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THE INFLUENCE OF THE BOARD CHARACTERISTICS ON THE ENVIRONMENTAL, SOCIAL, AND GOVERNANCE PERFORMANCE OF THE NSE-LISTED COMPANIES

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ABSTRACT

This article examines how the size of the board, the presence of women on the board, and the critical mass of women on the board affect the environmental, social, and governance (ESG) performance of companies listed on the NSE. This cross-sectional analysis relies on secondary data from the CRISIL database and examines a sample of 973 companies listed on the NSE. The Credit Rating Information Services of India Limited (CRISIL) assigns an ESG score to assess Indian firms' ESG performance. The authors collected data on female representation and board size from the yearly reports of the firms and their respective websites. The findings indicate that Indian corporations prioritize social and governance issues more significantly than environmental concerns. The results indicate that the board characteristics have a varied impact on the ESG performance of the companies listed on the NSE.

Keywords: Social and governance, environmental, ESG performance, critical mass, board size

INTRODUCTION

Both society and businesses depend on efficient corporate governance (Gunningham et al., 2005). Good corporate governance enhances the confidence of many stakeholders in organizations (Chopra, 2016). The 2013 Indian Companies Act emphasizes corporate social responsibility (CSR), improving openness and increasing accountability to stakeholders (Gupta & Chanchal, 2022). Funding agencies and investors reward companies that prioritize sustainability, enhancing their prospects for survival and development (Agnihotri et al., 2022). The Indian Corporations Act of 2013 imposes accountability on Indian corporations concerning their CSR policies and disclosures (Majumder & Hussain, 2023). Sustainability is an organizational commitment to society and the environment that enables a company to meet the demands and expectations of its stakeholders. Organizations use a sustainability report, also known as a CSR report, as a communication tool to share with all stakeholders their sustainability commitments and accomplishments (Maji & Lohia, 2023). As a responsible corporate citizen, the company strives to create value by enhancing liveability across the socioeconomic spectrum and closely collaborates with all of its partners to accelerate success for all (Pramanik et al., 2008). "Sustainable development means one that meets the needs of the present without endangering the resources of future generations to perform their own needs", according to the 1987 Brundtland Commission report. To attain the objective of long-term business sustainability, firms must meet the "three fundamental pillars" specified in the Sustainable Development Framework: a) social justice, b) economic growth, and c) environmental preservation (Aldowaish et al., 2022). However, despite their focus on environmental protection and social responsibility, this has not always been the case. Instead, businesses have been striving to develop the economy's "pillar" of manufacturing, income, and benefit.

The environmental pillar is responsible for addressing issues related to energy usage, waste management, emissions, and supply chain optimization. Corporations that provide compensation to society for acts that have caused disruption or discomfort are considered part of the external aspect of the social pillar (Pramanik et al., 2008). Additionally, it involves assisting with essential human requirements and ethical considerations, ensuring fair remuneration and benefits for all workers, and promoting inclusivity within the organization (Ashraf et al., 2022). A company is considered a socially conscious enterprise if it meets three specific requirements, considering the continuing discussion regarding the definition and implementation of sustainable development in a corporate setting (Erokhina, 2022). To establish a competitive edge and prove their commitment, these companies often provide details about their triple bottom line, which refers to the three pillars, namely environmental, social, and economic. These specific pieces of information are commonly known as sustainability reporting. Organizations can acquire these by adhering to their preferred methodology and impact indicators or by utilizing conventional methods such as the Global Reporting Initiative (GRI) (Pramanik et al., 2008; Gupta & Motwani, 2022).

India has inherent challenges in making substantial investments in ESG reforms due to its status as a developing nation (Ashraf et al., 2022). India is now at a crucial stage in its endeavors to eradicate poverty and foster equitable economic development via investments in ESG reforms (Agnihotri et al., 2022). Transitioning to sustainable practices sometimes involves significant financial investments and technological advancements, which may be particularly challenging for small and medium-sized enterprises (SMEs) and rural communities (Gupta & Motwani, 2022). Moreover, the increasing population and economic growth in India result in a significant need for energy, mostly met using fossil fuels like coal (Majumder & Hussain, 2023). According to Pramanik et al. (2008), the allocation of substantial funds to critical areas like social infrastructure, healthcare, education, and poverty reduction limits the available resources for comprehensive ESG improvements. However, regardless of these constraints, it is crucial to abide by ESG principles. India should adopt a deliberate and pragmatic strategy that considers the unique characteristics of the country while progressively integrating ESG issues into its practices and regulations (Bhatia & Dhawan, 2023).

