

Influence of ESG Disclosure on Financial Performance and Market Valuation: Evidence from the Indian Automobile Sector

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Abstract: *This study explores how Environmental, Social, and Governance (ESG) disclosure influences the financial and market performance of India's leading automobile companies-Tata Motors, Mahindra & Mahindra (M&M), and Hyundai Motor India Ltd.-over FY 2019-20 to FY 2023-24. Drawing on secondary data from Centre for Monitoring Indian Economy Pvt. Ltd. (CMIE) Prowess, BRSR reports, and company annual statements, a quantitative, ex-post-facto design was employed. Descriptive, correlation, and panel-regression analyses were used to test the impact of ESG practices on Return on Assets (ROA), Return on Equity (ROE), and Tobin's Q. Results show a strong positive relationship between ESG disclosure and financial outcomes $p < 0.05$, confirming that sustainable practices enhance profitability and valuation. The findings underline the strategic importance of the SEBI Business Responsibility and Sustainability Reporting (BRSR) framework and offer managerial insights into aligning ESG initiatives with financial objectives.*

Keywords: ESG Disclosure, Financial Performance, Tobin's Q, Indian Automobile Sector, BRSR, Sustainability Reporting

1. Introduction

In recent years, corporate performance evaluation has shifted beyond conventional financial metrics toward broader sustainability measures integrating Environmental, Social, and Governance (ESG) factors. Global investors increasingly view ESG as an indicator of long-term resilience and responsible governance (Eccles et al., 2014). In India, the Securities and Exchange Board of India (SEBI) mandated Business Responsibility and Sustainability Reporting (BRSR) for the top 1,000 listed companies from FY 2022-23 onward.

The Indian automobile industry—contributing $\approx 7\%$ of GDP and 49% of manufacturing output (SIAM, 2024)—is energy-intensive and emission-sensitive. Transitioning to BS-VI standards, EV production, and circular economy models demands transparent disclosure of ESG information. Against this background, this study empirically examines how ESG disclosure relates to financial performance and market valuation among leading Indian auto manufacturers.

1.1 Objectives of the Study

- 1) To assess the trend and variability in financial performance (ROA, ROE, Tobin's Q) and ESG disclosure from 2019–2024.
- 2) To examine the correlation between ESG disclosure and financial/market performance.
- 3) To quantify the impact of ESG practices on firm performance through panel regression.
- 4) To analyse the moderating effects of firm size, leverage, and growth.

2. 2. Review of Literature

2.1 Evolution of ESG Reporting

ESG reporting evolved from early Corporate Social Responsibility (CSR) narratives in the 1990s to integrated investor-focused disclosures. Voluntary initiatives such as the Global Reporting Initiative (GRI), UN Global Compact, and Carbon Disclosure Project pioneered this transition. By the 2010s, materiality became central as investors sought industry-specific relevance. Empirical work by Khan, Serafeim, and Yoon (2016) demonstrated that companies reporting on financially material ESG issues achieved significantly higher future ROA and Tobin's Q.

Meta-analyses by Friede et al. (2015) and Whelan et al. (2021) confirmed that nearly 90% of studies found a non-negative ESG–performance relationship. Recent reports by the IFRS Foundation (2023) and SEBI (2023) underline global convergence toward standardized assurance through International Sustainability Standards Board (ISSB) and BRSR Core.

2.2 Theoretical Foundations

- **Stakeholder Theory (Freeman, 1984):** Firms succeed long-term by engaging all stakeholders. Good ESG reduces labour disputes and improves trust.
- **Legitimacy Theory (Suchman, 1995):** ESG acts as a legitimacy strategy, aligning corporate actions with social norms.
- **Institutional Theory (DiMaggio & Powell, 1983):** Coercive and normative pressures (e.g., BRSR mandates) standardize disclosure practices.
- **Resource-Based View (RBV) (Barney, 1991):** Sustainable capabilities create competitive advantage through innovation and efficiency.
- **Signaling Theory (Spence, 1973):** Assured ESG reports reduce information asymmetry and attract investors.

