



Corporate Governance and ESG Performance in Indian Manufacturing Firms: The Moderating Role of Firm Size and Profitability

Pravata Kumar Jena¹, Dr. Ajit Kumar Mishra²

¹Research Scholar, P.G. Department of Commerce, Utkal University, Bhubaneswar, Odisha,

²Lecturer in IMBA, Department of Business Administration, Utkal University, Bhubaneswar, Odisha,

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.914MG00191>

Received: 26 October 2025; Accepted: 31 October 2025; Published: 10 November 2025

ABSTRACT

Purpose: This study investigates how corporate governance practices—board independence, board diversity, shareholder rights, and transparency—shape ESG performance in Indian manufacturing firms, and whether firm size and profitability strengthen these effects. **Design/methodology/approach:** Using secondary data for 120 NSE/BSE-listed manufacturers over 2016–2023, ESG scores were obtained from CRISIL, S&P Global, ESGRisk.ai/Refinitiv, and SES, while governance and financial variables were compiled from annual reports, BRSR filings, and SEBI disclosures; analyses comprised descriptive statistics, Pearson correlations, multiple regression for direct effects, and moderated regression to test interactions with firm size and profitability.

Findings: Transparency in reporting and board independence emerge as the strongest, statistically significant predictors of ESG performance; board diversity has a positive but comparatively smaller effect, and shareholder rights show a weaker yet positive association; moderation tests reveal that larger and more profitable firms convert governance strengths into superior ESG outcomes more effectively.

Originality/value: The paper provides sector-specific, India-focused evidence on the governance–ESG nexus across the BRR→BRSR transition, integrates agency, stakeholder, and resource-based perspectives, and jointly models two organizational moderators—size and profitability—offering nuanced insights beyond headline ESG scores.

Implications: Managers should prioritize credible, decision-useful transparency and reinforce independent, diverse boards to enhance ESG performance; policymakers can deepen BRSR guidance, assurance standards, and capacity-building incentives for mid-cap manufacturers; investors should weight transparency quality and board structure alongside ESG ratings to better assess sustainability credibility and risk.

Keywords: Corporate Governance, ESG Performance, Board Independence, Transparency, India, Manufacturing Firms.

INTRODUCTION

In recent years, the intersection of corporate governance (CG) and environmental, social, and governance (ESG) performance has become a focal point of scholarly and practical attention. The growing integration of ESG into business strategies is not merely a response to stakeholder activism but also a recognition that responsible governance enhances long-term sustainability and firm value (Shaikh, 2022). Corporate governance traditionally concerned with board structure, shareholder rights, and transparency, is now increasingly evaluated for its role in driving ESG outcomes (Shrivastava & Addas, 2014).

Globally, empirical evidence suggests that companies with robust governance frameworks are better positioned to disclose ESG practices and align their operations with sustainable development goals (Kim & Li, 2021; Saygili et al., 2022). For instance, board independence and diversity have been shown to positively influence ESG disclosure and stakeholder trust (Alexandra & Daria, 2021; Konstantin & Elena, 2022). Similarly, shareholder

protection and transparent governance mechanisms moderate the relationship between ESG reporting and firm performance (Albitar et al., 2020; Elamer & Boulhaga, 2024).

In emerging markets such as India, ESG adoption has gained momentum due to regulatory initiatives by SEBI, increased global investor pressure, and rising awareness of sustainability risks (Sharma, Panday, & Dangwal, 2020). However, despite India's significant industrial growth, ESG disclosure practices among manufacturing firms remain uneven. While large firms such as Tata Consultancy Services and Hindustan Unilever receive consistently high ESG scores from rating agencies like Crisil, S&P Global, and ESGRisk.ai, several companies continue to lag, highlighting the role of governance in shaping ESG performance (Mooneeapen, Abhayawansa, & Mamode Khan, 2022).

At the same time, studies across regions provide mixed findings. While some report positive associations between ESG and corporate performance (Nareswari, Tarczyńska-Łuniewska, & Al Hashfi, 2023; Martha & Khomsiyah, 2023), others suggest that ESG compliance can impose costs that reduce short-term profitability, especially in emerging markets (Dalal & Thaker, 2019). Moreover, controversies around ESG practices highlight the need for strong governance mechanisms to mitigate reputational risks and restore stakeholder trust (Elamer & Boulhaga, 2024).

Against this backdrop, the present study seeks to examine how corporate governance practices influence ESG performance among Indian manufacturing companies. By focusing on board structure, shareholder rights, transparency in ESG disclosure, and firm characteristics such as size and profitability, this research contributes to the literature on governance–ESG linkages. Using secondary data from NSE/BSE-listed firms, the study aims to provide empirical insights into how governance practices shape ESG performance in the Indian context, thereby offering implications for investors, regulators, and policymakers.

Statement of the Problem

Corporate governance has long been regarded as a critical driver of corporate accountability, transparency, and long-term value creation. In recent years, its role has expanded to encompass sustainability concerns, where environmental, social, and governance (ESG) performance has become a key benchmark for responsible business practices (Shrivastava & Addas, 2014; Kim & Li, 2021). Globally, investors, regulators, and rating agencies increasingly demand that firms demonstrate not only financial performance but also responsible governance and ESG commitments (Shaikh, 2022).

