token theory and critical mass theory to test their predictions concerning the ability of female members on the board of directors to advance the disclosure of CSR information. Their findings reinforced the proposition that female directors are associated with strong company level commitment to CSR. This finding occurred even in the presence of a sole or token female board member. This study focused on large US companies. Hence, the findings support the proposition that there are benefits of women on company boards, particularly in an environment where there is legislation that encourages female's presence on these boards. Additionally, the authors suggested that future research could better specify the cultural, legal, political, and economic conditions that enable female board members to influence board decisions and company policy(Cook and Glass, 2018). They also propose that future research could adopt a longitudinal approach so that the impact of female directors could be identified including their ability to grow influence over time (Cook and Glass, 2018). Jordan does not have gender board balance strategies or policies, and therefore, provides a control environment to test the relationship between gender diversity on boards and CSR reporting.

This study investigates all non-financial listed companies on the Amman Stock Exchange (ASE) for the period of 2006 to 2015. Financial sectors are excluded because their disclosure requirements are different to non-financial sectors (Ahmed Haji, 2013; Al-Rahahleh, 2017). The longitudinal data results in balanced panel data of 800 observations. A content analysis method was used to assess the reporting index of the CSR disclosure in the annual reports. To determine the association between corporate governance factors and the level of CSR reporting, multiple regression analysis (ordinary least square) was used.

The remainder of this paper is organised as follows. The next section reviews the literature. The third section presents an overview of corporate governance and CSR reporting in Jordan. The fourth section provides the theoretical framework and hypothesis development. The fifth section explains the study design and methodology. The sixth section discusses the empirical findings of the study. The final section submits the conclusion, implications and further directions for research.

2. Literature Review

Board diversity, specifically board gender diversity, has received significant attention from regulatory bodies in many countries and is an ongoing global concern. Many countries are working towards improving the gender balance within corporate boards. For example, Australian public listed companies are required to report on gender diversity at board and senior management levels (Rao and Tilt, 2016a). French law also requires that female directors should represent 50% of the board of directors (Bøhren and Strøm, 2010).

There is a growing amount of literature that emphasises the importance of board gender diversity in decision making. However, limited attention has been devoted to linking board gender diversity with the CSR reporting decision-making process. The existing literature suggests that females are generally considered to be more socially sensitive and ethically concerned than their male counterparts, and that gender balance may affect the disclosure levels of CSR information (Bear et al., 2010; Frias-Aceituno et al., 2013; Kiliç et al., 2015; Ibrahim and Hanefah, 2016; Rao and Tilt, 2016b). Most of the prior studies have revealed a positive relationship between CSR reporting and board gender diversity (Bear et al., 2010; Ibrahim and Hanefah, 2016; Isa and Muhammad, 2016; Liao et al., 2016; Rao and Tilt, 2016b). Bear et al. (2010) suggest that female directors are socially influential and are more likely to prefer to engage in environmental and social activities than male counterparts. Rao and Tilt (2016b) suggests that female and male directors have differing values when it comes to CSR issues. Isa and Muhammad (2016) also argued that female directors on the board may have different skills, experience, and prestige compared to the male directors. Hence, female directors may encourage companies to be better corporate citizens and disclose more information related to CSR.

One significant gap in the literature relates to corporate governance and CSR reporting. There is currently a paucity of such research in developing countries. Limited prior studies which have been conducted in developing countries have concentrated on financial sectors such as banks (Khan, 2010; Bukair and Rahman, 2015; Kiliç et al., 2015) where the disclosure requirements are different than compared to non-financial sectors (Ahmed Haji, 2013; Al-Rahahleh, 2017). Other studies which have examined non-financial sectors in developing countries found mixed results. For example, the impact of female directors on the level of CSR reporting were found significantly positive (Isa and Muhammad, 2016; Katmon et al., 2017), while others find insignificantly positive (Majeed et al., 2015; Yusoff et al., 2016), and negatively significant (Muttakin et al., 2015). Consequently, further research in a different institutional context provides important evidence since there is no consensus within the findings on the relationship between board gender diversity and the level of CSR reporting. There is also a lack of such research in the context of developing countries.

The influence of board gender diversity on the level of CSR reporting studies has received scant attention in the context of Jordan (Ibrahim and Hanefah, 2016). However, the presence of a female director on the board was investigated by Ibrahim and Hanefah (2016). Their study found that average female membership on the board is 2.7% in Jordanian listed companies and that the presence of female directors is positively associated with CSR reporting. In this study, the authors examined companies on the first and second markets of the ASE including financial, services, and industrial sectors over the period of 2007-2011. Financial sectors have different disclosure requirements and a different corporate governance code when compared to non-financial companies. Therefore, their study finding are not able be generalised to non-financial companies. To address this gap, this study examines all non-financial sector companies over longitudinal balanced panel data of 800 observations. This study contributes to corporate governance and CSR reporting practices literature in developing countries and the Middle East by addressing this gap in the literature.

3. Corporate Governance and CSR Reporting in Jordan

Jordan provides an appropriate setting for this study due to a number of factors. First, Jordan is located in the Middle East and has different regulatory and cultural environments and, different economic considerations from developed countries (Barakat et al., 2015; Ibrahim and Hanefah, 2016). Known as the Hashemite Kingdom of Jordan it is safe, politically stable, and has a well-organised legal context (Naser et al., 2002; Ismail and Ibrahim, 2008; Barakat et al., 2015). However, the instability which has occurred in the surrounding Arab countries since 2011 (including events such as the Iraqi and Syria crisis and the resultant flow of refugees into Jordan) has affected the economy and placed stress on the limited resources of Jordan (Haddad et al., 2017).

Corporate social and environmental reporting is one of the Jordanian government priorities (Barakat et al., 2015; Ibrahim and Hanefah, 2016). This is because good CSR reporting practices are seen as a way of attracting local and foreign investment in Jordan. Accordingly, the government has issued legislation and regulations to improve CSR reporting in annual reports (Ibrahim and Hanefah, 2016; Haddad et al., 2017). This intent can be seen in the Environmental Protection Law (enacted in 1995 and amended in 2006), Securities Commission Law No.1 (1998), and the Instructions and Guides issued by the Jordan Securities Commission (JSC 2004). These regulations required companies who do not report social and environmental information to clearly state that they do not provide that information in their annual report, however, there was no requirement to explain the reason for omission (Ibrahim and Hanefah, 2016; Haddad et al., 2017).

In 2009, the Jordanian Corporate Governance Code (JCGC) was issued and stated that *"the Company shall disclose its policy regarding the local community and the environment"*. Companies are expected to comply with the requirements of this code, and those that do not comply must explain the reason in their annual report. This comply or explain approach was designed as a mechanism to gradually obtain complete compliance with the code (Jordan Securities Commission, 2009). In addition, the code did not prescribe guidelines for which CSR activities require disclosure. Therefore, CSR reporting is not fully regulated and is still a voluntary action in Jordan.

The JCGC started taking effect on ASE public listed companies (Jordan Securities Commission, 2009; Shanikat and Abbadi, 2011) in 2009. The second chapter of the JCGC deals with the board of directors of shareholding companies. This chapter clarified that members of the board of director should be qualified, experienced, and elected by a cumulated voting system in the general assembly meeting representing all stakeholders. There must be not less than five members and not more than thirteen appointed for a maximum period of four years. In addition, one-third of the board members are required to be independent. However, the code does not require publicly listed companies to report on gender diversity at senior management and board levels. Female representation on corporate boards of the public listed companies is not mentioned in this code or in any other regulations within Jordan (Jordan Securities Commission, 2009; Ibrahim and Hanefah, 2016; Al-Rahahleh, 2017).