The existing ESG framework is the outcome of past efforts that have focused on different aspects of corporate governance (Mitra, 2012). Various factors, including the regulatory framework, institutional investors, and other external forces, influence the incorporation of ESG factors into business operations within a specific jurisdiction. However, the primary responsibility for driving this integration lies with internal forces, specifically the board of directors and key managerial personnel (Gupta & Chanchal, 2022). The Indian legislative framework implemented Business Responsibility and Sustainability Reporting (BRSR) for organizations that are among the top 1000 corporations in terms of market capitalization to comply with the ESG adoption requirement (Gupta & Chanchal, 2022). SEBI, on May

10, 2021, mandated that the top 1000 listed businesses create Business Responsibility and Sustainability Reports (BRSR) for the fiscal year 2021–2022, replacing the previous requirement of Business Responsibility Reports (BRR) (Pramanik et al., 2008). The circular mandates that the entities must disclose their performance on nine criteria as suggested by the National Guidelines on Responsible Business Conduct (NGRBC) (Agnihotri et al., 2022).

ESG is a relatively new concept in India. However, it has gained substantial appeal worldwide in recent years. Indian corporations prioritize social and governance aspects above environmental ones, according to Maji & Lohia (2023). Achieving sustainable development requires careful consideration of ESG aspects. Companies that prioritize these concerns often have superior long-term outcomes, lower costs of capital, increased employee retention rates, and less exposure to legal liabilities (Mishra & Yadav). ESG is increasingly becoming a mandatory framework that firms must comply with. It assesses the institution's long-term viability and influence on society (Cappucci, 2018; Aldowaish et al., 2022). Currently, investors are actively seeking socially responsible investments that will provide long-term profits, while consumers are increasingly demanding sustainable products and services (Yu et al., 2020; Ashraf et al., 2022; Aldowaish et al., 2022).

Furthermore, studies have shown that organizations that adhere to ESG regulations tend to be more financially lucrative than those that do not follow such regulations, integrate ESG factors into risk management strategies, and assess the potential financial repercussions of these factors (Maji & Lohia, 2023). Erokhina (2022), on the other hand, identifies potential benefits that may arise from ESG integration, including expanded market access, novel product offerings, enhanced operational efficiency, and more (Friede et al., 2015). Academic researchers, decision-makers, and the media have all expressed interest in board diversity (Elmagrhi et al., 2019; Nguyen et al., 2020; Kara et al., 2022; Shohaieb et al., 2022; Kizys et al., 2023; Liu et al., 2023). Many countries have implemented multiple initiatives aimed at improving the gender balance in business leadership (Mensi-Klarbach & Seierstad, 2020; Martínez-García et al., 2022). Corporate executives have a significant impact on ESG practices, and one important consideration is the presence of diverse gender representation in leadership (Rao & Tilt, 2016; Birindelli et al., 2019; Allemand et al., 2022).

The impact of female directors on company behavior and decision-making within the framework of corporate governance has gained significant attention in scholarly studies. As per Campbell & Mínguez-Vera (2008), there is a claim that having female directors involved in decision-making processes within corporations can enhance their quality by introducing varied perspectives. In addition to promoting corporate decision-making efficiency and enhancing the board of directors' monitoring role, this also reduces reckless risk-taking. Furthermore, Setó-Pamies (2015) notes that non-financial aspects of a company's performance, like its environmental reputation, are frequently linked to female leadership. Studies have indicated that women are typically more environmentally conscious and open to participating in environmental entrepreneurship projects, which lends support to this perspective in the existing literature (Braun, 2010). Additionally, Liao et al. (2019) discovered a positive correlation between the percentage of female directors and environmental innovation. According to Adams & Ferreira's (2009) research, there is a tendency for female directors to exhibit greater diligence in carrying out their oversight responsibilities. Research has shown that having a diverse mix of genders on boards greatly improves information transparency and quality of earnings disclosures while lowering the risks associated with investments and mergers and acquisitions (Levi et al. 2014). Prior studies have indicated that the presence of female directors has enhanced corporate governance, decreased agency expenses, and lessened the tendency of management to be shortsighted (Adams & Ferreira 2009).

The board's ability to monitor and provide advice increases proportionately with its size since there are more members to rely on. A larger group also allows for a wider diversity of perspectives and experiences and facilitates information sharing. On the other hand, disagreements in group decision-making could make large boards function worse. The benefits of additional directors are ultimately surpassed by procedural challenges, ineffective decision-making, free-riding, and poor coordination (Huang & Wang, 2015). A board becomes inefficient as it gets bigger because of bad decision-making and the free rider issue. Therefore, businesses ought to support having small boards of directors (Huang & Wang, 2015). However, a larger board might be able to provide more direction (Coles et al., 2008; Dalton et al., 1999; Huang & Wang, 2015). Board size seems to influence corporate value, firm policy decisions, and risk-taking, even though there isn't a perfect board size for every company (Eisenberg et al., 1998; Coles et al., 2008; Uchida, 2011; Huang & Wang, 2015).

