Impact of Corporate Governance Attributes on Sustainability Reporting: Evidence from India

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Abstract: The study aimed to examine the impact of corporate governance attributes on sustainability reporting in the context of 435 non-financial companies from the top 500 BSE-listed companies based on market capitalization. The study is based on secondary data collected from the published sustainability, governance, and annual reports for a period of 6 years, that is, from 2015 to 2020. We have employed a content analysis technique to measure CSP using binary coding, that is, 0 (for non-disclosure) and 1 (for disclosure of item) based on the GRI reporting framework. Using panel data regression, we found that the corporate governance attribute plays an incredibly significant role in influencing the sustainability disclosure of Indian firms. Outcome of the regression results clearly indicates that except for independent directors all aspects of corporate governance, such as board size, gender diversity, and CEO duality have a positive and significant impact on Indian companies’ corporate sustainability reporting practices indicating that they play a key role in influencing the reporting practices of Indian companies.

Keywords: content analysis, corporate governance, GRI framework, panel data, sustainability disclosure.

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INTRODUCTION

Disclosure of corporate sustainability performance (CSP) information within the framework of organizational governance enables businesses to maintain good relationships with all stakeholders and to be viewed by society as CSP-committed actors (Adamu & Tyasari, 2022; Novitasari et al., 2021; Simpson & Kohers, 2002). In this way, firms can signal to society that they are interested in meeting the expectations and needs of shareholders and all stakeholders (Önder & Baimurzin, 2020; Arvidsson, 2010), because the disclosure of social and environmental issues may be useful for decreasing agency problems and information costs in capital markets, enhancing companies’ reputation and increasing stock values, among others (Jensen & Meckling, 1976; Jizi, 2017; Musah et al., 2022).

Boards of directors are responsible for a wide variety of tasks, including allocating resources to businesses, deciding how much of a commitment a CSP will make to its stakeholders and society, fostering positive relationships with those stakeholders, and determining the company’s next strategic move (Saha & Kabra, 2019; Mukhtaruddin et al., 2019). A more long-term viable company might emerge from these choices.
Therefore, efficient boards will likely promote CSP reporting when it is in the company’s interest to indicate to all stakeholders and society that they are devoted to their requirements, as suggested by Gray et al. (1995). It’s possible that boards will increase CSP issue reporting if they feel social pressure to reach out to all stakeholders. By encouraging more CSP data to be reported voluntarily, boards of directors may help make businesses more open to the public. Some studies (Ortiz-de-Mandojana & Aragon-Correa, 2015; Das et al. 2021; Farida & Purwanto, 2021; Hatane et al., 2021) have found that the composition of boards affects their effectiveness in promoting CSP reporting, keeping good connections with all stakeholders, producing company performance, and meeting all stakeholders’ requirements. According to Jamali et al. (2008), a company’s board structure is crucial in making decisions on CSP disclosure. Board members are selected primarily to protect the company’s stockholders, although it is generally accepted that effective boards will also consider and address the concerns of other relevant parties.

The board of directors must take into account corporate transparency as a strategic choice. Companies’ ability to monitor, control, and report is impacted by the number of directors on a board. Group dynamics suggests that smaller boards are better able to supervise and oversee management than larger boards. Directors on smaller boards will be better able to work together and communicate, leading to increased individual responsibility and participation (Dey, 2008). John & Senbet (1998) contend, however, that small boards may have drawbacks since individual directors will have more jobs and responsibilities, which may limit the regulating and monitoring function and competence of board directors. Even more so, as Guest (2009) points out, boards with few members may lack diversified knowledge, which would have an adverse effect on both the board’s governing and advising functions. In light of the extra effort required by CSP disclosure, boards should take it into account.

Multiple studies have shown that companies with larger boards have many benefits, including increased company value (Kalsie & Shrivastav, 2016) and improved financial reporting (Obigbemi et al., 2016; Dewi et al. 2021). Accordingly, the size of the board is a factor that contributes to the board’s effectiveness in terms of exerting pressure on management to reveal CSP concerns. Big boards are more likely to include directors with a variety of skills and backgrounds, which is useful for resolving disagreements and making choices, such those involving revealing CSP concerns, according to research by Dalton et al. (1999) and Kaymak & Bektas (2017). In order to reduce the negative effects of information asymmetry and the associated agency costs, Cormier et al. (2010) demonstrate that a larger board improves reporting on corporate governance. This research suggests that board size is a factor in the alignment of interests between shareholders and management, which in turn helps reduce agency concerns.