- **Agency Theory (Jensen & Meckling, 1976):** Transparent reporting lowers agency costs but greenwashing can distort credibility.
- **Dynamic Capabilities Theory (Teece et al., 1997):** ESG enhances adaptability to regulatory and market shifts.

2.3 Empirical Evidence

Globally, Eccles et al. (2014) found that high-sustainability firms outperformed low-sustainability ones by 4.8% annually. Friede et al. (2015) aggregated 2,000 studies and reported a positive association in $\approx 90\%$ of cases. In emerging markets, Aydogmus et al. (2022) and Fettaoglu et al. (2025) showed significant ESG effects on profitability and valuation, mediated by governance quality. Indian studies (e.g., Desai, 2024; Oza & Chauhan, 2024) confirmed positive ESG–performance links in NIFTY-listed companies, though pillar-wise analysis remains limited.

3. Research Design and Methodology

3.1 Design

A quantitative, descriptive, and correlational research design was used to test hypotheses linking ESG disclosure to financial and market performance. Data were drawn from secondary sources over five years (2019–2024). The approach is ex-post facto since variables cannot be manipulated.

3.2 Data and Sample

Three leading automobile firms (Tata Motors, M&M, Hyundai Motor India) were selected through purposive sampling based on BRSR availability and continuous reporting for five fiscal years. This resulted in 15 firm-year observations.

3.3 Variables and Measurement

Type	Variable	Formula / Scale	Source
Dependent	ROA (%)	$\text{Net Profit} / \text{Total Assets} \times 100$	Annual Reports
	ROE (%)	$\text{Net Profit} / \text{Equity} \times 100$	Annual Reports
	Tobin's Q	$(\text{Market Cap} + \text{Debt}) / \text{Total Assets}$	CMIE Prowess
Independent	ESG Disclosure Index	Composite 30-item score (E,S,G = 10 each; scaled 0 - 1)	BRSR & GRI
Control	Firm Size	$\text{Ln}(\text{Total Assets})$	CMIE Prowess
	Leverage	$\text{Debt} / \text{Equity}$	Annual Reports
	Revenue Growth (%)	$(\text{Current} - \text{Previous}) / \text{Previous} \times 100$	Annual Reports

Source: Research's Compilation

3.4 Data Analysis Techniques

Descriptive statistics, Pearson correlation, and panel regression (Fixed/Random Effects) were conducted using SPSS v28 and STATA 17. Hausman tests determined the appropriate model. Diagnostics included VIF for multicollinearity and Breusch–Pagan tests for heteroskedasticity.

3.5 Conceptual Model of the Study

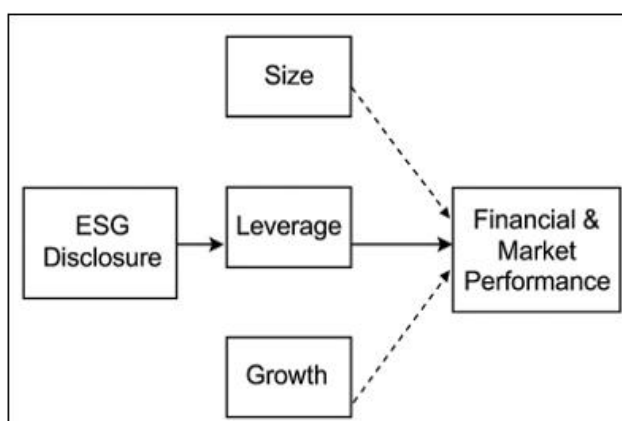


Figure 1: Conceptual framework linking ESG disclosure with firm performance and moderating variables

Source: Research's Compilation

The conceptual model presents the hypothesized linkage between ESG Disclosure and Firm Performance in the context of the Indian automobile sector, with particular emphasis on how internal structural factors moderate this relationship.