REVIEW OF LITERATURE AND HYPOTHESIS FORMULATION

The variables most mentioned in the literature to describe the relationship between ESG performance and corporate governance include the proportion of women (or gender diversity) on the board, the proportion of independent directors (or independence) on the board, the size of the board, the frequency of board meetings, and the presence of a CSR sustainability committee. In the following sections, we present our hypothesis on the relationship between board size, the proportion of female board members, and the critical mass of female board members, all of which are widely recognized as important corporate governance factors.

Board Size

The Board of Directors (BoD) plays a vital role in the corporate governance (CG) system (Menicucci & Paolucci, 2022). The ESG score represents the board's obligations towards the company, the environment, and society since it is the responsibility of the Board of Directors to maintain the organization's alignment with its external surroundings (Carter et al., 2010). Board size positively correlates with ESG performance (Suttipun, 2021; Menicucci & Paolucci, 2022). Prior studies have focused on examining the relationship between the size of the board and the disclosure of ESG information (Abeysekera, 2010; Ahmed & Mohd, 2013; Giannarakis, 2014; Chamnankij & Suttipun, 2016; Naklerd & Suttipun, 2016; Chams & García-Blandón, 2019). Academic research literature suggests that boards with more members are likely to be more open to stakeholder concerns and are more involved in ESG issues. By incorporating diverse talents, information, and perspectives, companies may adopt a comprehensive approach to formulating plans and policies, enabling them to contribute to the holistic welfare of all parties concerned. Furthermore, it assists in resolving the principal-agent contradiction of agency theory. Jensen and Meckling formulated the agency theory in 1976, which asserts that the agent in an economic relationship has an ethical obligation to prioritize the principal's best interests. Esa and Anum (2012) discovered a favorable correlation between the extent of CSR disclosure in publicly listed Malaysian companies and their board size. According to the available literature on the subject, a larger board results in better performance in terms of stakeholder welfare than a smaller board. Research indicates that the geographic location of nations has a moderating effect on board size and composition, which in turn affects the sustainable performance of firms (Samaha et al., 2015; Chams & García-Blandón, 2019). The governance elements of the country, such as its laws and regulations, shape the corporate governance practices of companies. These variables, in turn, impact the performance of each firm in terms of ESG criteria (Lagasio & Cucari, 2018). Utilizing a sample of 100 US corporations from a variety of industries, Giannarakis (2014) was unable to find any evidence of a substantial correlation between board size and ESG disclosure. Based on the previously mentioned literature, the following hypotheses have been developed:
H1= Board size positively affects the ESG performance of selected NSE-listed companies.

H1A= Board size positively affects the environmental performance of selected NSE-listed companies.
H1B= Board size positively affects the social performance of selected NSE-listed companies.
H1C= Board size positively affects the Governance performance of selected NSE-listed companies.

Women Board Members

According to Gilligan (1993), men and women may have distinct approaches to thinking and problem-solving due to their upbringing and social relationships. Socialization has instilled in women a heightened sensitivity to the needs of others and a greater concern for moral matters (Eagly et al., 1990; Eagly & Johannesen-Schmidt, 2001). Their leadership style and decision-making processes may indicate this (Rosette & Tost, 2010). Empirical evidence suggests differences in how men and women form moral judgments (Mason & Mudrack, 1996; Dawson, 1997; Loo, 2003; Lund, 2008). As to the findings of García-Sanchez et al. (2015), firms with a higher proportion of female board members are likely to have more comprehensive and rigorous ethical standards. The presence of a diverse board can lead to a decrease in environmental violations, a more comprehensive assessment of ethics-related concerns, a balanced consideration of all stakeholders' interests, and a reduction in carbon emissions (Liu, 2018; Zalata et al., 2018; Lu & Herremans, 2019; Nuber & Velte, 2021). Female directors, in general, exhibit less ambition and motivation than male directors when it comes to achieving power and reputation (Adams & Funk, 2012). Instead, they are characterized by their wide universality and benevolence. These attributes demonstrate a deep understanding of and dedication to safeguarding the environment and the welfare of society (Galbreath, 2018). Empirical data indicates that companies with a greater proportion of women on their boards exhibit a positive correlation with increased levels of charitable donations and the implementation of social and environmental initiatives addressing concerns such as community development and environmental sustainability (Post et al., 2015; Lin et al., 2018). According to research, female directors usually display traits that are typically associated with women, such as helpfulness, friendliness, care for others, relationship-focused behaviour, and sensitivity to the needs of others (Cosma et al. 2021).