Despite some contradictory findings, the vast majority of studies have shown a favorable association between board size and CSP disclosure. Several authors have found that larger boards have a positive effect on CSP reporting; these include Brown et al. (2006); Frías-Aceituno et al. (2013); Ntim & Soobaroyen (2013); Jizi et al. (2014); Jizi (2017); García-Meca & Pucheta-Martínez (2018).

One such board characteristic that might affect CSP disclosure is board independence. Corporate governance mechanisms like an independent board are useful for overseeing and monitoring management and protecting shareholders’ interests, especially those of minority shareholders. Furthermore, Rodriguez-Ariza et al. (2014) suggest that independent directors will be required to make choices to guarantee that enterprises realize their goals and act appropriately from an independent, external, and objective viewpoint, leading to an increase in the number and quality of information disclosure. Previous studies have shown a favorable association between board independence and voluntary disclosure (e.g., Cheng & Courtenay, 2006; Prado-Lorenzo et al., 2009).
Fligstein (1991) argues that independent board members are selected primarily for their financial knowledge, while other factors, such as a strong professional background and a sterling reputation, also play a role. Reeb & Zhao (2013) show that effective reporting quality depends on whether the independent directors meet the capabilities, and Keasey & Hudson (2002) argue that independent directors can evaluate managers’ actions and detect and resolve problems arising from managers’ behavior provided they have industry knowledge of firms and the appropriate expertise. It’s possible that independent directors may try to persuade businesses not to disclose CSP data that they’ve gathered willingly. Various authors, including Eng & Mak (2003), Haniffa & Cooke (2005), Lim et al. (2007), Prado-Lorenzo & Garcia-Sanchez (2010), and Arora & Dharwadkar (2011), find that board independence negatively affects voluntary disclosures, including CSP disclosure. As a result, we conclude that the independence of the board has a deleterious effect on CSP reporting for the reasons stated above. Disclosure of CSP concerns, such as greenhouse gas emissions, may be beneficial to all parties involved, but it may be counter to the interests of shareholders, as shown by Prado-Lorenzo & Garcia-Sánchez (2010).

Previous study has looked at how having a CEO with multiple roles affects CSP disclosure, with mixed results. In line with agency theory, managers’ dedication to CSP practices and transparency is likely to be influenced by the managers’ own self-interests. Therefore, the CEO duality’s managerial authority may urge the management team to reassess CSP operations if the team believes they are not beneficial. To that end, CEO duality may reduce the efficacy of directors’ monitoring function, limit transparency to shareholders and other stakeholders (Butt et al., 2020; Isnurhadi et al., 2020; Rahman et al., 2020; Giannarakis, 2014; Sundarasen et al., 2016), and impede the performance of specific governance duties, such as CSP disclosure. A Chair-CEO figure has been shown to have a detrimental effect on a company’s openness by authors like Chau & Gray (2010) and Donnelly & Mulcahy (2008) due to a decline in voluntary disclosures, especially CSP information. Finkelstein & D’Aveni (1994) believe, however, that CEO duality may also be beneficial since it serves a vital supervisory function. In situations when the CEO is also the chair of the board, that person may have an incentive to promote CSP reporting to demonstrate to society and stakeholders that they are concerned with CSP concerns. The CEOs may also enjoy longer terms in office, more public acceptance, and increased financial rewards as a result of their efforts (Rath et al., 2020). In a similar vein, Jiraporn & Chintrakarn (2013) contend that CEOs with dual roles will exploit CSP transparency to their advantage. The favorable link between CEO duality and CSP reporting has been reported in previous studies (Jiraporn & Chintrakarn, 2013; Jizi et al., 2014; Mallin et al., 2013), lending credence to the premise that CEO dualism is not necessarily detrimental.

Gender diversity on corporate boards is gaining popularity. Female directors, according to research, have an important role in boosting board performance and supporting excellent business practices, among other things (Pucheta-Martinez et al., 2016; Rogelberg & Rumery, 1996). According to agency theory, female directors may be effective drivers of CSP issues since their leadership style may encourage the disclosure of problems related to corporate social responsibility. Because women leaders are more empathic, compassionate, and nurturing than male’s directors, it follows that women directors are more likely to work together to achieve a common goal (Kim, 2013). Female directors, according to Bird & Brush (2002), Davis et al. (2010), and Melero (2011), may better encourage staff because they are more relationally focused and democratic in their decision-making. Women leaders have been shown to be more successful in the corporate environment, with evidence coming from sources such as Nielsen & Huse (2010) and Matsa & Miller (2013).