Jordanian females represent 47 % of the total population. The literacy rate among adult female is 90% with an average of 14.8% who hold a bachelor degree or above. Yet only 16.3 % of the total employed persons in the country are female. Their unemployment rate is considerably higher than males with an average of 24.1 % and 13.3 % respectively (Jordan Department of Statistics, 2016). Females in the Jordanian labour market are supported and protected by the law and regulations such as the constitution of the Hashemite Kingdom of Jordan January 1, 1952, and the Jordanian Labour Law no. (8) 1996. Despite this protection under Jordanian law female workers still face difficulties in the labour market, and differences in wage range and employment positions are evident when compared with males (Ibrahim and Hanefah, 2016).

4. Theoretical Framework and Hypothesis Development

The most widely used theory to explain the variations in levels of CSR reporting is legitimacy theory (Deegan et al., 2002; Rashid, 2018). Legitimacy can be considered as a process that leads to the company being adjudged legitimate and may be considered as a resource on which companies depend for their survival. Hence, companies may attempt to manage this process via various reporting strategies to gain approval for their activities within the environment in which they operate (Islam and Deegan, 2008).

Corporate social reporting is perceived as one of the legitimation strategies that companies adopt to inform the public perception about their activities or to avoid the threats to their legitimacy (Lindblom, 1994; Haniffa and Cooke, 2005). The relationship between legitimacy and CSR reporting is expected to be stronger when there is an event such as a change in policy or regulation that influences the expectations of the public (Patten, 1992; Rashid, 2018). Companies may take actions to close the perceived legitimacy gap and conform to the prevailing expectations (Dowling and Pfeffer, 1975; Islam and Deegan, 2008). Therefore, companies may adopt CSR reporting as a legitimation strategy and voluntarily disclose more CSR information to influence external perceptions of its responsibilities and activities (Deegan et al., 2002).

Prior research has suggested that board gender diversity is a corporate governance attribute which increases board control, monitoring of the company's decision making, and enhancement of relationships with stakeholder groups including society (Carter et al., 2003; Ellis and Keys, 2003). Diversity on the board improves board effectiveness and meeting frequency, especially in the presence of female directors (Adams and Ferreira, 2004). From a legitimacy theory perspective, companies may adopt CSR reporting as a legitimation strategy, and there is some evidence that female directors on the board facilitate this (Majeed et al., 2015; Willows and van der Linde, 2016). Female representation on the board may also increase board effectiveness, improve board discussion, enhance the quality of decision-making, and improve reporting practices (Carter et al., 2003; Sartawi et al., 2014). Female directors provide different perspectives, and this may increase discussion about social issues as well as enhance CSR reporting practices (Bear et al., 2010; Kiliç et al., 2015). Females also alert the board to CSR activities as they are more likely than males to be sensitive to community matters (Muttakin et al., 2015). Therefore, the presence of female directors may prompt increased voluntary CSR reporting to ensure that companies' conform to public expectations. This discussion leads to the following hypothesis:

H1: There is a positive relationship between female directors' presence on the board and the level of CSR reporting.

5. Research Design

5.1 Data

This study has excluded financial companies such as insurance, banks, diversified financial services, and real estate. This exclusion is necessary due to two main reasons. First, there are significant differences in the application of accounting policies by financial and non-financial companies. Secondly, there are different sets of instructions and rules of disclosure requirements for financial companies compared to non-financial companies (Haniffa and Cooke, 2005; Goodwin-Stewart and Kent, 2006; Ghazali, 2007; Abed et al., 2012; Ahmed Haji, 2013; Ho and Taylor, 2013; Esa and Zahari, 2016; Habbash, 2016). Additionally, unlisted and suspended companies over the total period of the study were omitted from the study. Further companies were omitted where annual reports were not accessible. Table 1 summarises the data selection process to show the total number of companies included in this study.

Table 1: Summary of the study population

Study Population Summary	No. of ASE listed Companies
Total number of ASE-listed companies as of 31st Dec 2015	228
Less: financial companies	(111)
Less: companies which were not listed for entire study period	(23)
Less: companies with unavailability of annual reports	(11)
Less: suspended companies during the study period	(3)
Total number of non-financial companies in this study	**80**

The data was sourced from the annual reports of the non-financial publicly listed companies on the Amman Stock Exchange for the period 2006-2015. Table 2 shows the breakdown of the 80 companies contained in a balanced panel data of 800 observations for the annual reporting periods from 31 December 2006 to 31 December 2015.

Table 2: Description of non-financial sectors

Sectors	Number of companies in the study	Observed Companies Years	Observation in %
Industrial	45	450	56.25
Services	35	350	43.75
Total	**80**	**800**	**100.00**

Data was collected from 2006 onwards because annual reports were unavailable prior to 2006 on the ASE website. The 2015 annual report data was the most recent year for which data was available. Annual reports were selected as the data source as it has been reported as the most reliable source for financial and non- financial information (Neu et al., 1998). This is consistent with the prior research on corporate governance and CSR disclosures (Milne and Adler, 1999; Rashid and Lodh, 2008; Said et al., 2009; Ahmed Haji, 2013; Majeed et al., 2015; Isa and Muhammad, 2016).

5.2 Measurement of variables

5.2.1 Dependent variable

The corporate social responsibility (CSR) reporting index is the dependent variable in this study. This index was created by observing the different areas of disclosures within the annual reports of companies. A content analysis method was employed to codify the selected annual report content into different categories (Guthrie and Abeysekera, 2006). Analysing annual reports using content analysis method is empirically appropriate in the field of CSR reporting (Guthrie and Parker, 1990).

The proposed checklist of voluntary CSR information is derived from a number of disclosure areas such as environmental, community involvement, marketplace and workplace disclosures. This approach is consistent with prior research on CSR reporting in developing countries (Ghazali, 2007; Rashid and Lodh, 2008; Barakat et al., 2015; Rashid, 2015; Isa and Muhammad, 2016; Omar et al., 2016; Ahmad et al., 2017). In order to avoid CSR information repetition, this study has ignored any other external reporting by the companies. Further, a pilot test was undertaken on 35 companies in order to test the validity of the proposed checklist. Consequently, 48 items of the checklist have been modified to confirm the relevance to Jordanian companies (See Appendix). In addition, to confirm the CSR reporting index reliability, two independent research assistants were asked to repeat the coding procedure. This approach is consistent with the methods advocated by Khan (2010).

The CSR score is based on an unweighted method, which is consistent with prior studies (Ghazali, 2007; Omar and Simon, 2011; Ahmed Haji, 2013; Barakat et al., 2015). An unweighted method assumes that all CSR reporting measures are valued equally irrespective of their importance or significance to any particular stakeholder group. Therefore, a value of 1 was given if an item in the checklist is disclosed by the company; otherwise, a value of 0 was given. This process calculates the total binary variable score awarded to each company by a maximum number of checklist items to achieve the ratio of CSR reporting index. The following formula presents the CSR reporting index calculation as used by Sharif and Rashid (2014):

$$\text{CSRRI} = \sum d_i^{48} / n_j$$

Where:

CSRRI = Corporate Social Responsibility Reporting Index

n_j= Total number of items for j^{th} companies $n_{j\leq}$ 48

d_i= Equal 1 if items included in the checklist and 0 if otherwise

5.2.2 Independent and control variables

Board gender diversity was the independent variable utilised for this study. The study has recognised that only 5% of the non-financial Jordanian public listed companies have 2 or 3 female directors on the board. This suggests that 95% of companies may have at least one female director on the board. Therefore, board gender diversity is measured as a dichotomous variable equal to 1 if there was a female director on the board and 0 otherwise (Ghabayen et al., 2016; Nekhili et al., 2017; Yaseen et al., 2018).