Compared to men, women are often regarded as more altruistic, less power-oriented, and more concerned with maintaining connections when making decisions (Adams & Funk 2012). According to Post et al. (2011), these gender-specific experiences are seen in corporate leadership as well as in general population segments. Female directors tend to be actively involved in strategic issues that impact the company and its stakeholders, as they prioritize relationship cultivation, define themselves through relationships, and build networks of relationships that garner public support (Nielsen & Huse 2010). This means that personal factors such as age, gender, work experience, education, and the religion of the members of the board of directors can significantly impact corporate decisions (Daily & Dalton, 2003). Specifically, female directors may perceive their leadership role in the company differently from male directors (Glass et al., 2016). Men generally tend to focus on the primary needs of shareholders, while women are often more attentive to the needs of a wider range of stakeholders (Adams et al., 2011).

Women also tend to show more interest in non-work areas, such as philanthropy and community service. Additionally, women's mental attitudes are more likely to reduce information asymmetries with other stakeholders and the market, promoting transparency and trust (Zhang et al., 2013). The professional background of female directors, often as business support representatives or community influencers, gives them a broader knowledge of different areas. This enables them to propose alternative solutions and demonstrate a positive attitude toward addressing corporate social responsibility issues and environmental concerns (Shaukat et al., 2016). Female directors contribute to better board accountability and strengthened decision-making power, as they bring a broader perspective and careful consideration of issues (Daily & Dalton 2003). Female directors are known to be actively involved in ESG activities

and disclose them in their annual reports. They support ESG initiatives and effectively address ESG-related issues, thereby enhancing corporate governance and potentially improving ESG disclosure.
Based on theories of gender socialization and ethics, women can improve ESG factors in two ways: first, by making ESG issues more important because of their unique values (like universalism and benevolence) and moral behavior; and second, by bringing more attention to and acting on ethical issues like ESG because they are represented on boards and in leadership positions. According to the theory of diversity, the decision-making process can be made better by including people with diverse experiences and perspectives (Siciliano, 1996). Considering the above literature, the authors asserted the following hypothesis.
H2: The presence of women on BoD positively affects the ESG performance of selected NSE-listed companies.
H2A: The presence of women on BoD positively affects the environmental performance of selected -NSE-listed companies.
H2B: The presence of women on BoD positively affects the social performance of selected NSE-listed companies.
H2C: The presence of women on BoD positively affects the governance performance of selected -NSE-listed companies.

Critical Mass of Women Board of Directors

Although evidence indicates that women may have a positive effect on ESG policies and practices, the presence of just one or a few female directors on the board may not have a significant impact on corporate decision-making (Kanter, 1977; Konrad et al., 2008). Moreover, according to Cambrea et al. (2023), a single woman might not have enough allies or support on the board to adequately reflect the interests and viewpoints of females and other underrepresented groups. Hence, a critical mass of female board members is more likely to be effective than a small number or a single female to ensure the inclusion and consideration of a variety of goals and perspectives during the decision-making process (Terjesen et al., 2009). The symbolic presence of women on corporate boards has no bearing on ESG performance; instead, a critical mass of female directors on the board is required for a beneficial influence (Al-Shaer et al., 2024).

According to the critical mass theory, for women to substantially impact decision-making, their representation on the board must be substantial, as opposed to minimal or just one. According to this theory, the presence of at least three women on a board is sufficient for women to challenge the board's controlling culture and power dynamics, express themselves, and be heard on an equal footing with male board members (Torchia et al., 2011; Joecks et al., 2013; Ben-Amar et al., 2013; Ben-Amar et al., 2017; Dobija et al., 2022). Due to functional distinctions between men and women, female directors could be dedicated to ESG practices (Cook & Glass, 2018). Compared to their male counterparts, women are more likely to undertake diverse business ventures and interact with a range of stakeholders, which promotes gender homophily and enhances ESG practices (Yarram & Adapa, 2021). When there is only one female director on the board, she may be scrutinized more, which puts pressure on her to perform like the majority of directors (Yarram & Adapa, 2021). It may also make it harder for her to voice her opinions and share her experiences (Cook & Glass, 2018; Main & Gregory-Smith, 2018). A critical mass of female directors ensures that the board is effectively balanced and that their varied experiences are considered when developing the company's strategy (Glass et al., 2016).

According to critical mass theory, increased representation of women raises a threshold or critical mass, which facilitates the provision of new knowledge and abilities and, as a result, influences collective performance (Kanter, 1977). For the board's dynamics and procedures to be impacted, a critical mass of female directors is required (Birindelli et al., 2019). For instance, Cabeza-García et al. (2018) find that a critical mass of female directors increases ESG disclosure, Post et al. (2011) contend that a critical mass of female directors positively affects ESG reporting practices, and Torchia et al. (2011) suggest that a critical mass of females on boards has a positive effect on firm innovation. De Masi et al. (2021) investigate how the ESG score is affected when a certain percentage of women serve on boards. According to their research, a critical mass of female board members has a favourable impact on every ESG score component. As such, as the proportion of female board members exceeds a certain threshold, usually three or more, their opinions become more visible, their suggestions are taken seriously, and they start to have a significant impact on the dynamics of the board (De Masi et al. 2021).