In the Indian context, particularly in the manufacturing sector, ESG adoption has gained momentum due to regulatory reforms, pressure from institutional investors, and greater public scrutiny (Sharma, Panday, & Dangwal, 2020). Rating agencies such as Crisil, S&P Global, ESGRisk.ai, and SES have begun to systematically assess Indian companies on ESG performance, with large firms like Tata Consultancy Services (TCS) and Hindustan Unilever securing consistently high ratings. However, many manufacturing firms still lag in ESG disclosure and performance, often due to weak governance structures, inadequate transparency, and inconsistent shareholder protection mechanisms.

Furthermore, existing research presents mixed findings: while some studies show that robust governance mechanisms positively influence ESG performance (Albitar et al., 2020; Saygili et al., 2022), others highlight that compliance with ESG standards imposes significant costs on firms in emerging economies, reducing short-term profitability (Dalal & Thaker, 2019; Nareswari et al., 2023). Additionally, high-profile controversies around governance failures in India underscore the risks of weak governance in undermining ESG credibility (Elamer & Boulhaga, 2024).

Despite the growing importance of ESG in India, limited empirical research specifically explores how corporate governance practices shape ESG performance in Indian manufacturing companies. Most available studies are either international or sector-agnostic, creating a research gap in understanding this relationship within the Indian industrial context.

Therefore, this study seeks to address the problem of inadequate clarity on the governance–ESG nexus in India by empirically examining how board structure, shareholder rights, and transparency influence ESG performance

in NSE/BSE-listed manufacturing firms, while also considering the moderating effects of firm size and profitability.

Research Objectives

The present study has the following objectives:

- To examine the influence of board structure (independence and diversity) on ESG performance of Indian manufacturing companies.
- To analyze the impact of shareholder rights and governance mechanisms on ESG disclosure and performance.
- To investigate the role of transparency and corporate disclosure practices in strengthening ESG outcomes.
- To assess the moderating effects of firm size and profitability on the relationship between corporate governance and ESG performance.
- To provide insights for regulators, policymakers, and investors regarding how governance practices can enhance ESG adoption in the Indian manufacturing sector.

Research Questions

Based on the above objectives, the study seeks to answer the following research questions:

- How does board independence and diversity affect ESG performance in Indian manufacturing firms?
- To what extent do shareholder rights and governance mechanisms influence ESG disclosure practices?
- What is the relationship between corporate transparency and the quality of ESG reporting?
- Do firm size and profitability moderate the relationship between governance practices and ESG performance?
- What lessons can regulators and policymakers derive from the governance–ESG linkage in listed Indian manufacturing companies?

Research Hypotheses

- **H₁:** Board independence and diversity have a positive influence on the ESG performance of manufacturing firms.
- **H₂:** Shareholder rights and governance mechanisms are positively associated with ESG disclosure and performance.
- **H₃:** Transparency in corporate reporting significantly enhances ESG performance.
- **H₄:** Firm size positively moderates the relationship between corporate governance practices and ESG performance, such that larger firms with strong governance exhibit higher ESG performance.
- **H₅:** Profitability positively moderates the relationship between corporate governance practices and ESG performance, with more profitable firms showing stronger ESG outcomes.

REVIEW OF LITERATURE

Board composition sits at the heart of the governance–ESG nexus. Across settings, independent directors and diverse boards are linked to stronger monitoring, richer stakeholder dialogue, and better sustainability outcomes. Early evidence shows that boards with higher independence tend to embed sustainability into oversight and strategy, improving non-financial performance (Shrivastava & Addas, 2014). More recent work emphasizes the quality of board human capital—skills, expertise, and heterogeneity—as channels that raise the salience of environmental and social risks and expand disclosure breadth (Alexandra & Daria, 2021). Systematic reviews converge on this mechanism: board independence and diversity enhance ESG ratings and—through them—market perceptions and firm value, while excessively large boards can dilute accountability (Konstantin & Elena, 2022). Emerging-market findings are consistent but nuanced: in Turkey, sub-indices related to shareholder rights and board responsibilities improve corporate financial performance while environmental disclosure alone can correlate negatively with contemporaneous returns, suggesting transitional costs (Saygili, Arslan, & Birkan,

2022). International panel evidence also indicates that the governance pillar is the most reliable predictor of profitability and credit quality among the three ESG pillars (Kim & Li, 2021).

Shareholder protection, committee structures, and formal governance processes shape both the decision to disclose and the quality of ESG integration. Governance devices such as active audit/CSR committees, clear board charters, and rigorous internal controls are shown to moderate how ESG disclosure translates into performance, strengthening the credibility of reported metrics and reducing greenwashing risk (Albitar, Hussainey, Kolade, & Gerged, 2020). When controversies arise—environmental incidents, social violations—firms with stronger boards (independence, gender diversity) and established ESG routines experience a smaller performance penalty and recover faster, highlighting a buffering role of governance (Elamer & Boulhaga, 2024). At the public-policy interface, country-level governance quality fosters corporate ESG by raising regulatory predictability and enforcement credibility (Mooneeapen, Abhayawansa, & Mamode Khan, 2022). Yet recent evidence warns of “excessive ESG”: in weak public-governance environments, firms may over-index on symbolic ESG to meet external expectations without underlying operational change, diluting value relevance (Kuzey, Al-Shaer, Karaman, & Uyar, 2023).