While there is a substantial body of literature that dissects the relationship between corporate governance and CSP reporting, the impact of corporate governance institutions like boards of directors, and in particular their composition, on CSP disclosure has received far less attention in emerging market like India. Therefore,
the purpose of this research is to evaluate the effect of various characteristics of the board structure like board size, board independence, board gender diversity, and chief executive officer (CEO) duality on CSP reporting in a representative sample of Indian firms.

METHODS

We have used secondary data collected from the published sustainability reports (or business responsibility report) and corporate governance report from companies’ respective website which was easy for us to download it without any cost. Further, the time period of the study is 6 years i.e., from 2015 to 2020. We have used 2015 as a starting point because, SEBI made it mandatory for top 500 companies based on market capitalization listed in BSE to publish sustainability report. Our sample of the study is 435 non-financial companies out of 500 companies which is the population of the study.

The CSP, as measured by a content analysis technique based on the GRI framework, is the study’s dependent variable. We measured CSP in this study, in terms of level of disclosure. Level of disclosure is calculated by using binary code i.e., ‘0’ if the item given in GRI framework is disclosed and ‘1’ if not disclosed in the report. The explanatory variable of the study are the attributes of corporate governance. In this study these attributes are considered as an independent variable under the broad term corporate governance which are Board Size (BS) measured by total number of directors in board, independent director (Ind-Di) measured in terms of presence or absence of independent directors on the board, Gender diversity (GD) measured by the percentage of women in the board and CEO duality (CEO-Dua) measured in terms of presence or absence of CEO duality on the board. We have also used some important control variables which are Firm Size (SIZE) measured by natural log of total assets, Leverage (LEV) measured by debt-equity ratio, Lag CSP disclosure (CSP-Lag) measured by difference between current year disclosure with the previous year disclosure and Return On Assets (ROA) measured by dividing profit before tax with total assets of the firm.

For investigating the impact of corporate governance on CSP after considering other explanatory variables of non-financial companies listed in BSE, an appropriate panel data model has been used in this study. More specifically we have used Random Effect Model because we have found chi-square value of the Breusch-Pagan test to be significant, which indicates that random effects regression model is more appropriate for present dataset. The specific model is shown below:

\[
CSP_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 Ind-Di_{it} + \beta_3 GD_{it} + \beta_4 CEO-Dua_{it} + \beta_5 CSP-Lag_{it} + \beta_6 SIZE_{it} + \beta_7 LEV_{it} + \beta_8 ROA_{it} + c_{it}
\]

RESULTS AND DISCUSSION

The descriptive statistics of all the variables are shown in Table 1. A quick glance at the table reveals that the mean value of CSP is 58 percent, implying that the average amount of disclosure across all 435 organizations is roughly 58 percent, as shown by father. A further look into to the disclosure pattern of CSP it reveals that minimum value is nearly 14% and maximum value 98% which indicates inconsistency is disclosing information related to sustainability. If we investigate the descriptive statistics of board size it shows that the minimum number of directors is 4 and maximum number of directors is 24. We have also noticed that on an average the mean value of the board of directors in our present data set is nearly 11 directors. Since we have measured CEO duality measured by ‘0’ in ‘1’ indicating if quality exist then the score is ‘1’ and if not, the score is ‘0’. The
descriptive statistics of CEO duality clearly shows that there are few companies in which duality exist and, in few companies, there is no existence of duality. We also noticed the mean value of duality is coming less than 1. Women directors, on the other hand, make up over half of the board of directors. The minimum value 0 for general diversity in the table indicates that there are few companies where there are no women directors. The average value of women directors is coming around 14% of the board size. A further look into the table also reveals that the independent directors are there in the present data set which is indicated by maximum value 1. The minimum value 0 for independent director as per the table indicates that there are few companies where there is an absence of independent director, we have also found the mean value for independent director is 1 which indicates that on an average the sample firm have independent directors in their respective board.