Following prior research on corporate governance and CSR reporting, this study includes governance factors and company characteristics as control variables that may influence the level of CSR disclosures. These include board independence, government ownership, debt ratio, and company age (Rashid and Lodh, 2008; Said et al., 2009; Oh et al., 2011; Ahmed Haji, 2013; Barakat et al., 2015; Habbash, 2016; Liao et al., 2016; Rao and Tilt, 2016b).

Independent directors on the board may encourage management to increase the level of voluntary CSR reporting to enhance their reputation, legitimacy, and honour in the society (Liao et al., 2015). Board independence is measured as a dummy variable equal to 1 if there is an independent member presence on the board and 0 otherwise (Al Fadli et al., 2018). Ghazali (2007) and Abdullah et al. (2011) argued that shares held by the government would position the company in the public eye. Hence, this type of company may be expected to promote more voluntary CSR disclosures to enhance public perception about their legitimacy (Ghazali, 2007; Ahmed Haji, 2013). Following Ahmed Haji (2013) and Habbash (2016), the ratio of government ownership refers to the total shares owned by the government or any of its agencies to the total number of shares issued.

High debt ratio companies also tend to report more CSR information in an effort to manage their legitimation process and to enhance their credibility to stakeholders who control the resources on which the company is dependent upon (Rashid and Lodh, 2008). This study measures the debt ratio as the ratio of the total liabilities divided by total assets (Khan et al., 2013; Habbash, 2016). Older companies have been found to report more CSR information than younger companies to maintain their legitimacy and reputation with the public at large (Habbash, 2016). Thus company age is measured as a ratio of the total years of company establishment. This consistent with Rashid and Lodh (2008) and Oh et al. (2011).

5.3 Model

Longitudinal (panel data) was used to investigate the impact of board gender diversity on the level of CSR reporting. The study estimates two multivariate ordinary least squares (OLS) regression models on CSR reporting in Jordan. The first model includes all independent and control variables. However, evidence from prior studies has shown that the level of CSR reporting may be influenced by both the nature of the company's business activities and over time (Ghazali, 2007; Barakat et al., 2015; Ibrahim and Hanefah, 2016; Rashid, 2018). Therefore, the second model employs a multiple regression model (OLS) by adding industry and time effects via the inclusion of dummy variables. Both models are shown below.

Model (1)

$$\boldsymbol{CSRRI = \beta 0 + \beta 1\ BGD + \beta 2\ BDIND + \beta 3\ GOVOWN + \beta 4\ DR + \beta 5\ AG + \varepsilon}$$

Model (2)

$$\boldsymbol{CSRRI = \beta 0 + \beta 1\ BGD + \beta 2\ BDIND + \beta 3\ GOVOWN + \beta 4\ DR + \beta 5\ AGE + \beta 6\ INDUSTRY + \beta 7\ TIME + \varepsilon}$$

Where:

CSRRI is the corporate social responsibly reporting index. **BGD** is board gender diversity. **BDIND** is board independence. **GOVOWN** is **government** ownership. **DR** is debt ratio. **AGE** is companies' age. **INDUSTRY** is industry type dummy. **TIME** is year dummy. **β** = Beta coefficient. **ε** = Error term.

The assumptions of statistical analysis (such as normality, no multicollinearity, homoscedasticity, and no endogeneity problem) have been met in the above regression equation (Khan et al., 2013; Rashid, 2015; Habbash, 2016; Rao and Tilt, 2016b). The assumption of normality means that the data observations must be normally distributed. Pallant (2007) argued that this assumption is comparatively irrelevant if the study has a large number of observations; 30 observations or more. However, the Jarque-Bera test was used in this study to test normality of the data. The result indicates that the range of probability is 0.00 across all variables and as a result the assumption of normality is met.

Correlation statistical analyses, including Variance Inflation Factor (VIF) tests, were examined to test the correlation coefficients between sets of variables. This helped to diagnose any multi-collinearity problems (Weisberg, 2005). The problem of multicollinearity occurs if a significant correlation is found between independent variables. In this instance, the high correlated variables must be omitted from the analysis. However, as shown in table 5, the highest VIF value of the independent variables is 1.15, which indicates that high collinearity is not present in the data (Gujarati, 2003).

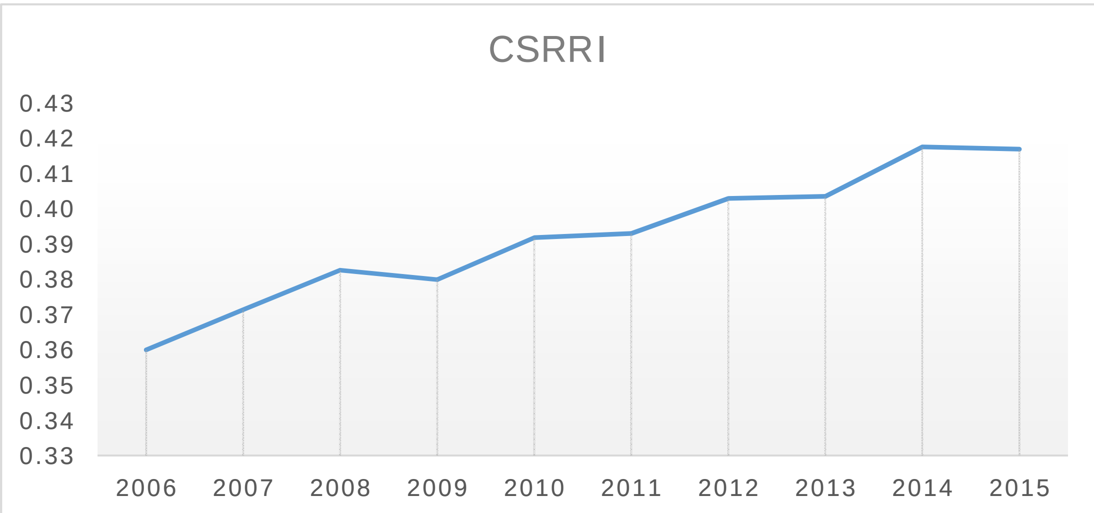
In order to meet the heteroscedasticity assumption, this study has analysed the scatter plot of the residuals (ZRESID) against the predicted value (ZPRED), chi square, Breusch-Pagan, and corresponding p values tests. The findings clearly show that heteroscedasticity is present in the data. Therefore, the study employed White (1980) heteroscedasticity-consistent standard errors in the results.

6. Results and Discussions

6.1 Descriptive statistics

A summary of the descriptive statistics for the variables used in the study is shown in table 3. The level of CSR reporting was found to be on average 39% among the non-financial Jordanian publicly listed companies. This finding indicates that the level of CSR reporting has increased when compared to previous studies of Jordanian publicly listed companies. For example, previous research showed levels of CSR reporting as 13% (Suwaidan et al., 2004), 22.68% (Ismail and Ibrahim, 2008), 19% (Al-Hamadeen and Badran, 2014), and 30% (Ibrahim and Hanefah, 2016). The variation in the CSR reporting index over time in Jordan is shown in figure 1.