Disclosure is the observable tip of ESG practice. International studies show that firms with stronger governance disclose more extensively, face lower information asymmetry, and often enjoy valuation premia (Shaikh, 2022). In India, profitability and market performance are positively associated with ESG disclosure intensity, suggesting a strategic complementarity between financial strength and transparency (Sharma, Panday, & Dangwal, 2020). Still, literature stresses that disclosure quality—decision-useful metrics, external assurance, and consistency across reports—matters more than volume. Where governance tightly links strategy, risk, and sustainability reporting (e.g., through integrated reporting and committee oversight), ESG signals is more predictive of outcomes (Albitar et al., 2020).

Large, profitable firms face stronger stakeholder scrutiny and possess slack resources, making them more likely to invest in ESG systems and to earn higher ESG ratings (Kim & Li, 2021; Dalal & Thaker, 2019). Yet the cost curve is non-linear in emerging markets: Indonesian evidence shows ESG portfolios can outperform on risk-adjusted returns even as higher ESG scores correlate with lower contemporaneous accounting profitability, consistent with near-term investment costs and learning effects (Nareswari, Tarczyńska-Łuniewska, & Al Hashfi, 2023). Similar patterns appear in Turkey where environmental disclosures depress short-run financials (Saygili et al., 2022). At the same time, studies find overall positive associations between ESG and corporate performance across samples when horizons lengthen and when governance quality is high (Martha & Khomsiyah, 2023; Kim & Li, 2021).

Meta-patterns across settings suggest that the governance pillar is the most stable driver of profitability and credit ratings, the social pillar often supports reputation and risk reduction, and the environmental pillar can impose transitional costs before benefits materialize (Kim & Li, 2021; Saygili et al., 2022). International evidence further indicates that higher ESG practice/disclosure is associated with better operating efficiency and valuations, but effects vary across regions and sectors (Shaikh, 2022). Panel evidence in India shows ESG relates positively to financial performance on average, though industry structure and firm maturity condition the slope (Dalal & Thaker, 2019). A systematic review reinforces that board-centric governance mechanisms are repeatedly the active ingredient behind ESG–performance links (Konstantin & Elena, 2022).

Within India’s tightening regulatory architecture and rising investor demand, governance quality (board independence/diversity, committee strength, shareholder protections) appears to be the binding constraint that converts ESG intentions into credible disclosure and performance. Indian evidence shows financially stronger firms disclose more and are rewarded by capital markets, but smaller manufacturers may face transitional cost headwinds, heightening the role of governance in phasing investments, prioritizing material issues, and sustaining credibility (Sharma et al., 2020; Dalal & Thaker, 2019). Country-governance conditions shape these firm-level choices, underlining the need to account for institutional context (Mooneeapen et al., 2022).

Research Gap

Although global scholarship has established links between corporate governance and ESG performance, several

critical gaps remain, particularly in the Indian context. First, most empirical studies focus on developed economies such as Europe and North America, where governance structures and ESG frameworks are relatively mature, leaving limited evidence from emerging markets like India, where regulatory enforcement and disclosure quality are still evolving. Second, existing Indian studies primarily examine ESG disclosure levels rather than the effectiveness of governance mechanisms such as board independence, diversity, and shareholder rights in driving actual ESG outcomes. Third, while international literature increasingly highlights the role of firm-specific moderators such as size and profitability in shaping the governance–ESG relationship, few Indian studies have empirically tested these interactions. Fourth, sector-specific analyses are scarce, despite the fact that manufacturing firms are among the largest contributors to environmental and social risks in India, making them a critical setting for ESG evaluation. Finally, the regulatory transition from Business Responsibility Reporting (BRR) to the Business Responsibility and Sustainability Report (BRSR) since 2021 has created a new reporting environment that is underexplored in empirical research. This study addresses these gaps by providing robust, sector-focused evidence on how governance practices influence ESG performance in Indian manufacturing firms, while also testing the moderating effects of firm size and profitability within the evolving BRR–BRSR disclosure regime.

RESEARCH METHODOLOGY

This study adopts a descriptive and analytical research design to examine the influence of corporate governance practices on Environmental, Social, and Governance (ESG) performance. The research relies exclusively on secondary data collected from multiple credible sources such as company annual reports, Business Responsibility and Sustainability Reports (BRSR), disclosures mandated by the Securities and Exchange Board of India (SEBI), and ESG rating agencies including CRISIL, S&P Global, Refinitiv, and ESGRisk.ai. The target population consists of all manufacturing firms listed on the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE). From this population, a purposive sampling technique was applied to ensure inclusion of companies with consistent governance and ESG-related disclosures during the study period. After excluding firms with incomplete ESG data or missing governance variables, the final sample size was determined to be 120 NSE/BSE-listed manufacturing firms.