**Table 1 Descriptive Statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSP</td>
<td>58.06</td>
<td>17.11</td>
<td>13.61</td>
<td>98.48</td>
</tr>
<tr>
<td>CSP-Lag</td>
<td>-0.06</td>
<td>10.44</td>
<td>-98.48</td>
<td>65.26</td>
</tr>
<tr>
<td>BS</td>
<td>10.73</td>
<td>3.32</td>
<td>4.00</td>
<td>24.00</td>
</tr>
<tr>
<td>CEO-Dua</td>
<td>0.22</td>
<td>0.42</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>LEV</td>
<td>0.79</td>
<td>12.54</td>
<td>-387.59</td>
<td>130.40</td>
</tr>
<tr>
<td>SIZE</td>
<td>10.92</td>
<td>1.42</td>
<td>3.19</td>
<td>16.27</td>
</tr>
<tr>
<td>GD</td>
<td>13.84</td>
<td>6.69</td>
<td>0.00</td>
<td>50.00</td>
</tr>
<tr>
<td>ROA</td>
<td>5.30</td>
<td>11.70</td>
<td>-327.85</td>
<td>98.19</td>
</tr>
<tr>
<td>Ind-Di</td>
<td>1.00</td>
<td>0.02</td>
<td>0.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Source: Computed by Author

**Table 2 Correlations Matrix**

<table>
<thead>
<tr>
<th></th>
<th>CSP</th>
<th>CSP-Lag</th>
<th>BS</th>
<th>CEO-Dua</th>
<th>LEV</th>
<th>SIZE</th>
<th>GD</th>
<th>ROA</th>
<th>Ind-Di</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSP</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSP-Lag</td>
<td>0.279</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS</td>
<td>0.041</td>
<td>0.028</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO-Dua</td>
<td>-0.048</td>
<td>-0.016</td>
<td>-0.063</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>0.000</td>
<td>0.006</td>
<td>-0.010</td>
<td>0.002</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.141</td>
<td>-0.012</td>
<td>-0.012</td>
<td>0.037</td>
<td>0.026</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GD</td>
<td>0.038</td>
<td>0.012</td>
<td>-0.401</td>
<td>0.019</td>
<td>-0.014</td>
<td>-0.050</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>-0.087</td>
<td>-0.040</td>
<td>-0.006</td>
<td>0.039</td>
<td>0.001</td>
<td>-0.074</td>
<td>-0.049</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Ind-Di</td>
<td>0.014</td>
<td>0.000</td>
<td>0.023</td>
<td>0.011</td>
<td>0.000</td>
<td>-0.004</td>
<td>0.043</td>
<td>0.010</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: Computed by Author
Table 2 reveals the correlation matrix. It is very necessary to identify any potential high degree correlation among the independent variables. Any regression model having high degree of correlation among independent variables violates the basic assumption of regression that there absence of high degree multi-collinearity among independent variables. The table 2 clearly indicates that none of the two independent variables are having high degree correlation (i.e., more than 0.6) which indicates that multi-collinearity is not an issue for carrying out the regression analysis. For instance, the correlation coefficient between BS and CEO-Dua, BS and GD as well as between BS and Ind-Di are -0.063, -0.401, 0.023 respectively.

The empirical result as shown in table 3, reveals that the impact of board size on firm performance is positive and significant at 10% level. This indicates that the number of directors in the board facilitates corporate sustainability reporting. This board members are mainly responsible for monitoring controlling and financial and non-financial (such as sustainability reporting) reporting of companies. The outcome of our study is consistent with many previous studies for instance Frías-Aceituno et al. (2013); Jizi (2017); García-Meca & Pucheta-Martínez (2018).

Table 3 Random-Effects (GLS)

<table>
<thead>
<tr>
<th></th>
<th>Coef.</th>
<th>Std. Error</th>
<th>z-Stats</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Const.</td>
<td>67.795</td>
<td>10.024</td>
<td>6.763</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>BS</td>
<td>0.173</td>
<td>0.103</td>
<td>1.685</td>
<td>0.092</td>
</tr>
<tr>
<td>GD</td>
<td>0.106</td>
<td>0.044</td>
<td>2.418</td>
<td>0.016</td>
</tr>
<tr>
<td>Ind-Di</td>
<td>-6.850</td>
<td>9.395</td>
<td>-0.729</td>
<td>0.466</td>
</tr>
<tr>
<td>SIZE</td>
<td>-1.163</td>
<td>0.226</td>
<td>-5.149</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.069</td>
<td>0.018</td>
<td>-3.7443</td>
<td>0.000</td>
</tr>
<tr>
<td>CSP-Lag</td>
<td>0.438</td>
<td>0.018</td>
<td>24.051</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>CEO-Dua</td>
<td>0.181</td>
<td>0.770</td>
<td>0.236</td>
<td>0.084</td>
</tr>
<tr>
<td>LEV</td>
<td>0.008</td>
<td>0.015</td>
<td>0.509</td>
<td>0.611</td>
</tr>
</tbody>
</table>

Note: Log-likelihood=−9960.17, Joint test on named regressors - Asymptotic test statistic: Chi-square = 679.332***; Breusch-Pagan test - Chi-square = 2378.02***; Hausman test - Chi-square = 14.4826; R-square: within = 0.0749, between = 0.1101, and overall = 0.0753.