Figure 1: The change of CSR reporting index over time



The results also indicate that 20% of the non-financial Jordanian companies have at least one female director on the board. This suggests that 80% of the companies have no gender diversity on the board of directors. In regards to the control variables, table 3 shows that, on average, 91% of the Jordanian boards have at least one independent director. This finding suggests that these companies are conscious of corporate governance rules that require one-third of the board members to be independent. Government ownership is on average of 7%

with a range from 0 to 99% in the non-financial Jordanian public listed companies. The highest government ownership is the national petroleum company which is owned almost entirely by the government or its agencies.

Table 3: Descriptive Statistics

	N	Mean	Median	Std. Deviation	Minimum	Maximum
Dependent Variable						
CSRRI	800	0.39	0.40	0.17	0.01	0.88
Independent Variable						
BGD	800	0.20	0.00	0.40	0.00	1.00
Control Variables						
BDIND	800	0.91	1.00	0.29	0.00	1.00
GOVOWN	800	0.07	0.00	0.16	0.00	0.99
DR	800	0.32	0.29	0.22	0.01	1.80
AGE	800	22.32	18.00	14.77	1.00	64.00

Notes: CSRRI= corporate Social Responsibility Reporting Index; BGD= dichotomous variable equal 1 if there is a female director presence on the board and 0 otherwise; BDIND= to dummy variable equal 1 if there is an independent member presence on the board and 0 otherwise; GOVOWN= ratio of total shares owned by government to total number of shares issued; DR= total liabilities divided by total assets; AGE= years of establishment.

6.1.1 Additional descriptive test on pre- and post-2009 data.

This study divided the data into two groups based on information disclosure before and after the JCGC issue in 2009. This code required companies to disclose information about social and environmental activities under a ‘comply or explain’ approach. This was done to evaluate if the increase in CSR reporting levels is significantly related to the JCGC requirements. Table 4 shows the descriptive statistics for variables pre and post 2009.

Pre-2009, the mean of CSR reporting level among Jordanian non-financial companies was 37%. Post-2009 this improved to 40%. The T-test of the mean differences was employed between pre- and post-2009, as shown in table 4. The result of T- test indicates that the mean differences of CSRRI are statistically significant. This significant improvement in the level of CSR reporting suggests that the JCGC requirements to disclose social and environmental information may be one of the factors which contributed to this increase. From the viewpoint of legitimacy theory, Jordanian non-financial companies may have adopted CSR reporting as a legitimation strategy to inform the public about their legitimacy after the JCGC requirements. Another possible explanation for CSR reporting increasing since 2011 could be the Iraq and Syrian crisis. Jordanian companies may have adopted CSR reporting since 2011 as a legitimation strategy following such crisis to influence external perception of its operations and to reassure the public of their legitimacy.

The JCGC did not require publicly listed companies to report on gender diversity at board levels. Female director's representation on the board pre-2009 was on average 21%, and post 2009 was 20%. However, this change in female representation on the board is insignificant as shown in table 4. In regards to control variables, the presence of independent director's (average) is 91% in both pre- and post-2009 data. Company law and the JCGC recommend that at least one-third of the board members be independent. Therefore this result suggests that companies are complying with the JCGC and regulations. Government ownership average is 7% in pre-2009 which decreased to 6% in post-2009. This may suggest that privatisation is increasing in Jordanian companies as Jordan opens its market to the world to attract local and foreign investors.

Table 4: Means differences of the pre-and post-2009 data

			t-test for Equality of Means		
	Pre-2009 Mean	**Post-2009 Mean**	**t**	**Mean Difference**	**Std. Error Difference**
Dependent variable					
CSRRI	0.37	0.40	(2.299)**	0.03	0.010
Independent variable					
BGD	0.21	0.20	(-0.210)	-0.01	0.013
Control variables					
BDIND	0.91	0.91	(0.027)	0.00	0.021
CEOD	0.23	0.20	(-0.798)	-0.03	0.032
GOVOWN	0.07	0.06	(-0.592)	-0.01	0.013
DR	0.30	0.34	(2.099)**	0.04	0.016
AGE	18.84	23.82	(4.435)***	4.98	1.123

Notes: CSRRI= corporate Social Responsibility Reporting Index; BGD= dichotomous variable equal 1 if there is a female director presence on the board and 0 otherwise; BDIND= to dummy variable equal 1 if there is an independent member presence on the board and 0 otherwise; GOVOWN= ratio of total shares owned by government to total number of shares issued; DR= total liabilities divided by total assets; AGE= years of establishment; The t-test are presented in the parentheses ** $p<0.05$, *** $p<0.01$.

6.1.2 Correlation Analysis

Correlation analysis was conducted to examine the association between the independent variables and the results are presented in table 5. As mentioned earlier, the finding suggests that there was no significant problems of collinearity. In addition, the correlation coefficients between the independent variables range from -0.06 to 0.410. In this respect, the correlation does not exceed 0.80 and is below the level normally deemed excessive (Gujarati, 2003).

Table 5: Correlation Analysis

		1	2	3	4	5	6	**VIF**
1	CSRRI	1.00						
2	BGD	-0.06	1.00					1.13
3	BDIND	.205**	-.260**	1.00				1.13
4	GOVOWN	.204**	0.05	-.188**	1.00			1.15
5	DR	0.02	-.082*	0.01	-.124**	1.00		1.04
6	AGE	.410**	-.138**	.129**	.119**	0.06	1.00	1.25

Notes: CSRRI= corporate Social Responsibility Reporting Index; BGD= dichotomous variable equal 1 if there is a female director presence on the board and 0 otherwise; BDIND= to dummy variable equal 1 if there is an independent member presence on the board and 0 otherwise; GOVOWN= ratio of total shares owned by government to total number of shares issued; DR= total liabilities divided by total assets; AGE= years of establishment; **. Correlation is significant at the 0.01 level (2-tailed); *. Correlation is significant at the 0.05 level (2-tailed).

6.2 Model Analysis

Table 6 outlines the results of the two multivariate OLS regression models examining the relationship between board gender diversity and CSR reporting. The adjusted R-squared values are 22.5% in model (1) and 26.6 % in model (2). These values indicate that after adding industry and time dummies, model (2) is an appropriate model to explain the changes in the level of CSR reporting. In addition, model 2 clearly shows that board gender diversity becomes statistically significant after accounting for time and industry effects.

The regression coefficient in model 2 indicates that the presence of female directors on the board has a positive and significant association with the level of CSR reporting. This finding is consistent with Ibrahim and Hanefah (2016) and Katmon et al. (2017). Hence, the study hypothesis has been supported. This suggests that Jordanian boards with female directors present tend to disclose more CSR information. It has been proposed that female directors have different values from males in regards to social disclosures (Bear et al., 2010; Rao and Tilt, 2016b). Despite the relatively low representation of female directors on Jordanian corporate boards, their presence, and even the presence of only one female has increased board awareness toward CSR reporting as a way to manage the legitimation process and public expectations.

When considering the control variables, board independence was significantly positive with the level of CSR reporting. This finding is consistent with prior studies (Khan et al., 2013; Ibrahim and Hanefah, 2016) and suggests that independent directors in Jordanian boards have a tendency to manage corporate legitimacy and promote disclosure of more CSR information. The debt ratio was positive and insignificant with the level of CSR information. This finding indicates that companies with a high level of debt ratio may have little motivation to report more CSR information. This because they may tend increasing profit and reducing high debt levels to manage the legitimation process with the resources on which companies depend for their survival such as creditors (Oh et al., 2011).