The analysis period covers the financial years 2016 to 2023. This timeframe is chosen deliberately because reliable and systematic ESG disclosures in India became available after SEBI's mandatory Business Responsibility Reporting (BRR) framework for the top 500 listed companies in 2016. Furthermore, the period also captures the transition to the more comprehensive Business Responsibility and Sustainability Reporting (BRSR) framework introduced in 2021. The endpoint of 2023 reflects the most recent year for which complete ESG and governance data is currently available, as audited 2024 ESG data has not yet been fully released by rating agencies.

In terms of variables, the study considers ESG performance as the dependent variable, measured through ESG scores disclosed by recognized rating agencies. The independent variables include key corporate governance dimensions such as board independence, board diversity, shareholder rights, and transparency in reporting practices. Two moderating variables are also included: firm size (measured by market capitalization and total assets) and profitability (measured through Return on Assets and Return on Equity). Control variables such as industry sub-sector and financial leverage are also considered to ensure robustness of results.

The analytical procedure involves descriptive statistics to summarize ESG performance trends across the sample firms, followed by correlation analysis to assess preliminary associations between governance practices and ESG scores. Multiple regression analysis is employed to test the direct effect of governance variables on ESG performance, while moderated regression models are used to examine the moderating roles of firm size and profitability. Statistical software such as SPSS and STATA is utilized for data analysis to ensure accuracy and replicability of results.

The scope of the study is limited to NSE and BSE-listed manufacturing firms, thereby excluding unlisted companies and firms operating exclusively in the services sector. While the reliance on secondary data ensures objectivity and comparability, the study acknowledges the limitation that ESG ratings may vary slightly across agencies due to methodological differences. Nevertheless, the chosen dataset provides a robust basis for



evaluating the impact of corporate governance practices on ESG performance within the Indian manufacturing context.

Data Analysis and Interpretation

Table-1: Descriptive Statistics of ESG Scores and Governance Variables

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ESG Score	120	32.00	82.00	58.40	12.75
Board Independence (%)	120	30.00	75.00	52.10	11.32
Board Diversity (%)	120	5.00	40.00	18.20	7.65
Shareholder Rights (Index)	120	2.00	9.00	6.10	1.82
Transparency Score	120	25.00	85.00	61.45	13.24
Firm Size (Log Assets)	120	8.50	14.20	11.30	1.45
Profitability (ROA %)	120	1.20	18.50	9.85	4.12

Source: Author’s Own Computation

Interpretation

The descriptive statistics show that the average ESG score of 58.40 indicates moderate sustainability performance among NSE/BSE-listed Indian manufacturing firms. However, the large range (from 32 to 82) demonstrates that some firms are far ahead while others lag significantly in ESG adoption. Governance variables reveal important variations: board independence averages 52.1%, which is reasonably strong, but there are firms with very low independence at 30%, suggesting possible risks of managerial dominance. Board diversity, averaging only 18.2%, highlights a major gap in gender and skill representation on corporate boards — a crucial area for governance reform.

Transparency scores range widely (25–85), confirming that while some companies provide comprehensive ESG disclosures, others are still opaque in reporting. This variation supports the argument that governance quality is unevenly distributed in Indian manufacturing. Firm size (log assets) shows a broad spread (8.5–14.2), suggesting a mix of small, mid-cap, and large firms, which allows testing of size as a moderator. Similarly, profitability averages 9.85% ROA, but the range shows that some firms are highly profitable while others struggle. Overall, the descriptive statistics confirm that the dataset is diverse and suitable for exploring how governance practices influence ESG performance under different organizational contexts.

Table-2: Correlation Analysis

Variables	ESG Score	Board Independence	Board Diversity	Shareholder Rights	Transparency	Firm Size	Profitability
ESG Score	1	.42**	.36**	.28**	.49**	.33**	.30**
Board Independence	.42**	1	.22*	.31**	.38**	.25*	.18
Board Diversity	.36**	.22*	1	.27**	.29**	.15	.14
Shareholder Rights	.28**	.31**	.27**	1	.33**	.20*	.12
Transparency	.49**	.38**	.29**	.33**	1	.35**	.28**



Firm Size	.33**	.25*	.15	.20*	.35**	1	.42**
Profitability	.30**	.18	.14	.12	.28**	.42**	1

Source: Author’s Own Computation

Note: **p < .01 = **; *p < .05 = *

Interpretation

The correlation results reveal that ESG score is significantly and positively associated with all governance variables. The strongest relationship is with transparency (r = .49), which confirms that firms that provide higher-quality disclosures tend to perform better in ESG ratings. This aligns with global evidence suggesting that disclosure quality reduces information asymmetry, builds investor trust, and translates into stronger ESG credibility.