Source: Computed by author

The outcome of the impact of independent directors on sustainability reporting a shown in in Table 3. The table clearly reveals that the coefficient of independent director is negative and statistically insignificant. Although we expected some impact of independent directors on the sustainability reporting, but our study reveals that independent directors has no association with sustainability reporting. The main plausible reason for that could be that independent directors have lack of information about the related cost associated with the voluntary disclosure of the company. According to the research like Prado-Lorenzo & Garcia-Sanchez (2010), when companies decide to disclose social and environmental related information to the large group of stakeholders, this my disturbed the shareholders’ interest. Hence independent directors may not support full heartedly the non-financial disclosure for protecting the interest of the shareholder. As shown in table 3, the
influence of gender diversity on sustainability reporting is favorable and statistically significant at 95 percent level of confidence. As a result, we are free to accept our alternative theory (H3). Ibrahim & Angelidis (1994) who also found that women presented on the board of directors an overly sensitive to sustainability issues. They further argued that the presence of women directors can also influence other members in the board to be socially and environmentally more responsible.

The regression result present in the table 3 clearly shows that the impact of CEO duality on corporate sustainability performance is positive and statistically significant at 5% level. The outcome of the study indicates that CEO-duality helps in preparing and disclosing the CSP report to reduce the pressure of stakeholders (Jizi, 2017). In addition, Laeven & Levine (2009) also recognized the efficiency of CEO duality in disclosing sustainability report to its stakeholder. Our finding is consistent with the study of Al-Janadi et al. (2013) who also reported a positive impact of CEO duality on voluntary disclosure in the context of Saudi Arabia. They further articulated that CEO-duality provide a centralized focus for achieving the goal of the organization.

Apart from the independent variables, there are few control variables like Firm Size and ROA whose impact on sustainability reporting is found to be negative and significant. On the other hand, leverage is found to be insignificant in influencing the sustainability reporting in the context of present data set. We have also found that the impact of the last year disclosure of CSP on current year disclosure is positive and significant. Finally, the significance of Joint test on named regressors (Asymptotic test statistic) along with the value of R-square, indicates that the regression model used here is a good fit and its outcomes are valid and reliable for analysis.

The outcome of our study is consistent with the outcome of many previous studies (Frías-Aceituno et al., 2013; Jizi, 2017; García-Meca & Pucheta-Martínez, 2018; Ibrahim & Angelidis, 1994; Al-Janadi et al., 2013). Our studies support that board composition is critical for sustainable performances and reporting, which consequently attracts Foreign Institutional Investors (FIIs) and that indirectly leads to economic growth and development to the nation. The outcome of the study may give confidence to the managers and shareholders of the company that effective corporate governance is better for good reporting. And good reporting may bring benefits to the company by attracting (FIIs'). Our study also provides an implication for academicians by contributing to the academic debate relating to the association between corporate governance and corporate sustainability. Our findings of the study may be helpful for the policy makers who are involved in making regulation for sustainable development in general and corporate governance.

CONCLUSION

The present study is a modest attempt to examine the impact of corporate governance attributes on the reporting practices in the context of 435 listed non-financial companies from India. From the outcome of the study, we have noticed that on an average the sample firms have disclosed 58% of information related to sustainability activities. Outcome of the regression results clearly indicates that except for independent directors all aspects of corporate governance, such as board size, gender diversity, and CEO duality have a positive and significant impact on Indian companies’ corporate sustainability reporting practices indicating that they play a key role in influencing the reporting practices of Indian companies. Based on our entire analysis, we make some suggestions for future study/research. Future studies should investigate the association between corporate governance to individual aspect of the corporate sustainability. There are some important variables like Research and Development cost, market-to-book ratio, Tobin's Q not included in study. Thus, we suggest that future study should consider these variables to control the impact of corporate governance on sustainability performances.
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REFERENCES