Cambrea et al. (2023) examine the connection between a company's ESG performance and the existence of a critical mass of women in boardrooms using data from an Italian sample. Their results also show that improving ESG performance requires a critical mass, which is defined as having at least three female directors. Joecks et al. (2013) contend that while a token presence of women on the board negatively affects performance, a beneficial impact on company performance is expected to occur after a critical mass of female representation is reached. The argument is substantiated by the findings of three studies (Post et al., 2011; Ben-Amar et al., 2017; Masi et al., 2021), which demonstrate that corporations with three or more female directors achieve superior outcomes for society and the environment compared to those with a lower number of female directors. The authors, therefore, propose the subsequent hypothesis:

H3: The critical mass of women positively affects the ESG performance of the selected NSE-listed companies.

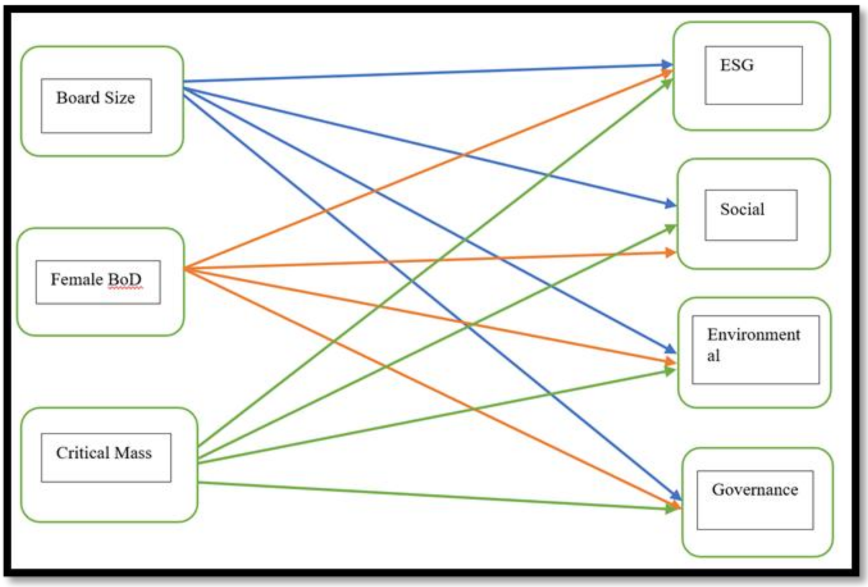
H3A: The critical mass of women positively affects the environmental performance of the selected NSE-listed companies.

H3B: The critical mass of women positively affects the social performance of the selected NSE-listed companies.

H3C: The critical mass of women positively affects the governance performance of the selected NSE-listed companies.

Figure 1

Research Framework



METHODOLOGY

The sample population in this paper consists of 973 companies listed on NSE India. Securities and Exchange Board of India (SEBI) launched Business Responsibility and Sustainability Reporting (BRSR) in May 2021. Starting in the financial year 2022 to 2023, the top 1,000 listed businesses (by market capitalization) must submit BRSR as part of their annual report to SEBI. The authors attempted to include all 1000 companies in our study, but due to the limitation of data availability, some of the companies were eliminated, and the authors utilized a final sample of 973 companies (Sekar & Krishnan, 2022). ESG factors are becoming increasingly important to investors as they match their investment choices with their values and larger societal objectives. Strong ESG performance, in the opinion of many investors, positions a company for long-term success and reduces its vulnerability to risks related to social and environmental challenges.

The paper uses ESG data from the CRISIL database. The data from the CRISIL database includes the ESG ratings of all NSE-listed companies and their three components, namely Environmental, Social, and Governance performance ratings of these companies. The data is further classified by sector. CRISIL uses its ESG data to select companies that meet the NSE listing requirements, ensuring the data accurately represents the companies under study. The authors gathered data on board characteristics from the annual reports and official websites of the selected companies. Several international agencies, including Moody’s, Bloomberg, ASSET4, FTSE Russell, CRISIL, MSCI, and S&P Global, provide ESG ratings. The various approaches used in data compilation lead to variations in ESG performance ratings among rating agencies. As a result, this study limited its scope to the CRISIL database for ESG ratings to ensure consistency in its findings (Hasan et al., 2022; Gregory, 2022). The CRISIL database provided the sample for the study, which included 973 NSE-listed firms for the financial years 2022 and 2023. The authors have calculated the average of the two years’ data for all the variables defined in the study to proceed with the statistical calculations. The authors used SPSS AMOS software to analyze the statistical relationship between the variables because of its intuitive graphical user interface and because it is simple to use and comprehend. Out of a total population of 1000 firms, the study excluded 27 samples due to the lack of required data on board characteristics. Table 1 presents a summary of the selection of samples.

