

Gender Diversity and Managerial Ownership Response to Corporate Social Responsibility Initiatives: Empirical Evidence from Australia

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Abstract

The objective of this study is to examine the relationship between corporate governance, particularly board independence, board size, CEO duality, gender diversity, managerial ownership and corporate social responsibility disclosure (CSR). The data was collected from annual reports of Australian listed companies. The quantitative approach was utilized and the content analysis was also undertaken to measure the extent of CSR disclosure. The overall results reveal that board independence, board size, gender diversity and CEO duality have significant positive impact on CSR. Whereas, managerial ownership has negative impact on CSR. These results are in line with stakeholder theory, suggesting that a diversified and independent board may balance a company's financial and non-financial goals with limited resources. By investigating these links, the study significantly contributes to the extant literature. It has implications for Australian business organizations, regulatory bodies, and other stakeholders.

Keywords: Board independence, board size, CEO duality, gender diversity, managerial ownership, CSR and Australia.

Introduction

Overpopulation, burning of fossil fuels, chemical pollution containing chlorine and bromide, excessive CO² production and deforestation issues has become the cause of unrest in environmental peace. A number of issues reveal loss of environmental peace, like access to clean water, smog in the air, depletion of Ozone layer, acid raining, and rising temperature. After the industrialization, environmental peace has become the matter of concern for the regulatory bodies and community because

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this revolution is continuously destructing the function of earth ecological system. Since February 2005 Kyoto protocol has become effective which means the reduction in greenhouse gases (GHG) and the emission has become the strategic agenda for all economies (Lee et al., 2015). No doubt, corporate sustainability performance has become the top priorities for all industrialized economies especially those which have more manufacturing industries in their portfolio. Australian Stock Exchange (ASX) has almost more than half industry which is based on manufacturing unit. Only two major sectors (i.e. energy and material) have consisted of almost 44% of total ASX listed firms in 2014.

Now the corporate philosophy has changed, even if the firm sells a commodity which is not good for health but they are showing their concerns about consumer health and environment as well. This becomes necessary because now the society is more follower of Freeman (stakeholder perspective) than Friedman (wealth maximization perspective). Era of big data has begun, where big data made the industrial decisions more easy and accurate but also publicized the dangerous effect of industrialization in more details. Big data engendering considerable contain disruption not only for individuals' privacy but also for industry. In the domain of CSR related information towards its stakeholder effect of social media is too strong and fast (Saxton, 2016). Hence, managers of the firms have more pressure to compliance their environmental responsibilities to attract their investors and customers. One way to accomplish the journey of sustainable development is achieved by the alliance between business, politics and society (Richards et al., 2015).

The motivation behind this research is to recall that agency problem remain same in the shape of managerial ownership divergent interest about the ethical issue of CSR, (Oh et al., 2011). In the literature, much attention has been paid to explore the impact of corporate board composition on financial performance. Whereas, a little emphasis was given to explore the role of board composition on CSR disclosure (Rao & Tilt, 2016a). Furthermore, board gender diversity is an emerging issue which has gained the attention of both practitioner and academia (Rao & Tilt, 2016a). It is well debated in the literature that diversity among corporate board members has a substantial impact on economic performance and disclosure (Rose, 2007). However, only few studies were conducted to investigate whether it is applied to non-financial performance specially CSR. Furthermore, a little concentration was given to explore the link between board diversity and CSR, resulting that diversity can have a significant positive impact on CSR aspects (Bear et al., 2010; Post et al., 2011). Female directors considered mere as tokens,

to attenuate this tokenism issue, regulatory body has to encourage the minimum reserve quota for women in the board (Chapple & Humphrey, 2014). According to Norway regulatory body (directed in the year 2003) the women proportion on the board should reach at least 40 percent of the total board till 2008 (Hoel, 2008). Whereas, Spain regulatory body directed to increase the share of women directors to 40 percent till 2015 (Adams & Ferreira, 2009). France has also decided that 25 percent of the total board size must be comprised of women directors (Medland, 2004). Overall there is an increasing trend in the legislation of gender diversity proportion in the board as France has decided to fix 40% quota by 2016, Italy decided 33.3% by 2015 and Netherland target is 30% by 2016 (Ahmed et al., 2017). There is a need for such movements in other countries to recognize the importance of women directors that may lead to balance the agency problems (Lin et al., 2018).