Board independence (r = .42) also shows a strong positive relationship with ESG performance, indicating that independent directors play a critical role in monitoring management, ensuring accountability, and prioritizing sustainability initiatives. Board diversity has a moderate but significant correlation (r = .36), reinforcing the argument that diverse boards are better at integrating multiple perspectives into ESG decision-making. Shareholder rights (r = .28) also show a positive association, though weaker, suggesting that shareholder protections contribute to ESG but are not the strongest driver in this context.

Control variables also show interesting trends: firm size is positively correlated with ESG (r = .33), meaning larger firms have more resources and face greater stakeholder scrutiny, pushing them toward better ESG practices. Profitability (r = .30) is similarly linked to higher ESG, reflecting that financially stable firms are better positioned to invest in sustainability.

Regression Analysis (Impact of Governance on ESG Performance)

Table-3: Model Summary

R	R²	Adjusted R²	Std. Error
.692	.479	.462	9.21

Source: Author’s Own Computation

Table-4: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	7510.21	4	1877.55	22.15	.000
Residual	8130.34	115	70.70		
Total	15640.55	119			

Source: Author’s Own Computation

Table-5: Coefficients

Variable	β	t	Sig.
(Constant)	21.45	3.12	.002
Board Independence	0.28	2.95	.004



Board Diversity	0.22	2.45	.016
Shareholder Rights	0.15	2.01	.046
Transparency	0.36	4.25	.000

Source: Author's Own Computation

Interpretation

The regression model explains 47.9% of the variance in ESG performance, a substantial explanatory power for social science research. Among the predictors, transparency ($\beta = 0.36$, $p < .001$) emerges as the most powerful determinant of ESG, reinforcing the idea that disclosure is the backbone of sustainability credibility. Board independence ($\beta = 0.28$, $p < .01$) also has a strong effect, underscoring the importance of external monitoring in ensuring that firms adhere to ESG commitments.

Board diversity ($\beta = 0.22$, $p < .05$) is significant, highlighting that gender and skill diversity bring innovative perspectives that strengthen ESG adoption. Shareholder rights ($\beta = 0.15$, $p < .05$) have the smallest but still significant effect, suggesting that while investors' influence matters, it is not as central as board or transparency factors in the Indian context.

The high F-statistic (22.15, $p < .001$) confirms that the overall model is robust. These findings align with theories of stakeholder accountability and agency theory, which emphasize the role of governance in reducing agency conflicts and enhancing long-term sustainability.

Table-6: Moderation Effects (Firm Size and Profitability)

Interaction Term	β	t	Sig.
Board Independence $\times$ Firm Size	0.18	2.32	.022
Transparency $\times$ Firm Size	0.21	2.65	.009
Board Independence $\times$ Profitability	0.14	2.01	.047
Transparency $\times$ Profitability	0.17	2.28	.025

Source: Author's Own Computation

Interpretation

The moderation analysis shows that both firm size and profitability strengthen the positive effects of governance on ESG performance. Larger firms magnify the impact of board independence and transparency, as they have greater resources, visibility, and stakeholder scrutiny, making governance mechanisms more effective. Similarly, profitable firms are better able to allocate funds to sustainability programs, amplifying the governance–ESG relationship.

This indicates that governance mechanisms do not operate in isolation — their effectiveness depends on organizational context. Small or financially weak firms may adopt governance formally but lack the resources to implement ESG meaningfully. By contrast, large and profitable firms can translate governance practices into substantive ESG outcomes, supporting resource-based theory, which argues that firms with more resources can achieve stronger competitive advantages in sustainability.

RESULTS AND DISCUSSION

The analysis of 120 NSE/BSE-listed manufacturing firms for the period 2016–2023 provides important insights into how corporate governance practices shape the environmental, social, and governance (ESG) performance of Indian companies. The results first reveal from the descriptive statistics that the average ESG score of the

sampled firms stood at 58.40, which indicates a moderate level of sustainability integration. However, the range of ESG scores (32 to 82) suggests substantial variation among companies in terms of sustainability adoption and performance. Some firms, particularly larger and multinational-oriented companies, have made significant progress in embedding ESG into their strategies, while others remain at an early stage of adoption. With respect to governance variables, board independence averaged 52.1 percent, showing that many companies have met minimum requirements but may still fall short of best practices seen in global benchmarks. Board diversity was notably low at 18.2 percent, highlighting a persistent lack of gender and professional diversity in Indian boardrooms. Transparency in reporting varied significantly, with disclosure scores ranging between 25 and 85, reflecting wide disparities in how openly companies communicate their ESG practices.

The correlation analysis demonstrated that ESG performance was significantly and positively associated with all governance indicators. The strongest relationships were observed between transparency and ESG performance ($r = 0.49$), followed closely by board independence ($r = 0.42$). This suggests that companies with clearer, more detailed reporting and stronger independent oversight achieve higher levels of sustainability performance. Positive correlations were also found between ESG performance and both firm size ($r = 0.33$) and profitability ($r = 0.30$), implying that larger and more profitable companies are more likely to invest in and achieve better sustainability outcomes. Although correlations cannot imply causality, they provide initial evidence that governance practices and firm characteristics are linked to variations in ESG outcomes.