Variable Definition

ESG_score Represents the company’s overall score of the environmental, social, and governance pillars from the CRISIL Database.
Social_score Represents the social pillar from the CRISIL Database.
Environmental_score Represents the environmental pillar from the CRISIL Database.
Governance_score Represents the environmental pillar from the CRISIL Database.
Board_female Represents the number of female directors serving on the Board of Directors.
Board_size Represents the total number of directors serving on the Board of Directors.
Critical_mass Dummy variable equal to 1 if there are at least three women on the Board of Directors and 0 otherwise.

EMPIRICAL RESULTS AND DISCUSSION

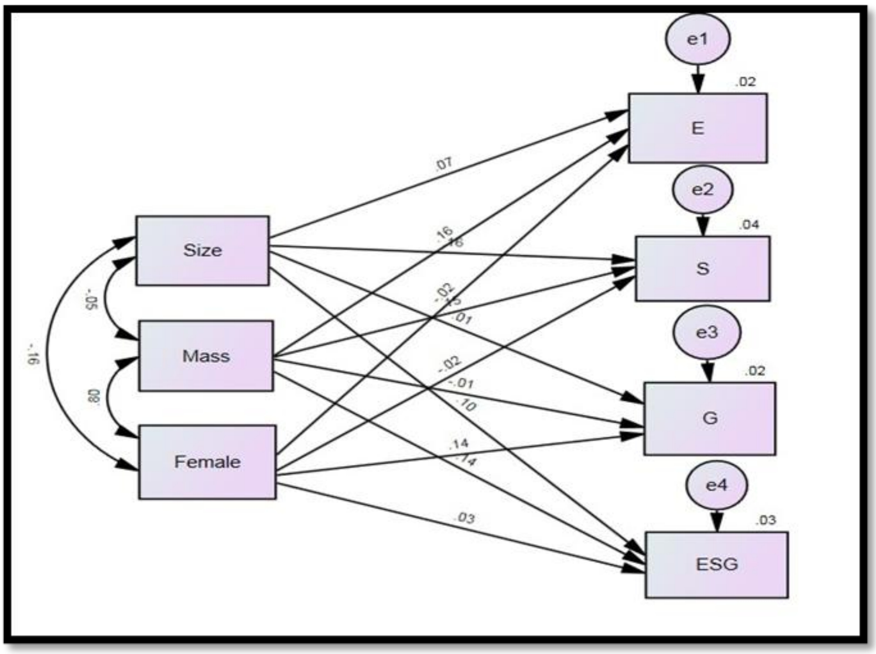
Table 1

Descriptive Statistics of the dependent and independent Variables

Scores	Average	Standard Deviation	Minimum	Maximum
Environment Score	*35.539*	*12.202*	*13*	*79*
Social Score	44.349	9.225	24	73
Governance Score	65.931	6.228	26	84
ESG Score	49.916	7.191	32	76
Board Size	*9.028*	*2.575*	*3*	*21*
Female BoD	*1.673*	*0.853*	*0*	*6*
% of Women BoD	*19.73*	*8.787*	*0*	*60*

Figure 2

Amos Model. Standardized Regression Weight



According to the descriptive statistics in Table 1, the NSE-listed companies have an overall ESG score of 49.916, with a standard deviation of 7.191, indicating a small amount of variation from the average. Companies are allocating increased financial resources towards governance programs, resulting in improved performance. The governance pillar, with its highest average score of 65.935, serves as evidence of this. The social pillar has an average score of 44.349, indicating that companies are giving significant consideration to social initiatives, second only to the governance pillar. The average rating of the environmental pillar is 35.539, suggesting a lack of dedication to environmental initiatives in Indian companies. This is a cause for concern in a country facing challenges in achieving its Sustainable Development Goals (SDGs). According to the overall ESG score, the majority of companies appear to have good ESG ratings and comply with the good governance standards that apply to listed entities. The average board size for all of the sampled companies is 9.028, with a standard deviation of 2.525 and minimum and maximum board members of 3 and 21, respectively. The average number of females on the board is 1.673, with a standard deviation of 0.853 and a minimum and maximum of 0 and 6, respectively. India has seen a significant gradual improvement in female participation in the BoD, as the average women's participation is 19.730, an improvement from 15% about five years ago (March 2018) to 16% in March 2019. The standard deviation in the percentage of women in BoD is 8.787, with a minimum participation of 0% and a maximum participation of 60% in BoD.