Gender diversity recommendation in Australian listed firms was introduced in 2011. ASX 200 increased its women proportion from 8.3% to 21.9% in the period of 2009-2016. However, the Australian Institute of Company Directors (AICD) target is to increase the women participation up to 30% in ASX 200 by 2018 which seems to be unattainable (Monem, 2016). The concern about gender diversity is not only the matter of ASX 200 but all ASX firm have to follow all those guidelines which deduce the management risk. The stakeholders are becoming more focused about the transparent disclosure of CSR activities by the companies and want to know all types of management related risk, more likely about the environment and other ethical concerns (Rao & Tilt, 2016b). Focusing on the ASX 200 only may be the point of contention. In ASX listed firms, the ratio of female CEOs is more than the ratio of the female as a chairperson of the board; this is a good trend towards leadership and gender diversity.

This study contributes to the extant literature in four different ways. This is *first* research effort which simultaneously investigates the impact of gender diversity and managerial ownership on CSR disclosure. It intends to realize that in any corporate governance practices, the managerial ownership is a more alarming issue along with gender diversity. *Second*, in contextual perspective, it also contributes to the Australia and rest of economies because the population is segregated between four major categories' as per the function of the industry. *Third*, this research confirmed that gender diversity is one of the key driving forces behind CSR initiatives but there is also need to make some more practical guidelines for the managerial ownership. *Finally*, relying on agency theory there is a time to make efforts for change in the behavior

of managers towards CSR; otherwise the agency problem remained same even after the participation of women in the board.

Literature Review and Hypotheses

Stakeholder's agency framework argues that social welfare developments are only possible when stakeholders may work on single-valued strategic objectives (Mitchell et al., 2016). Social psychologists and behavioral economists proved that it is difficult to accept the assumption that all stakeholders care about the fairness and their behavior are in collective endeavors like value creation (Bridoux et al., 2011). For individual stakeholders, two main categories are identified: one who is conscious about their personal payoffs are known as self-regarding and others known as reciprocators whose philosophy is to reward a fair and punishment for an unfair even at their personal cost (Bridoux & Stoelhorst, 2014). Under such perspective and after revealed Volkswagen corporate fiasco in 2015 governance practices are needed to be more aligned with environmental concerns. It is a time to know the characteristics of the board of directors by emphasizing the role of CEO, size of the board of directors, a higher proportion of independent directors, and the proportion of a number of females in board and managerial ownership structures in the context of voluntary reporting on CSR activities.

Board Independence and CSR Voluntary Disclosure

According to agency theory, the business organization can get the benefit by having independent directors because they have the right to challenge the managerial decisions (Dalton et al., 1998). Independent directors have the least concern with short-term goals and more focused with long-term objectives, furthermore, as compared to internal directors they pay more attention to socially responsible actions (Jizi et al., 2014). Therefore, higher proportions of independent directors in the board are caused for more transparency in their dealing either for financial or non-financial reporting (Armstrong et al., 2014; Chan et al., 2014). No doubt independent directors less participate in operations of the company except in decision making but they can control the operations of the company by their strategic environmental aligned decisions. Firms are inclined towards environment-friendly behavior and supporting CSR initiatives by the higher presence of outside directors on the board (Jizi, 2017). Strength and impact of the proportion of outside directors in the board is notably based on different market condition. It may vary from country to country but the environment, social and community well-being are more likely to be achieved by a higher proportion of outside

directors in the board (Ortas et al., 2017). From the above discussion, it is expected that higher number of independent directors on the board are more readily embracing the strategic perspective of CSR as reciprocators' stakeholders. Accordingly, it is hypothesized that:

H₁: The presence of larger proportion of independent directors exhibits positive association with voluntary CSR disclosure.