The regression analysis provided stronger evidence of these relationships by explaining 47.9 percent of the variance in ESG performance ($R^2 = 0.479$). Among the governance factors, transparency in reporting emerged as the strongest predictor ($\beta = 0.36$, $p < 0.001$), underlining the fact that comprehensive disclosure is not only a matter of compliance but also a driver of stakeholder trust and long-term sustainability recognition. Board independence was the second strongest predictor ($\beta = 0.28$, $p < 0.01$), reaffirming its monitoring and accountability role in ensuring ESG strategies are implemented effectively. Board diversity also had a positive and significant impact ($\beta = 0.22$, $p < 0.05$), suggesting that even modest increases in diversity contribute to better ESG integration by bringing multiple perspectives and innovative problem-solving approaches into board deliberations. Shareholder rights ($\beta = 0.15$, $p < 0.05$) were found to have a smaller yet significant effect, indicating that empowered shareholders do exert pressure on companies to pursue sustainable practices, though their influence is less pronounced in the Indian context where shareholder activism is still developing.

The moderation analysis offered further nuance by showing that both firm size and profitability strengthened the positive effects of governance on ESG performance. Larger firms, often operating in more competitive and visible markets, are under greater scrutiny from regulators, investors, and civil society, which compels them to implement governance practices more rigorously and translate them into meaningful sustainability outcomes. Profitability also acted as a resource enabler: firms with stronger financial performance were better able to allocate resources toward sustainability investments, such as clean technologies, employee welfare programs, and robust disclosure mechanisms. Conversely, smaller or less profitable firms may adopt governance structures but lack the financial capacity to transform these into substantial ESG initiatives, limiting their impact.

In the discussion of these findings, several important patterns emerge. First, transparency stands out as the single most critical governance factor influencing ESG outcomes. This reinforces stakeholder theory, which argues that reducing information asymmetry through clear and credible reporting enhances legitimacy, trust, and long-term value creation. Indian companies that disclose sustainability practices comprehensively are rewarded not only with higher ESG scores but also with stronger investor confidence. Second, board independence remains crucial in line with agency theory, as independent directors safeguard against managerial opportunism and ensure that sustainability is not treated as symbolic but integrated into corporate strategy. Third, the role of board diversity, while still emerging in India, reflects global evidence that diverse boards improve the quality of decision-making and make companies more sensitive to environmental and social concerns. The relatively low levels of diversity observed in Indian manufacturing boards highlight a structural weakness that needs urgent reform if firms are to meet global sustainability expectations.

The smaller but significant effect of shareholder rights suggests that governance structures empowering shareholders contribute to sustainability but may be constrained by weak institutional activism and cultural norms in India. This is an area where regulatory reforms and investor education could play a role in strengthening

shareholder oversight. Finally, the moderating role of firm size and profitability supports resource-based theory, which emphasizes that organizational resources are critical in enabling the successful adoption of sustainability practices. Larger and more profitable firms not only have the means to invest in ESG but also the motivation to maintain legitimacy in increasingly competitive global markets.

Overall, the results demonstrate that corporate governance practices substantially shape ESG outcomes in Indian manufacturing firms. The findings align with international studies that emphasize governance as the backbone of sustainability performance, yet they also reveal contextual challenges specific to emerging markets. The evidence suggests that while governance structures are improving, issues such as limited diversity, uneven transparency, and constrained shareholder activism continue to limit ESG advancement. For policymakers, regulators, and investors, these findings highlight the need for stronger governance reforms, targeted incentives, and enhanced stakeholder pressure to ensure that ESG adoption in India moves beyond compliance to become a genuine driver of sustainable development.

FINDINGS OF THE STUDY

The study reveals that corporate governance practices play a decisive role in shaping the ESG performance of Indian manufacturing firms. First, the descriptive analysis showed that the average ESG performance of the sampled companies is at a moderate level, with substantial variation across firms depending on their governance quality, financial strength, and commitment to sustainability reporting. While some large, multinational-linked firms achieved higher ESG scores, many mid-sized firms continue to demonstrate weak adoption, particularly in environmental and social dimensions.

A key finding is that transparency in corporate disclosure emerged as the strongest predictor of ESG performance. Firms that provided comprehensive sustainability reports and adopted globally recognized reporting frameworks demonstrated higher ESG outcomes and greater stakeholder trust. Board independence was the next most influential governance factor, confirming that independent directors strengthen oversight and ensure sustainability strategies are effectively implemented. Board diversity, though limited in practice, was also found to have a positive and significant effect on ESG performance, highlighting the potential benefits of gender and professional heterogeneity in boardrooms. Shareholder rights were positively related to ESG, though their effect was comparatively weaker, reflecting the underdeveloped state of shareholder activism in the Indian context.

The findings also underscore the importance of organizational resources. Firm size and profitability were found to positively moderate the governance–ESG relationship, suggesting that larger and financially stronger firms are better positioned to allocate resources toward environmental and social initiatives, adopt innovative technologies, and maintain transparent disclosures. Smaller and less profitable firms, although adopting governance structures, often lack the resources to convert these into meaningful ESG performance, limiting their effectiveness.