Regression Equations for the model

$EN = \beta 0 + \beta 1 BSize + \beta 2 WBoard + \beta 3 Crit\ Mass + FSize + Profitability + TAsset + MCapital + \varepsilon.$

$SO = \beta 0 + \beta 1 Size + \beta 2 WBoard + \beta 3 Crit\ Mass + FSize + Profitability + TAsset + MCapital + \varepsilon.$

$CG = \beta 0 + \beta 1 Size + \beta 2 WBoard + \beta 3 Crit\ Mass + FSize + Profitability + TAsset + MCapital + \varepsilon.$

$ESG = \beta 0 + \beta 1 Size + \beta 2 WBoard + \beta 3 Crit\ Mass + FSize + Profitability + TAsset + MCapital + \varepsilon.$

Table 2

Standardized Regression Weights

Variables			Estimate	S.E.	C.R.	P-Value	Results
E	<---	Size	0.345	0.154	2.249	0.025	Significant
S	<---	Size	0.562	0.115	4.882	0.001	Significant
G	<---	Size	0.021	0.079	0.272	0.786	Not Significant
ESG	<---	Size	0.274	0.09	3.045	0.002	Significant
E	<---	Mass	3.835	1.316	2.915	0.004	Significant
S	<---	Mass	2.733	0.987	2.77	0.006	Significant
G	<---	Mass	-0.148	0.675	-0.219	0.827	Not Significant
ESG	<---	Mass	1.965	0.772	2.545	0.011	Significant
E	<---	Female	-0.022	0.074	-0.301	0.764	Not Significant
S	<---	Female	-0.023	0.056	-0.41	0.682	Not Significant
G	<---	Female	0.096	0.038	2.515	0.012	Significant
ESG	<---	Female	0.025	0.044	0.573	0.567	Not Significant

Table 3

Correlation Between Independent Variables

Variables	B_Size	Female	C_Mass	E-Score	S-Score	G-Score	ESG Score
B_Size	1						
Female	0.401	1					
C_Mass	-0.050	0.710	1				
E- Score	0.068	0.134	0.139	1			
S- Score	0.153	0.147	0.121	0.709	1		
G- Score	-0.013	0.115	0.097	0.225	0.293	1	
ESG Score	0.086	0.167	0.155	0.896	0.841	0.574	1

RESULTS

In light of the available literature, the authors asserted that board size and female board members positively impact NSE-listed companies' ESG scores. Furthermore, the authors assumed that once the female representation on the board of directors reaches a certain threshold (three or more female board members), they will have equal dominance in the decision-making process as their male counterparts, and their decisions will have a significant positive impact on the company's ESG performance, resulting in an improved ESG score. As a result, the authors formulated the aforementioned hypothesis, considering previous studies in the area and providing new insight on a country-level examination of secondary data from the CRISIL database and the annual reports of the companies. The finding of the study indicates that overall, women's participation in the BoD in India has improved to 19.730% as opposed to 18% in 2022, up from 13.8% in 2018 and 17.1% in 2021 (Report on International Women's Day). This improvement is largely the result of SEBI's Regulation 2015 (Listing Regulation Disclosure Requirement), which makes it mandatory for all listed firms to maintain an optimal blend of executive and non-executive directors with at least one female director on the board. There are still 21 sampled companies that do not have a single female director on their board, as opposed to the SEBI regulation. The analysis of the descriptive statistics reveals that Indian companies focus more on the governance pillar, with an average score of 65.931, followed by the social pillar, with an average score of 44.349, which is the second priority of the companies in India. Despite India's efforts to achieve its environmental goals as defined by the SDGs, the environmental pillar receives minimal attention, with an average score of 35.935.

To evaluate the hypothesis, the authors used the multiple regression analysis method with the assistance of SPSS AMOS software. Table 2 presents the findings of the regression analysis. The results indicate that board size has a positive influence on the sampled companies' ESG performance, with a regression weight of 0.274. Additionally, board size also has a beneficial impact on the environment and social performance, with regression weights of 0.345 and 0.562, respectively. The analysis indicates that the size of the board does not have a significant effect on governance performance, as evidenced by the p-value of 0.786. The table represents a p-value of more than 0.05 for the environment, social, and ESG performance, which leads us to accept that there is no impact of female board members on the environment, social, and ESG performance of the selected NSE-listed companies. The p-value for the governance performance, however, stands at 0.012, which means the female board members are impacting the governance performance of the NSE-listed companies.