Board Size and CSR Voluntary Disclosure

Agency theory depicts two different views about larger boards (Kaymak & Bektas, 2017). On the positive side, the larger board may be more vigilant and have more capabilities but it may be offset by slow decision making and slow communication (Kaymak & Bektas, 2017). Furthermore, the board of directors are also responsible for setting sustainable goals and allocating resources to achieve these sustainable goals (Jizi, 2017). The size of the board is considered as the major determinant of its effectiveness (Amran et al., 2014). However, the larger board is needed to be more efforts to reach any consensus than that of smaller board size. The potentially larger board has faced coordination and communication issues due to agency problem (Cheng, 2008). On the other hand, the large board has less workload issue and more space to understand the global changes in respect to the environment and make the quality of the strategic decision. A number of directors on any board may also be a good proxy to know the transmission of CSR initiatives and performance of any organization (Fuente et al., 2017). Board size has a significant positive impact on CSR activities, corporate investment and transparency in integrated sustainability reporting (Frias-Aceituno et al., 2013). Moreover, transparency in CSR reporting and corporate investment tends to be increased due to larger board size. Thus, we hypothesize that:

H₂: The presence of larger board size exhibits positive association with voluntary CSR disclosure.

CEO Duality and CSR Voluntary Disclosure

CEO has the power to divert the firm's efforts away from CSR activities (Jizi, 2017). In the context of agency problem, CEO and independent directors have different set of motivation and temporal orientation, which may differently influence the CSR activities (Galbreath, 2017). CSR initiatives are visible opportunity to attain praise and significantly influenced by CEO narcissism on the basis of organizational cost (Petrenko et al., 2016). Usually, the CEO's are more anxious about short-term action, and duality is negatively linked with socially responsible firms (Seamer, 2014) that can go against agency theory (Kaymak &

Bektas, 2017). In addition, Tuggle et al. (2010) suggest that if CEO duality does not exist it may cause for low monitoring and board need to be more vigilant to protect the interest of stakeholder groups. Furthermore, Shahzad et al. (2016) establish a significant positive relationship between lack of duality and corporate social performance. Therefore, it is expected that CEO duality positively affects the social and moral responsibility of the firm. This is as per the following hypothesis:

H₃: The presence of CEO duality exhibits positive association with voluntary CSR disclosure.

Gender Diversity and CSR Voluntary Disclosure

Corporate board diversity has become a major part of CG structure (Barako & Brown, 2008). Diversity in the board is defined as the variation among the characteristics of the board members such as gender, age, education, experience, ethnicity and personality (Coffey & Wang, 1998). Corporate philanthropy paradigm has shifted from the beginning of the twenty-first century and female participation in the boardroom have been more explored because it is known as a big win for business and society (Vilké et al., 2014). In the top layers of management still, the ratio of women is low and considered as tend to become a token. But now this has become a global phenomenon because women on board are caused by more initiatives regarding CSR activities (Setó-Pamies, 2015). A number of theories have been proved that men and women have different values and women are more generous than man. Adoption of CG practices is mandatory for all listed firms in almost all over the world. Most of the CG principles uphold that women participation in the boardroom is compulsory but now the debate is moving towards their numbers not only their presence (Schwartz-Ziv, 2017). Australia yet included in those countries where the induction of female in board or disclosures of some important environmental issues like GHG emissions are not mandatory (Hollindale et al., 2017).

The literature suggests a number of reasons in the favor of a positive relationship between board gender diversity and CSR disclosure. For example, female directors have different professional and educational background than the male directs, which may lead to the initiatives of CSR (Bear et al., 2010). Furthermore, the female directors possess certain psychological characteristics that make them empowered to focus on the value of stakeholders' claims (Zhang et al., 2013). However, in such situation, there is more need to measure the gender diversity relation with voluntary disclosures that will help to make ASX corporate governance principle more controlling and powerful. A

considerable empirical study draws a significant positive relationship between gender diversity and CSR disclosure (Post et al., 2011). On the basis of above discussion we can claim that the elevated proportion of female directors in board will positively affect CSR voluntary disclosure. Thus the following hypothesis is proposed:

H₄: The presence of women directors exhibits positive association with voluntary CSR disclosure.

Managerial Ownership and CSR Voluntary Disclosure

Usually, it is assumed that higher ownership concentration increase agency conflicts between the minority and majority shareholders. Higher ownership is owned by the directors, mitigate the agency problems and more likely all decisions of the management are aligned with the interest of other shareholders (Oh et al., 2011). Therefore, they are in good position to expropriate the interest of minority shareholders and have command to decide about the value creation of the firm through CSR activities. On the other side, this will lead to entrenchment effect, where the managers come in a position to reduce the corporate transparency and use all the resources towards their own interest (Jensen & Ruback, 1983). The higher proportion of managerial ownership is more likely to disseminate voluntarily information and reduce the monitoring capacity of other stakeholders (Khlif et al., 2017). Based on above discussion we propose the following hypothesis:

H₅: The presence of higher managerial ownership exhibits negative association with voluntary CSR disclosure.