Overall, the study confirms that governance is the backbone of ESG performance. Effective governance mechanisms, particularly transparency, independent boards, and diversity, significantly enhance a firm's ability to achieve sustainability objectives. However, challenges such as low board diversity, uneven disclosure quality, and limited shareholder activism continue to constrain ESG performance in the Indian manufacturing sector. These findings emphasize the need for stronger regulatory interventions, improved governance practices, and increased investor and stakeholder engagement to accelerate the integration of ESG principles into corporate strategy.

Implications of the Study

The findings of this research carry several important implications for theory, practice, and policy. From a theoretical perspective, the study reinforces the centrality of corporate governance as a determinant of ESG performance, lending support to stakeholder theory and agency theory. By showing that transparency, board independence, and diversity significantly enhance ESG outcomes, the study confirms that governance mechanisms are not merely compliance-oriented but actively shape firms' ability to integrate sustainability into



business strategy. Moreover, the moderating role of firm size and profitability underscores the relevance of resource-based theory, highlighting that access to financial and organizational resources strengthens a firm's capacity to implement effective ESG practices.

From a managerial standpoint, the results suggest that corporate leaders should prioritize strengthening governance mechanisms if they seek to improve ESG performance and long-term competitiveness. Enhanced disclosure practices, supported by credible reporting frameworks such as GRI and BRSR, are essential for building investor confidence and stakeholder trust. The significant role of board independence indicates that appointing qualified and independent directors can provide better oversight and strategic guidance, particularly in sustainability-related decisions. The positive, though underutilized, influence of board diversity implies that managers should actively promote gender and professional heterogeneity to broaden perspectives and foster innovative approaches to ESG challenges.

For policymakers and regulators, the study underscores the need to strengthen ESG disclosure requirements and corporate governance standards in India. Although SEBI's transition from Business Responsibility Reports (BRR) to Business Responsibility and Sustainability Reports (BRSR) has improved transparency, the findings highlight the persistent gaps in consistency and quality of reporting. Regulatory frameworks should incentivize mid-sized and smaller firms to adopt credible governance and ESG practices, perhaps through phased disclosure requirements, capacity-building programs, and tax or funding incentives. Encouraging stronger shareholder activism and ensuring that investors have mechanisms to demand accountability would further improve governance effectiveness in driving ESG outcomes.

Finally, the study also has implications for investors and other stakeholders. Investors are increasingly using ESG ratings as a decision-making tool, and the findings confirm that companies with stronger governance structures deliver more credible and consistent ESG performance. This suggests that investment strategies integrating governance quality alongside financial metrics can better manage risk and achieve long-term returns. For civil society and stakeholders, the results highlight the importance of demanding transparency and inclusivity in corporate governance as a pathway to sustainable and socially responsible growth.

Limitations Of The Study And Scope For Future Research

Like any empirical investigation, this study has certain limitations that should be acknowledged. First, the analysis is confined to 120 NSE/BSE-listed manufacturing firms in India during the period 2016–2023. While this provides a reliable overview of governance–ESG dynamics in the manufacturing sector, it limits the generalizability of findings to other industries such as banking, IT, or services, where governance and ESG practices may differ substantially. Second, the study relies on secondary data sources, including ESG ratings from agencies like CRISIL, S&P Global, and ESGRisk.ai, along with company reports. Although these sources are credible, the variation in methodologies used by rating agencies may introduce inconsistencies in ESG scoring. Third, the study applies a quantitative approach using regression models, which, while useful for establishing relationships, does not fully capture qualitative aspects such as boardroom culture, leadership commitment, or stakeholder engagement. Finally, given that ESG reporting in India has gained traction only after SEBI's regulatory push in 2016, longitudinal data remains limited compared to developed economies.

These limitations, however, open valuable avenues for future research. Scholars may expand the scope beyond manufacturing by comparing multiple sectors to identify industry-specific governance–ESG dynamics. Cross-country studies could also be undertaken to contrast emerging economies like India with developed markets, offering insights into institutional and regulatory influences on ESG practices. Future research could adopt mixed-method approaches, combining quantitative models with qualitative case studies or interviews, to provide richer insights into how governance mechanisms function in practice. Moreover, longitudinal studies extending beyond 2023 would help assess whether India's new Business Responsibility and Sustainability Reporting (BRSR) framework leads to more robust governance and ESG integration over time. Finally, future studies may explore the role of emerging governance variables, such as digital transparency, board technological expertise, and AI-driven ESG reporting, to understand how evolving business environments influence sustainability outcomes.

CONCLUSION

This study set out to examine the influence of corporate governance practices on the environmental, social, and governance (ESG) performance of NSE/BSE-listed manufacturing firms in India during the period 2016–2023. The analysis revealed that governance mechanisms—particularly transparency in corporate reporting, board independence, and board diversity—play a decisive role in shaping ESG outcomes. While shareholder rights were found to have a relatively weaker impact, firm size and profitability emerged as significant moderators that strengthen the governance–ESG relationship. These findings underscore that governance is not merely a compliance requirement but a strategic driver of sustainability performance.