Government ownership and company age were significantly positive with the level of CSR reporting. In general, companies with government ownership had a tendency to disclose more information and legitimise their action with the public at large (Habbash, 2016). Companies age results support the prior studies of Khan et al. (2013) and Habbash (2016). This suggests that older companies tend to disclose more CSR reporting relative to younger companies in an effort to maintain their reputation and legitimacy.

Table 6: Regression Results

Dependent Variable CSR reporting		
	Model 1 **OLS** **(before controlling for industry and time)**	**Model 2** **OLS** **(after controlling for industry and time)**
Intercept	0.158 (7.013)***	0.137 (4.114)***
Independent variable		
BGD	0.012 (0.890)	0.030 (2.168)**
Control variables		
BDIND	0.124 (6.063)***	0.131 (5.464)***
GOVOWN	0.217 (7.971)***	0.281 (9.424)***
DR	0.019 (0.834)	0.004 (0.166)
AGE	0.004 (11.139)***	0.003 (7.825)***
INDUSTRY DUMMY	No	Yes
TIME DUMMY	No	Yes
F Statistic	**(47.40)*** **	**(20.32)*** **
Adjusted R2	**0.225**	**0.266**
Observations	**800**	**800**

Notes: CSRRI= corporate Social Responsibility Reporting Index; BGD= dichotomous variable equal 1 if there is a female director presence on the board and 0 otherwise; BDIND= to dummy variable equal 1 if there is an independent member presence on the board and 0 otherwise; GOVOWN= ratio of total shares owned by government to total number of shares issued; DR= total liabilities divided by total assets; AGE= years of establishment; The t-test are presented in the parentheses ** p<0.05, *** p<0.01.

6.3 Robustness Checks

6.3.1 Endogeneity test

This study used balanced panel data, and the results were robust and examined for the possible problem of heterogeneity (Rashid, 2018). Velte (2017) suggested that a simultaneous relationship may be possible between board members and CSR reporting. This study used a one year lag structure as an instrumental variable to test for possible endogeneity problems between variables by employing the Two Stage Least Square (2SLS) regression model. The results are presented in table 7 and reveal that there was no significant problem of endogeneity and confirm the robustness of the OLS model that was used to test the study hypothesis.

Table 7: Endogeneity Test

Dependent Variable CSR reporting		
	Model 3 **2SLS** **(before controlling for industry and time)**	**Model 4** **2SLS** **(after controlling for industry and time)**
Intercept	0.146 (5.914)***	0.118 (3.383)***
Independent variable		
BGD	0.024 (1.414)	0.049 (2.918)***
Control variables		
BDIND	0.131 (5.952)***	0.139 (5.339)***
GOVOWN	0.227 (7.493)***	0.289 (8.783)***
DR	0.002 (1.002)	0.010 (0.386)
AGE	0.004 (10.811)***	0.003 (7.814)***
INDUSTRY DUMMY	No	Yes
TIME DUMMY	No	Yes
F Statistic	**(43.58)*****	**(19.93)*****
Adjusted R2	**0.227**	**0.266**
Observations	**720**	**720**

Notes: CSRRI= corporate Social Responsibility Reporting Index; BGD= dichotomous variable equal 1 if there is a female director presence on the board and 0 otherwise; BDIND= to dummy variable equal 1 if there is an independent member presence on the board and 0 otherwise; GOVOWN= ratio of total shares owned by government to total number of shares issued; DR= total liabilities divided by total assets; AGE= years of establishment; The t-test are presented in the parentheses *** p<0.01.

6.3.2 Pre and post 2009 regression test

The JCGC was issued during the study period in 2009. This code required companies to disclose environmental and social information in their annual reports under a 'comply or explain' approach. Therefore, to assess the influence of female directors on the level of CSR reporting post JCGC requirement, the study re-ran the OLS regression equation by dividing the data into pre- and post-2009 periods. The findings of this test are shown in table 8 with models 5 and 6, respectively. The results confirm the study hypothesis and suggest that the presence of female directors on the board tend to improve corporate governance best practices.

Table 8: Pre and post 2009 regression results

Dependent Variable CSR reporting		
	Model 5	**Model 6**
	Pre-2009	**Post-2009**
Intercept	0.242 (5.326)***	0.199 (5.066)***
Independent variable		
BGD	0.013 (0.602)	0.040 (2.278)**
Control variables		
BDIND	0.124 (3.148)***	0.138 (4.583)***
GOVOWN	0.221 (4.659)***	0.319 (7.993)***
DR	-0.001 (0.032)	0.015 (0.528)
AGE	0.002 (3.300)***	0.003 (7.238)***
INDUSTRY DUMMY	Yes	Yes
TIME DUMMY	Yes	Yes
F Statistic	**(10.984)*** **	**(17.867)*** **
Adjusted R2	**0.250**	**0.265**
Observations	**240**	**560**

Notes: CSRRI= corporate Social Responsibility Reporting Index; BGD= dichotomous variable equal 1 if there is a female director presence on the board and 0 otherwise; BDIND= to dummy variable equal 1 if there is an independent member presence on the board and 0 otherwise; GOVOWN= ratio of total shares owned by government to total number of shares issued; DR= total liabilities divided by total assets; AGE= years of establishment; The t-test are presented in the parentheses ** p<0.05, *** p<0.01.

7. Conclusion

The aim of this study was to examine whether board gender diversity influences CSR reporting level in Jordanian publicly listed companies. The regression analysis found that the presence of female directors on the Jordanian corporate board tended to improve the board awareness on CSR reporting practices. This finding has provided deeper insights into board gender diversity in Jordan.

This study has also conducted additional tests to explore the level of reporting pre-and post-JCGC requirements related to disclosing social and environmental information under the comply or explain approach. The results suggest that the corporate governance code is an important factor which determines the level of CSR reporting practices in Jordan. Additionally, female directors' could be one of the attributes which significantly increased the level of CSR reporting following the introduction of the JCGC. Companies with female directors on the board tend to disclose more CSR information and follow corporate governance best practices. Female directors may sensitise the board members towards providing increased CSR reporting to manage public expectations and also to maintain the company's reputation and legitimacy within society as a whole.

These findings extend existing knowledge and contribute to corporate governance and CSR reporting literature. Firstly, the results show that female directors on the board are an important characteristic which determines CSR reporting levels. This finding is consistent with legitimacy theory. Second, this study is one of few empirical studies that has evaluated the impact of board gender diversity on the level of CSR reporting using longitudinal data (balanced panel data of 800 observations for a ten year period by Jordanian companies). In addition, Velte (2017) criticises that endogenous or robustness checks have not been included in previous comparable studies. This study has provided endogenous testing and robustness analysis to lend support to the results. This study has contributed to the literature on corporate governance and CSR reporting practices in the Middle East and developing counties.

This study provides significant implications for policy makers. Firstly, adopting a policy to increase female director's presence on the board in Jordanian non-financial companies may enhance company reporting practices. Second, providing guidelines or templates for CSR reporting may encourage companies to report the information in their annual reports or standalone reports.