Research Design

The considered population for investigating the influence of gender diversity and managerial ownership on CSR belongs to all listed firms in Australian Stock Exchange (ASX). The ASX comprises of total 2177 public listed companies in the year 2014 and is divided into ten different sectors with twenty-six different industry groups. The sample of this cross-sectional study is based on twenty-four industry groups. The two industries were dropped because these groups were having newly registered firms i.e. “not Applic and Class Pend”. The remaining population of the study is 1948 observations classified into four main categories of industries on the basis of their functions and nature. Appendix 1 depicts the distribution of industry groups and total companies (1563) retained in the sample. The data of all the required variables were collected from the annual reports, CSR reports, sustainability reports and the information that is publically available on the websites of the companies.

Measurement

Independent Variables

The board size (B_Size) is calculated by the total number of directors present in the board. Board independence (B_Ind) is measured through the percentage of independent directors in the board. CEO duality (CEO_D) is measured through 0 or 1, where the role of CEO and Chairman is acting by same 0 otherwise 1. The number of women in the board (N_WB) is measured by the total number of women in the board. However, the proportion of all directors' shares in firm equity is used for managerial ownership (M_Owner).

Dependent Variable

Different approaches are used to measure the CSR disclosure scores. CSR data is gathered from reputation indices or from company rating approach through different databases (Fuente et al., 2017; Galbreath, 2017; Jizi, 2017; Kaymak & Bektas, 2017; Wang et al., 2018). CSR data can also be collected from the survey. But all the above methods have some limitations, the reputation indices and company rating approach have a small number of data and there is too much subjectivity involved in ranking the companies, Whereas survey method is more likely time consuming and costly. This study uses the most reliable technique among all approaches i.e. the content analysis with the help of well know qualitative software NVIVO 10. For this purpose, the secondary data is utilized from annual reports. Reliability and validity is a matter of discussion in content analysis but this study has no such issues because the same instrument has been used to calculate the CSR scores in the same country with the same source of data collection i.e. annual reports (Aslam et al., 2018; Chan et al., 2014).

Control Variables

Control variables of this research are in line with the prior literature on CSR disclosure. Firm Size (FS) is most commonly used control variable in the study of voluntary disclosures. Because the large firms have more funds to initiate environmental, social and welfare programs and build a morestrong image in front of their stakeholders (Glass et al., 2016; Haque, 2017; Hollindale et al., 2017; Nicola et al., 2018; Rao & Tilt, 2016b). Number of previous studies used firm size through the lag of total assets of the firms (Galbreath, 2017; Jizi, 2017; Wang et al., 2018). Managing the social and environmental programs are mostcostly activities and it always depends upon the profitability of the firms. A return on assets (ROA) is considered as the second control variable of the study as also used control proxy in environmental disclosure studies (Jaggi et al., 2017; Zeng et al., 2012). Higher leverage (Lev) of the firms inclined less towards CSR activities (Chan et al., 2014; Haque, 2017). A

firm with higher ratio of debt to equity ratio is more likely to be less free cash flows for building the pro-environmental image of the firms. Financial leverage is expected a more fungible measure of CSR disclosure.

Analysis and Results

Before starting the analysis it is necessary to check that the data set is free from errors. When a dataset is too large, it is very difficult for screening and cleaning data manually. By utilizing SPSS 22, we conduct missing values analysis and removed all aberrant and missing values.

Descriptive Statistics and Correlations

Table 1 shows the descriptive statistics of the overall model of the study. Skewness and Kurtosis values of ROA and number of women on the board are violated the normality assumption because of statistics value of skeness and Kurtosis ± 2.00 (Tabachnick & Fidell, 2007). Hence, the data set is not normally distributed. In social sciences, most of the time the data set is found non-normal distributed (Barnes et al., 2001). In order to make data set normal, the second method of normality test is conducted through Mahalanobis D^2 test. Due to outliers, 42 observations are removed from the dataset.