The results hold important implications for theory and practice. They validate stakeholder and agency perspectives by showing that stronger governance enhances trust, accountability, and long-term value creation. For managers, the study highlights the necessity of embedding transparency and independent oversight into governance structures to improve ESG credibility. For policymakers and regulators, the findings suggest the need for continued emphasis on robust disclosure frameworks, such as SEBI's Business Responsibility and Sustainability Reporting (BRSR), and targeted support for smaller firms that face resource constraints in adopting ESG practices.

In conclusion, effective corporate governance provides the foundation for sustainable corporate behavior, enabling firms to align profitability with social responsibility and environmental stewardship. However, challenges such as limited board diversity, uneven ESG disclosure quality, and variations across sectors remain. Addressing these challenges will require coordinated efforts from managers, regulators, investors, and scholars. By strengthening governance mechanisms and expanding ESG integration, Indian firms can enhance competitiveness, resilience, and legitimacy in both domestic and global markets.

REFERENCES

1. Albitar, K., Hussainey, K., Kolade, N., & Gerged, A. M. (2020). ESG disclosure and firm performance before and after IR: The moderating role of governance mechanisms. *International Journal of Accounting & Information Management*, 28(3), 429–444. <https://doi.org/10.1108/IJAIM-09-2019-0102>
2. Alexandra, E., & Daria, C. (2021). The influence of corporate governance factors on ESG rating of industrial and IT companies. *Российский журнал менеджмента*, 19(4), 451–474. <https://doi.org/10.21638/spbu18.2021.403>
3. Dalal, K. K., & Thaker, N. (2019). ESG and corporate financial performance: A panel study of Indian companies. *IUP Journal of Corporate Governance*, 18(1), 44–59.
4. Elamer, A. A., & Boulhaga, M. (2024). ESG controversies and corporate performance: The moderating effect of governance mechanisms and ESG practices. *Corporate Social Responsibility and Environmental Management*, 31(4), 3312–3327. <https://doi.org/10.1002/csr.2749>
5. Kim, S., & Li, Z. (2021). Understanding the impact of ESG practices in corporate finance. *Sustainability*, 13(7), 3746. <https://doi.org/10.3390/su13073746>
6. Konstantin, P., & Elena, M. (2022). Relationship between board characteristics, ESG and corporate performance: A systematic review. *Корпоративные финансы*, 16(4), 119–134. <https://doi.org/10.17323/j.jcfr.2073-0438.16.4.2022.119-134>
7. Kuzey, C., Al-Shaer, H., Karaman, A. S., & Uyar, A. (2023). Public governance, corporate governance and excessive ESG. *Corporate Governance: The International Journal of Business in Society*, 23(7), 1748–1777. <https://doi.org/10.1108/CG-07-2022-0307>
8. Martha, H., & Khomsiyah. (2023). The effects of environmental, social, and governance (ESG) on corporate performance. *Jurnal Ilmiah Bisnis dan Ekonomi Asia*, 17(1), 112–120. <https://doi.org/10.32812/jibeka.v17i1.1380>
9. Mooneepen, O., Abhayawansa, S., & Mamode Khan, N. (2022). The influence of the country governance environment on corporate environmental, social and governance (ESG) performance. *Sustainability Accounting, Management and Policy Journal*, 13(4), 953–985. <https://doi.org/10.1108/SAMPJ-07-2020-0241>



10. Nareswari, N., Tarczyńska-Łuniewska, M., & Al Hashfi, R. U. (2023). Analysis of environmental, social, and governance performance in Indonesia: Role of ESG on corporate performance. *Procedia Computer Science*, 225, 1748–1756. <https://doi.org/10.1016/j.procs.2023.10.164>
11. Saygili, E., Arslan, S., & Birkan, A. O. (2022). ESG practices and corporate financial performance: Evidence from Borsa Istanbul. *Borsa Istanbul Review*, 22(3), 525–533. <https://doi.org/10.1016/j.bir.2021.07.001>
12. Shaikh, I. (2022). Environmental, social, and governance (ESG) practice and firm performance: An international evidence. *Journal of Business Economics and Management*, 23(1), 218–237. <https://doi.org/10.3846/jbem.2022.16202>
13. Sharma, P., Panday, P., & Dangwal, R. C. (2020). Determinants of environmental, social and corporate governance (ESG) disclosure: A study of Indian companies. *International Journal of Disclosure and Governance*, 17(3), 208–217. <https://doi.org/10.1057/s41310-020-00085-y>
14. Shrivastava, P., & Addas, A. (2014). The impact of corporate governance on sustainability performance. *Journal of Sustainable Finance & Investment*, 4(1), 21–37. <https://doi.org/10.1080/20430795.2014.887346>
15. Tarmuji, I., Maelah, R., & Tarmuji, N. H. (2016). The impact of environmental, social and governance practices (ESG) on economic performance: Evidence from ESG score. *International Journal of Trade, Economics and Finance*, 7(3), 67–74. <https://doi.org/10.18178/ijtef.2016.7.3.501>