The results of this study should be interpreted carefully because of several limitations. Firstly, the results are based on the non-financial publicly listed companies, and therefore the results cannot be generalised to all companies in Jordan. Further studies may investigate companies whether they be privately listed or unlisted companies in the Jordanian context. Second, annual reports were the only source used to measure the CSR reporting data. Stand-alone reports, company websites or any publicly available information may be other channels of reporting that other studies may wish to utilise to analysis the level of CSR information. Third, the study measured the presence of female directors on the board as a dichotomous variable equal 1 if there is a female director presence on the board and 0 otherwise. This measurement was used because of the majority of the non-financial Jordanian publicly listed companies have only one female director. Further studies may use other measures for female director presence, such as total number of female directors on the board or a ratio of this. Finally, this study was limited to examining the impact of board gender diversity in the

Jordanian context. Further studies may investigate other corporate board characteristics such as board size, CEO duality and audit committees which may extend the understanding of how governance attributes determine CSR reporting practices in Jordan.

References

Abdullah, S.N., Mohamad, N.R. and Mokhtar, M.Z. (2011), "Board independence, ownership and CSR of Malaysian Large Firms", *Corporate Ownership & Control*, Vol. 8 No. 3, pp. 417-435. https://doi.org/10.22495/cocv8i2c4p5

Abed, S., Al-Attar, A. and Suwaidan, M. (2012), "Corporate governance and earnings management: Jordanian evidence", *International Business Research*, Vol. 5 No. 1, pp. 216-225. https://doi.org/10.5539/ibr.v5n1p216

Adams, R.B. and Ferreira, D. 2004, *Gender diversity in the boardroom*, Finance Working paper, European Corporate Governance Institute, Sweden. https://doi.org/10.2139/ssrn.594506

Ahmad, N.B.J., Rashid, A. and Gow, J. (2017), "Board Independence and Corporate Social Responsibility (CSR) Reporting in Malaysia", *Australasian Accounting Business & Finance Journal*, Vol. 11 No. 2, pp. 62-79. https://doi.org/10.14453/aabfj.v11i2.5

Ahmed Haji, A. (2013), "Corporate social responsibility disclosures over time: evidence from Malaysia", *Managerial Auditing Journal*, Vol. 28 No. 7, pp. 647-676. https://doi.org/10.1108/MAJ-07-2012-0729

Al-Hamadeen, R. and Badran, S. (2014), "Nature and determinants of CSR disclosure: experience of the Jordanian public shareholding companies", *European Journal of Business and Management*, Vol. 6 No. 13, pp. 18-34.

Al-Rahahleh, A.S. (2017), "Corporate Governance Quality, Board Gender Diversity and Corporate Dividend Policy: Evidence from Jordan", *Australasian Accounting, Business and Finance Journal*, Vol. 11 No. 2, pp. 86-104. https://doi.org/10.14453/aabfj.v11i2.6

Al Fadli, A., Sands, J., Jones, G. and Beattie, C. 2018, *Board Independence and CSR Reporting: Evidence from Jordan*, Working Paper, University of Southern Queensland, Australia, 06 June, <.

Barakat, F.S., Pérez, M.V.L. and Ariza, L.R. (2015), "Corporate social responsibility disclosure (CSRD) determinants of listed companies in Palestine (PXE) and Jordan (ASE)", *Review of Managerial Science*, Vol. 9 No. 4, pp. 681-702. https://doi.org/10.1007/s11846-014-0133-9

Bayoud, N.S., Kavanagh, M. and Slaughter, G. (2012), "Factors influencing levels of corporate social responsibility disclosure by Libyan firms: a mixed study", *International Journal of Economics and Finance*, Vol. 4 No. 4, pp. 13-29. https://doi.org/10.5539/ijef.v4n4p13

Bear, S., Rahman, N. and Post, C. (2010), "The impact of board diversity and gender composition on corporate social responsibility and firm reputation", *Journal of business ethics*, Vol. 97 No. 2, pp. 207-221. https://doi.org/10.1007/s10551-010-0505-2

Bøhren, Ø. and Strøm, R.Ø. (2010), "Governance and politics: Regulating independence and diversity in the board room", *Journal of Business Finance & Accounting*, Vol. 37 No. 9-10, pp. 1281-1308. https://doi.org/10.1111/j.1468-5957.2010.02222.x

Bukair, A.A. and Rahman, A.A. (2015), "The effect of the board of directors' characteristics on corporate social responsibility disclosure by Islamic banks", *Journal of Management Research*, Vol. 7 No. 2, pp. 506-519. https://doi.org/10.5296/jmr.v7i2.6989

Carter, D.A., Simkins, B.J. and Simpson, W.G. (2003), "Corporate governance, board diversity, and firm value", *Financial Review*, Vol. 38 No. 1, pp. 33-53. https://doi.org/10.1111/1540-6288.00034

Cook, A. and Glass, C. (2018), "Women on corporate boards: Do they advance corporate social responsibility?", *Human Relations*, Vol. 71 No. 7, pp. 897-924. https://doi.org/10.1177/0018726717729207

Cruz, C., Justo, R., Larraza-Kintana, M. and Garcés-Galdeano, L. (2018), "When Do Women Make a Better Table? Examining the Influence of Women Directors on Family Firm's Corporate Social Performance", *Entrepreneurship Theory and Practice*, Vol. 0 No. 0, pp. 1-20.

Deegan, C., Rankin, M. and Tobin, J. (2002), "An examination of the corporate social and environmental disclosures of BHP from 1983-1997: A test of legitimacy theory", *Accounting, Auditing & Accountability Journal*, Vol. 15 No. 3, pp. 312-343. https://doi.org/10.1108/09513570210435861

Dowling, J. and Pfeffer, J. (1975), "Organizational legitimacy: Social values and organizational behavior", *Pacific Sociological Review*, Vol. 18 No. 1, pp. 122-136. https://doi.org/10.2307/1388226

Eagly, A.H. (2009), "The his and hers of prosocial behavior: An examination of the social psychology of gender", *American Psychologist*, Vol. 64 No. 8, p. 644. https://doi.org/10.1037/0003-066X.64.8.644

Ellis, K. and Keys, P. 2003, *Stock returns and the promotion of workforce diversity*, University of Delaware, Newark.

Esa, E. and Zahari, A.R. (2016), "Corporate Social Responsibility: Ownership Structures, Board Characteristics & the Mediating Role of Board Compensation", *Procedia Economics and Finance*, Vol. 35 pp. 35-43. https://doi.org/10.1016/S2212-5671(16)00007-1

Frias-Aceituno, J.V., Rodriguez-Ariza, L. and Garcia-Sanchez, I. (2013), "The role of the board in the dissemination of integrated corporate social reporting", *Corporate Social Responsibility and Environmental Management*, Vol. 20 No. 4, pp. 219-233. https://doi.org/10.1002/csr.1294

Ghabayen, M.A., Mohamad, N.R. and Ahmad, N. (2016), "Board characteristics and corporate social responsibility disclosure in the Jordanian banks", *Corporate Board: role, duties and composition*, Vol. 12 No. 1, pp. 84-100. https://doi.org/10.22495/cbv12i1c1art2

Ghazali, N.A. (2007), "Ownership structure and corporate social responsibility disclosure: some Malaysian evidence", *Corporate Governance: The International Journal of Business in Society*, Vol. 7 No. 3, pp. 251-266. https://doi.org/10.1108/14720700710756535

Golob, U. and Bartlett, J.L. (2007), "Communicating about corporate social responsibility: A comparative study of CSR reporting in Australia and Slovenia", *Public Relations Review*, Vol. 33 No. 1, pp. 1-9. https://doi.org/10.1016/j.pubrev.2006.11.001

Goodwin-Stewart, J. and Kent, P. (2006), "Relation between external audit fees, audit committee characteristics and internal audit", *Accounting & Finance*, Vol. 46 No. 3, pp. 387-404. https://doi.org/10.1111/j.1467-629X.2006.00174.x

Gujarati, D.N. (2003), *Basic Econometrics.4th edition*, McGraw Hill, New York.