Table 2 depicts the Pearson correlation results, which exhibit that CSR is positively correlated with all the variables except the managerial ownership and leverage. The output of correlation confirmed that CSR is positive and significant at ($p < 0.01$), correlated with predictors and control variables of the study (B_size, B_Ind, N_WB, ROA, FS) and CEO_D is significant at ($p < 0.05$). On the other side, CSR is negatively significant at ($p < 0.01$) with M_Owner and Lev. VIF values of all independent variables proved that there is no multicollinearity issue among independent variables. Reliability value of CSR is also within acceptable (0.87) range.

Table 1: Descriptive Statistics

Variables	Min	Max	Mean	S.D	Skewness	Kurtosis
CEO_D	0.00	1.00	0.56	0.50	0.25	1.94
B_Size	3.00	13.00	4.75	1.63	1.13	1.42
B_Ind	0.00	100.00	52.47	23.97	-0.28	-0.62
M_Owner	0.00	92.93	15.27	18.63	1.65	2.30
N_WB	0.00	5.00	0.33	0.66	2.08	3.94

ROA	-959.56	541.16	3.96	21.84	3.15	8.85
FS	4.58	11.13	7.51	1.03	0.38	-0.01
Lev	-92.06	105.50	0.83	6.11	1.96	16.00
CSR_I	1.00	38.00	13.11	6.86	0.83	0.34

Notes: CEO_D= CEO duality; B_Size= Board size; B_Ind= Board independence; M_Owner; Managerial ownership; N_WB= No. of Women in the board; ROA= Return on investment; FS= Firm size; Lev= Leverage; CSR_I=CSR initiatives.

Regression Analysis

To investigate the hypothesized relationships, we run five regression models (Table 3) where CSR constitutes as a dependent variable. The same method has been used a number of times to predict the environmental performance (Calza et al., 2016; Surroca et al., 2010).

Table 2: Correlation Matrix

Variables	VIF	1	2	3	4	5	6	7	8	9
1. CSR_I	0.87 α	1								
2. B_Size	1.25	.321**	1							
3. B_Ind	1.20	.134**	.208**	1						
4. CEO_D	1.19	.061*	.159**	.365**	1					
5. N_WB	1.26	.233**	.429**	.209**	.141**	1				
6. M_Owner	1.05	-.190**	-.102**	-.131**	-.194**	-.121**	1			
7. ROA	1.18	.189**	.306**	.159**	.115**	.250**	-.097**	1		
8. FS	1.68	.357**	.564**	.272**	.195**	.429**	-.124**	.355**	1	
9. Lev	1.01	.136**	.116**	.278**	.184**	.205**	.239**	.390**	.077**	1

Notes: CSR_I=CSR initiatives; B_Size= Board size; B_Ind= Board independence; CEO_D= CEO duality; N_WB= No. of Women in the board; M_Owner; Managerial ownership; ROA= Return on investment; FS= Firm size; Lev= Leverage; * $p < 0.05$; ** $p < 0.01$.

Table 3: Regression Results

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Control	Overall	Manufacturing	Non-Financial Services	Financial Services	Trading and Merchandizing
ROA	.046* (1.850)	.074** (2.403)	.069** (2.311)	.188** (2.293)	.069** (2.311)
FS	.224*** (7.570)	.322*** (9.118)	.342*** (5.047)	.205** (2.043)	.351*** (3.600)
Lev	-.063*** (-2.727)	-.075** (-2.470)	-.101 (-3.359)	-.126* (-1.726)	-.363*** (-11.859)
Independent					
B_Ind	.056** (2.183)	.057* (1.729)	.214*** (3.668)	.023 (.289)	.085 (1.036)
B_Size	.259*** (9.926)	.220*** (6.649)	.252*** (4.343)	.259*** (3.120)	.366*** (4.855)
CEO_D	.044* (1.722)	.058* (1.751)	.121** (2.103)	.006 (.067)	.219** (2.605)
N_WB	.098*** (3.749)	.110*** (3.364)	.177*** (2.696)	.243*** (2.996)	.060 ^{n.s} (.777)
M_Owner	-.153*** (-6.408)	-.122*** (-3.866)	-.114** (-2.074)	-.111 (-1.549)	-.169** (-2.171)
Constant	12.970***	11.510***	2.965***	2.465**	2.52**
Adj. R ²	0.137	0.095	0.230	0.206	.258
N	1549	947	303	176	137