The critical mass of women board members positively influences the ESG performance, with a regression weight of 1.965, and the environment and social performance, with a regression weight of 3.835 and 2.733, respectively, all at a p-value less than 0.05 level of significance. The critical mass of female board members does not affect the governance performance of selected companies, as the p-value is greater than 0.05. Analysis of Table 3 shows a negative correlation between board size and female board members, with an estimated value of -0.163. Also, the correlation between the board size and the critical mass of female board members is negative, with an estimated value of -0.05. There is a positive correlation between the female board members and a critical mass of female board members, with an estimated value of 0.8.

CONCLUSION

Stakeholder capitalism sheds light on the importance of corporations embracing ESG issues. This philosophy asserts that businesses should strive to generate long-term value while also considering the needs and expectations of all stakeholders, including the general public. These actions may include offering employees secure employment, implementing sustainable business strategies, delivering exceptional customer service, establishing long-term relationships with suppliers, fulfilling tax obligations fairly, or minimizing the environmental footprint of operations. Amidst the COVID-19 pandemic's numerous disruptions, an increasing number of investors believe that companies excelling in ESG criteria are less prone to risk and better prepared to navigate uncertainties than those adhering to conventional business practices. SEBI implemented Clause 49 of the Listing Agreement in February 2014, mandating that listed companies include at least one female director on their board. The purpose of this regulation is to enhance gender diversity on corporate boards and foster improved governance practices. SEBI's mandate to include women directors aims to bring fresh perspectives and expertise to boardroom discussions, thereby boosting decision-making and corporate performance. Our main finding indicates that the presence of women on board has an insignificant impact on the environmental, social, and overall ESG scores achieved by the NSE-listed companies. Moreover, the presence of a critical mass of women on the board of directors has a significant impact on the environmental, social, and overall ESG scores for the companies included in the sample. It supports the assumption that as the number of female directors increases, there will be an improvement in the ESG score of the companies listed on the NSE. Our findings validate the notion that the board of directors plays a pivotal role in emerging markets, specifically in India, by making strategic decisions and meeting the ESG parameters.

This study contributes to the existing literature by showing the substantial influence of board characteristics, such as the size of the board, female board members, and a critical mass of female board members, on strategic decision-making in NSE-listed companies in India. In addition, this study builds on previous research that examined the general characteristics of emerging markets by specifically investigating the ESG disclosure practices of companies listed on the NSE. This study contributes to the existing literature by examining the relationship between ESG performance, board size, and the presence of women on boards. Our research specifically examines the impact of a minimum of one female board member, as required by SEBI's new regulation, on ESG performance in India. This is a relatively understudied issue in the literature. To the best of our knowledge, our analysis effectively fills the void in the existing literature on ESG performance. Our study's findings have important implications. Our empirical findings support the idea that companies can promote a more transparent stakeholder relationship and an ESG culture by increasing diversity and including women on their boards of directors. The authors believe the following research directions are potential extensions of our work: Prioritizing a comprehensive examination of the underlying mechanisms contributing to diversity's positive impact on boards is essential. This examination should specifically focus on the representation of women and its correlation with ESG performance. An important discovery from our research is that the inclusion of women on the board enhances problem-solving capabilities by introducing a more cooperative approach to solving complex problems, which contrasts with the predominantly competitive mindset of males. Furthermore, this inclusion signifies that social and environmental factors are considered in decision-making processes. Future studies may consider additional characteristics like the age and independence of directors as independent and experienced directors prioritize ESG factors because they are sensitive to their effects on other stakeholders in the firm's decision-making processes. Furthermore, the frequency of board meetings and CSR committees facilitates a deeper comprehension of the possible mechanisms through which it enhances ESG performance and must be explored in greater detail to understand the mechanism better. The authors believe certain innovations are necessary to enhance the overall understanding of this phenomenon based on the factors mentioned. The research focuses on improving the understanding of the factors affecting the ESG score among NSE-listed enterprises. It is imperative to expand the sample of enterprises by incorporating businesses from diverse markets to establish the generalizability of these findings. Furthermore, the authors advocate for the inclusion of companies from sectors beyond those currently present in the Indian market. Due to the widespread presence of multinational corporations in the market, one can expect to see similar impacts at the individual company level within the same industry but in different countries. By exploring these new areas of research, authors may expect to improve their understanding of ESG performance as a crucial aspect of transparent corporate governance practices, especially for companies listed on the NSE.

Finally, the authors believe that in the post-pandemic era of COVID-19, marked by increased restrictions on access to the financial markets, managing ESG risks will become a critical element for investors and firms. For firms seeking long-term viability, effectively managing the challenges posed by ESG criteria represents a chance to increase visibility and draw in future capital providers. For investors seeking highyield investment opportunities with low uncertainty and known risks, the ESG scores will assist them in their duty of value-seeking among thousands of shares and debt instrument issuers.

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