Guthrie, J. and Parker, L.D. (1990), "Corporate social disclosure practice: a comparative international analysis", *Advances in public interest accounting*, Vol. 3 pp. 159-175.

Guthrie, J. and Abeysekera, I. (2006), "Content analysis of social, environmental reporting: what is new?", *Journal of Human Resource Costing & Accounting*, Vol. 10 No. 2, pp. 114-126. https://doi.org/10.1108/14013380610703120

Habbash, M. (2016), "Corporate governance and corporate social responsibility disclosure: evidence from Saudi Arabia", *Social Responsibility Journal*, Vol. 12 No. 4, pp. 740-754. https://doi.org/10.1108/SRJ-07-2015-0088

Haddad, A.E., Haddad, A.E., Sbeiti, W.M., Sbeiti, W.M., Qasim, A. and Qasim, A. (2017), "Accounting legislation, corporate governance codes and disclosure in Jordan: a review", *International Journal of Law and Management*, Vol. 59 No. 1, pp. 147-176. https://doi.org/10.1108/IJLMA-07-2016-0064

Haniffa, R.M. and Cooke, T.E. (2005), "The impact of culture and governance on corporate social reporting", *Journal of Accounting and Public Policy*, Vol. 24 No. 5, pp. 391-430. https://doi.org/10.1016/j.jaccpubpol.2005.06.001

Ho, P.-L. and Taylor, G. (2013), "Corporate governance and different types of voluntary disclosure: Evidence from Malaysian listed firms", *Pacific Accounting Review*, Vol. 25 No. 1, pp. 4-29. https://doi.org/10.1108/01140581311318940

Ibrahim, A.H. and Hanefah, M.M. (2016), "Board diversity and corporate social responsibility in Jordan", *Journal of Financial Reporting and Accounting*, Vol. 14 No. 2, pp. 279-298. https://doi.org/10.1108/JFRA-06-2015-0065

Isa, M.A. and Muhammad, S. (2016), "The Impact of Board Characteristics on Corporate Social Responsibility Disclosure: Evidence from Nigerian Food Product Firm", *International Journal of Management Science And Business Adminstration*, Vol. 1 No. 12, pp. 34-45. https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.112.1004

Islam, M. and Deegan, C. (2008), "Motivations for an organisation within a developing country to report social responsibility information: evidence from Bangladesh", *Accounting, Auditing & Accountability Journal*, Vol. 21 No. 6, pp. 850-874. https://doi.org/10.1108/09513570810893272

Ismail, K. and Ibrahim, A.H. (2008), "Social and environmental disclosure in the annual reports of Jordanian companies", *Issues in Social and Environmental Accounting*, Vol. 2 No. 2, pp. 198-210. https://doi.org/10.22164/isea.v2i2.32

Jordan Department of Statistics (2016), *Jordan in Figures*, http://dosweb.dos.gov.jo/wpcontent/uploads/2017/11/JordanInFigures2016.pdf>.

Jordan Securities Commission (2009), *Corporate Governance Code for Shareholding Companies Listed on the Amman Stock Exchange*, viewed October 30, 2016, <http://www.jsc.gov.jo/library/636149731763167174.pdf>.

Katmon, N., Mohamad, Z.Z., Norwani, N.M. and Al Farooque, O. (2017), "Comprehensive Board Diversity and Quality of Corporate Social Responsibility Disclosure: Evidence from an Emerging Market", *Journal of business ethics*, pp. 1-35. https://doi.org/10.1007/s10551-017-3672-6

Khan, A., Muttakin, M.B. and Siddiqui, J. (2013), "Corporate governance and corporate social responsibility disclosures: Evidence from an emerging economy", *Journal of business ethics*, Vol. 114 No. 2, pp. 207-223. https://doi.org/10.1007/s10551-012-1336-0

Khan, H.-U.-Z. (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*, Vol. 52 No. 2, pp. 82-109. https://doi.org/10.1108/17542431011029406

Kiliç, M., Kuzey, C. and Uyar, A. (2015), "The impact of ownership and board structure on Corporate Social Responsibility (CSR) reporting in the Turkish banking industry", *Corporate Governance*, Vol. 15 No. 3, pp. 357-374. https://doi.org/10.1108/CG-02-2014-0022

Liao, L., Luo, L. and Tang, Q. (2015), "Gender diversity, board independence, environmental committee and greenhouse gas disclosure", *The British Accounting Review*, Vol. 47 No. 4, pp. 409-424. https://doi.org/10.1016/j.bar.2014.01.002

Liao, L., Lin, T.P. and Zhang, Y. (2016), "Corporate Board and Corporate Social Responsibility Assurance: Evidence from China", *Journal of business ethics*, Vol. 10 No. 7, pp. 1-15. https://doi.org/10.1007/s10551-016-3176-9

Lindblom, C.K. 1994, 'The implications of organizational legitimacy for corporate social performance and disclosure', in *Critical perspectives on accounting conference, New York*.

Majeed, S., Aziz, T. and Saleem, S. (2015), "The Effect of Corporate Governance Elements on Corporate Social Responsibility (CSR) Disclosure: An Empirical Evidence from Listed Companies at KSE Pakistan", *International Journal of Financial Studies*, Vol. 3 No. 4, pp. 530-556. https://doi.org/10.3390/ijfs3040530

Milne, M.J. and Adler, R.W. (1999), "Exploring the reliability of social and environmental disclosures content analysis", *Accounting, Auditing & Accountability Journal*, Vol. 12 No. 2, pp. 237-256. https://doi.org/10.1108/09513579910270138

Muttakin, M.B., Khan, A. and Subramaniam, N. (2015), "Firm characteristics, board diversity and corporate social responsibility: evidence from Bangladesh", *Pacific Accounting Review*, Vol. 27 No. 3, pp. 353-372. https://doi.org/10.1108/PAR-01-2013-0007

Naser, K., Al-Khatib, K. and Karbhari, Y. (2002), "Empirical evidence on the depth of corporate information disclosure in developing countries: The case of Jordan", *International Journal of Commerce and Management*, Vol. 12 No. 3/4, pp. 122-155. https://doi.org/10.1108/eb047456

Nekhili, M., Nagati, H., Chtioui, T. and Nekhili, A. (2017), "Gender-diverse board and the relevance of voluntary CSR reporting", *International Review of Financial Analysis*, Vol. 50 pp. 81-100. https://doi.org/10.1016/j.irfa.2017.02.003

Neu, D., Warsame, H. and Pedwell, K. (1998), "Managing public impressions: environmental disclosures in annual reports", *Accounting, organizations and society*, Vol. 23 No. 3, pp. 265-282. https://doi.org/10.1016/S0361-3682(97)00008-1

Oh, W.Y., Chang, Y.K. and Martynov, A. (2011), "The effect of ownership structure on corporate social responsibility: Empirical evidence from Korea", *Journal of business ethics*, Vol. 104 No. 2, pp. 283-297. https://doi.org/10.1007/s10551-011-0912-z

Omar, B. and Simon, J. (2011), "Corporate aggregate disclosure practices in Jordan", *Advances in Accounting*, Vol. 27 No. 1, pp. 166-186. https://doi.org/10.1016/j.adiac.2011.05.002

Omar, B.F., Zallom, N.O., Zain, M.M. and Johari, R. (2016), "Corporate social responsibility and market value: evidence from Jordan", *Journal of Financial Reporting and Accounting*, Vol. 14 No. 1, pp. 2-29. https://doi.org/10.1108/JFRA-11-2014-0084

Pallant, J. (2007), "SPSS survival manual: A step-by-step guide to data analysis using SPSS version 15", *Nova Iorque: McGraw Hill*.