Notes: *CSR_I*=CSR initiatives; *B_Size*= Board size; *B_Ind*= Board independence; *CEO_D*= CEO duality; *N_WB*= No. of Women in the board; *M_Owner*= Managerial ownership; *ROA*= Return on investment; *FS*= Firm size; *Lev*= Leverage; * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

Results and Discussion

The first hypothesis posits that higher proportion of independent directors on the board is positively related to the voluntary CSR initiatives. The coefficients of model 1, 2 and 3 to measure CSR initiatives are positive and statistically significant less than 10%, 5% and 1% respectively for explaining influence of *B_Ind* on CSR ($\beta = .056$, $p \leq 0.05$ for model 1, $\beta = .057$, $p \leq 0.10$ for model 2 and $\beta = .214$, $p < 0.01$ for model 3). Even the influence of independent directors on CSR on each sector is not found as significant but the results of overall ASX firms, manufacturing, and non financial services sector are in line with previous studies (Ben-Amar et al., 2017; Kaymak & Bektas, 2017; Khan et al., 2009; Kiliç et al., 2015; Ortas et al., 2017). In contrast with the results of model 1, 2 & 3 the proportion of independent directors is not

significantly associated with the level of CSR programs ($\beta = .023$, for model 4, $\beta = .085$ for model 5). The results of model 4 & 5 are in line with prior studies. (Handajani et al., 2014; Rao & Tilt, 2016b).

The Hypothesis H₂ predicts that higher board size is positively related to the voluntary CSR initiatives. The coefficients of model 1, 2, 3, 4 and 5 to measure CSR initiatives are positive and significant in all models for explaining influence of B_Size on CSR ($\beta = .259$, $p < 0.01$ for model 1, $\beta = .220$, $p < 0.01$ for model 2, $\beta = .252$, $p < 0.01$ for model 3, $\beta = .259$, $p < 0.01$ for model 4 and $\beta = .366$, $p < 0.01$ for model 5). All the results corroborate previous studies (Frias-Aceituno et al., 2013; Fuente et al., 2017; Post et al., 2011).

The third hypothesis explained that the presence of CEO duality exhibits positive association with voluntary CSR disclosure. Coefficients of model 1 & 2 are positive and significant which are in line with Said et al. (2009), whereas the coefficient of model 4 financial services sector has no significant result ($\beta = .044$, $p < 0.10$ for model 1, $\beta = .058$, $p < 0.10$ for model 2, $\beta = .121$, $p < 0.05$ for model 3, $\beta = .219$, $p < 0.05$ for model 5 and $\beta = .006$, for model 4). While in financial sector there is no significant result of CEO duality with CSR initiatives. This is as per the prior studies (Khan et al., 2013; Said et al., 2009). CEO duality is a mere ritual in corporate governance practices except for the family business.

The fourth Hypothesis states that the presence of women directors' exhibits positive association with voluntary CSR disclosure. All the coefficients of the first four models are positive and significantly explained this relation except trading sector. N_WB linked with CSR ($\beta = .098$, $p < 0.01$ for model 1, $\beta = .110$, $p < 0.01$ for model 2, $\beta = .177$, $p < 0.01$ for model 3, $\beta = .243$, $p < 0.01$ for model 4 and $\beta = .060$, model 5). In addition, boards with a higher number of women shows higher transparency towards CSR initiatives. The results are in line with prior findings (Bear et al., 2010; Ben-Amar et al., 2017; Dienes & Velte, 2016; Liao et al., 2015). Accordingly, this hypothesis is supported.

The fifth hypothesis predicts that managerial ownership is negatively influencing the CSR programs. The results prove that managerial ownership caused to detach management from social and environmental programs ($\beta = -.1538$, $p < 0.01$ for model 1, $\beta = -.122$, $p < 0.01$ for model 2, $\beta = -.114$, $p < 0.05$ for model 3, $\beta = -.111$, for model 4 and $\beta = -.169$, $p < 0.05$ for model 5). The results of model 4 are in line with recent research (Lin et al., 2018). While all other model results are shown a negative relationship between managerial ownership and CSR programs as reported (Chau & Gray, 2010; Khlif et al., 2017; Oh et al., 2011). However, this relation does not mean that directors with high managerial ownership have never done positive response for CSR but

their ownership is really a matter of concern. Thus, hypothesis 5 is also supported.

Finally, there is no disparity between the signs of control variables and their significance as mentioned in the proposed model of the study.

Robustness Check

To overcome the problem of endogeneity, we employed omitted variable bias method (Greene, 2003). The control variables of the study are selected carefully but we have to account for some other variables that may influence the decision of CSR programs. R&D intensity is measured through R&D expenses over current year sales. If the company is busy in some R&D activities, it is more likely that focus on their value creation through social and environmental programs. Financial slack is also the key variable while organization needs to do some welfare programs either for employees or for the community. It is measured by current assets minus current liabilities. Growth in sales is also one of the other reasons to spend more on CSR activities. Therefore, sales growth is also considered for analysis and measured as current year sales minus previous year sales divided by previous year sales. The coefficients of all three variables are not significant ($\beta = .035$; $\beta = .008$ and $\beta = -.025$). Thus the decision about the variable of interest is to remain unchanged.

Limitations and Directions

Although the current study makes significant contributions to corporate governance and CSR literature but it has some limitations. *First*, the study focused on few aspects of board composition and diversity such as board independence, board size, CEO duality, gender diversity and managerial ownership. In future, other attributes of the directors such as educational background, nationality, experience, etc can also be considered. *Second*, the results cannot be generalized as we used the data of only one country. To generalize the findings, future research may be conducted that may use the data of multiple countries. *Third*, the study is based on secondary data that fails to cover all aspects of CSR; it could be covered in future by collecting the data from primary sources. *Finally*, it is based on the cross-sectional dataset that limits data exploration to a narrow time frame. Future research can be conducted by using longitudinal panel dataset, which would permit the scholars to explore some new behaviors.

Implications and Conclusion

The higher numbers of females in the boardroom is positively associated with CSR initiatives. But at the same time there is an inverse significant relationship of managerial ownership with CSR which is whistle blowing for academia and regulatory bodies. No doubt, such intervention like the female director's participation and their proportion in board is responding to CSR initiatives but failed to attenuate the inverse significant managerial ownership influence on CSR. The empirical findings may assist the practitioners that still there is a need to attenuate the directors short-term temporal view and align them with a long-term strategic view of CSR. Hence, regulatory bodies themselves have to play some sound material initiative with corporate sectors to preserve the ecosystem.

However, managerial ownership influence can handle by the interventions of regulatory bodies through compulsory CSR trainings. Trainings may equip with usage of green technology, waste management, community commitments and recycling water and water preservation. While increased the managerial ownership of females may also cause for the better CRS initiatives.

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Appendix 1
Sample Distribution

S.No	Types	Industry Group	Total Companies listed	Final Sample after removing outliers	Frequency
1.	Manufacturing	Energy	262	207	79.00
		Material	745	575	77.18
		Food and Staples	04	04	100.00
		Food, Beverage & Tobacco	38	32	84.21
		Pharmaceuticals Biotechnology & Life Sciences	67	60	89.55
		Technology Hardware & Equipment	28	25	89.28
		Consumer Durables & Apparel	23	20	86.96
		Utilities	29	24	82.75
	Total		1196	947	79.18%
2.	Non-Financial Services	Consumer Services	53	45	
		Media	35	27	84.90
		Commercial Services & Supplies	71	60	84.51
		Transportation	24	21	87.50
		Health Care Equipment & Services	68	59	86.76
		Software and Services	83	65	78.31
		Telecommunication Services	28	26	92.85
	Total		362	303	83.70%
3.	Financial Services	Banks	13	10	76.92
		Diversified Financials	120	95	79.16
		Insurance	14	10	71.43
		Real Estate	87	61	70.11
	Total		243	176	72.43
4.	Trading and Merchandising	Capital Goods	100	88	88.00
		Automobiles & Components	05	04	80.00
		Retailing	44	38	86.36
		Household & Personal Products	04	04	100
		Semiconductors & Semiconductor Equipment	03	03	100
	Sub Total		156	137	87.82
	Total		1948	1563	80.23%