Patten, D.M. (1992), "Intra-industry environmental disclosures in response to the Alaskan oil spill: a note on legitimacy theory", *Accounting, organizations and society*, Vol. 17 No. 5, pp. 471-475. https://doi.org/10.1016/0361-3682(92)90042-Q

Rao, K. and Tilt, C. (2016a), "Board composition and corporate social responsibility: The role of diversity, gender, strategy and decision making", *Journal of business ethics*, Vol. 138 No. 2, pp. 327-347. https://doi.org/10.1007/s10551-015-2613-5

Rao, K. and Tilt, C. (2016b), "Board diversity and CSR reporting: an Australian study", *Meditari Accountancy Research*, Vol. 24 No. 2, pp. 182-210. https://doi.org/10.1108/MEDAR-08-2015-0052

Rashid, A. (2015), "The influence of stakeholder power on corporate social responsibility: evidence from a relationship-based economy", *Social Responsibility Journal*, Vol. 11 No. 2, pp. 270-289. https://doi.org/10.1108/SRJ-09-2013-0109

Rashid, A. (2018), "The influence of corporate governance practices on corporate social responsibility reporting", *Social Responsibility Journal*, Vol. 14 No. 1, pp. 20-39. https://doi.org/10.1108/SRJ-05-2016-0080

Rashid, A. and Lodh, S.C. (2008), "The influence of ownership structures and board practices on corporate social disclosures in Bangladesh", *Research in accounting in emerging economies*, Vol. 8 No. 1, pp. 211-237. https://doi.org/10.1016/S1479-3563(08)08008-0

Rouf, M. (2011), "The corporate social responsibility disclosure: a study of listed companies in Bangladesh", *Business and Economics Research Journal*, Vol. 2 No. 3, pp. 19-32.

Said, R., Hj Zainuddin, Y. and Haron, H. (2009), "The relationship between corporate social responsibility disclosure and corporate governance characteristics in Malaysian public listed companies", *Social Responsibility Journal*, Vol. 5 No. 2, pp. 212-226. https://doi.org/10.1108/17471110910964496

Sartawi, I.I.M., Hindawi, R.M., Bsoul, R. and Ali, A.e.J. (2014), "Board Composition, Firm Characteristics, and Voluntary Disclosure: The Case of Jordanian Firms Listed on the Amman Stock Exchange", *International Business Research*, Vol. 7 No. 6, p. 67. https://doi.org/10.5539/ibr.v7n6p67

Shanikat, M. and Abbadi, S.S. (2011), "Assessment of corporate governance in Jordan: An empirical study", *Australasian Accounting Business & Finance Journal*, Vol. 5 No. 3, pp. 93-106.

Sharif, M. and Rashid, K. (2014), "Corporate governance and corporate social responsibility (CSR) reporting: an empirical evidence from commercial banks (CB) of Pakistan", *Quality & Quantity*, Vol. 48 No. 5, pp. 2501-2521. https://doi.org/10.1007/s11135-013-9903-8

Singh, V., Terjesen, S. and Vinnicombe, S. (2008), "Newly appointed directors in the boardroom:: How do women and men differ?", *European management journal*, Vol. 26 No. 1, pp. 48-58. https://doi.org/10.1016/j.emj.2007.10.002

Suwaidan, M.S., Al-Omari, A.M.d. and Haddad, R.H. (2004), "Social responsibility disclosure and corporate characteristics: the case of Jordanian industrial companies", *International Journal of Accounting, Auditing and Performance Evaluation*, Vol. 1 No. 4, pp. 432-447. https://doi.org/10.1504/IJAAPE.2004.006355

Velte, P. (2017), "Does board composition have an impact on CSR reporting", *Problems and Perspectives in Management*, Vol. 15 No. 2, pp. 19-35. https://doi.org/10.21511/ppm.15(2).2017.02

Weisberg, S. (2005), *Applied linear regression*, vol. 528, John Wiley & Sons, Hoboken, New Jersy. https://doi.org/10.1002/0471704091

White, H. (1980), "A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity", *Econometrica: Journal of the Econometric Society*, Vol. 48 No. 4, pp. 817-838. https://doi.org/10.2307/1912934

Willows, G. and van der Linde, M. (2016), "Women representation on boards: A South African perspective", *Meditari Accountancy Research*, Vol. 24 No. 2, pp. 211-225. https://doi.org/10.1108/MEDAR-01-2016-0001

Yaseen, H., Amarneh, A. and Iskandrani, M. (2018), "Board diversity and social responsibility: The case of Jordanian commercial banks", *Corporate Ownership & Control*, Vol. 15 No. 2, pp. 139-147. https://doi.org/10.22495/cocv15i2c1p1

Yusoff, H., Jamal, A.D.A. and Darus, F. (2016), "Corporate Governance and Corporate Social Responsibility Disclosures: An Emphasis on the CSR Key Dimensions", *Journal of Accounting and Auditing Research & Practice*, Vol. 2016 pp. 112-125.

9. Appendix: CSR disclosure items

Community Involvement Reporting
Information on charitable donations for public
Information on support for public education
Information on support for public health
Information on support for the culture
Information on sponsoring recreational activities
Information on donations to the public for making gardens
Information on support to the local population
Information on establishment of educational institutions
Information on support for the social welfare system
Information on establishment of medical centre
Information on supporting or conducting educational conferences
Environmental Reporting
Information on environmental controlling system
Information on the company's policies for the environment
Information on protection of natural resources
Information on the effluent treatment system
Information on preventing waste
Information on the water discharge of the company's operations
Information on the air emission control of the company's operations
Information on observation of pollution in the process of business operations
Information on solid waste disposal of the company's operations
ISO /26000/9001/22000/14001
Information on anti-litter campaign
Information on making the country green (e.g. planting of trees)
Information on initiatives to reduce carbon or green gas emissions
Providing environmental management services to other company's projects
Support the public or private action designed to protect the environment
Participation in environmental institutions (e.g. industry committees)
Marketplace Reporting
Information on quality of the product
Information on safety of the product
Information on development of the product
Information on research plans to develop its product
Information on disclosing safety practices to consumer
Information on customer service improvement
Information on complaints and consumer satisfaction
Workplace Reporting
Information on number of employees
Information on health care for employees
Information on employee training
Information on employees' welfare
Information on employees' salary
Information on employee appreciation such as pensions programme
Information on the relationship between employee- management /or employee satisfaction
Information on hazards in the work environment

Information on compliance with safety and health standards in the workplace
Information on percentage or number of minorities in the workforce such as female directors
Information on employee morale
Information on sponsoring educational conferences
Information on the company’s future
Information on job opportunities

Adopted from Haniffa and Cooke (2005); Ghazali (2007); Rashid & Lodh (2008); Rouf (2011); Bayoud et al. (2012); Rashid (2015); Barakat et al. (2015); Ibrahim and Hanefah (2016); Ahmad et al. (2017); Al Fadli et al. (2018).