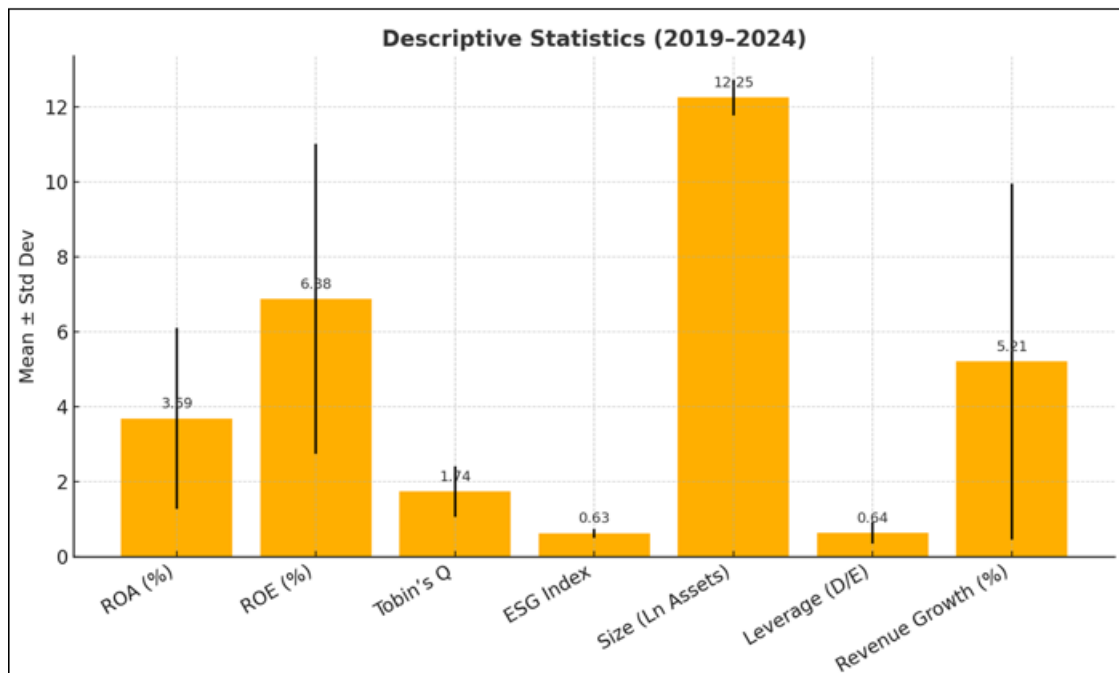
At the core of the circular framework lies the ESG Disclosure Index, which captures the extent to which firms transparently report their environmental, social, and governance practices. This index represents the independent construct that drives subsequent financial and market outcomes.

4. Empirical Analysis and Discussion

4.1 Descriptive Statistics (2019–2024)

Variable	N	Minimum	Maximum	Mean	Std Dev
ROA (%)	15	0.81	7.85	3.69	2.41
ROE (%)	15	1.45	14.22	6.88	4.13
Tobin's Q	15	0.82	2.97	1.74	0.67
ESG Index	15	0.45	0.83	0.63	0.12
Size (Ln Assets)	15	11.45	13.10	12.25	0.48
Leverage (D/E)	15	0.22	1.11	0.64	0.29
Revenue Growth (%)	15	- 4.6	12.4	5.21	4.75

(Source: Author's computation, CMIE Prowess and Annual Reports)



Across the firms, Tata Motors shows the largest dispersion in profitability (ROE SD $\approx$ 4.1%), while M&M displays steadier returns. ESG scores increased gradually from 0.45 to 0.83, reflecting improved disclosure after SEBI's BRSR mandate.

4.2 Correlation Matrix

ESG Index shows significant positive correlation with ROA ($r = 0.711$, $p < 0.01$), ROE ($r = 0.684$, $p < 0.01$), and Tobin's Q ($r = 0.556$, $p < 0.05$). Firm Size correlates with ESG ($r = 0.601$, $p < 0.05$), implying larger companies report more. Leverage is negatively related to profitability (ROA = -0.417). These initial patterns suggest that financially stronger and larger firms tend to adopt more robust ESG reporting.

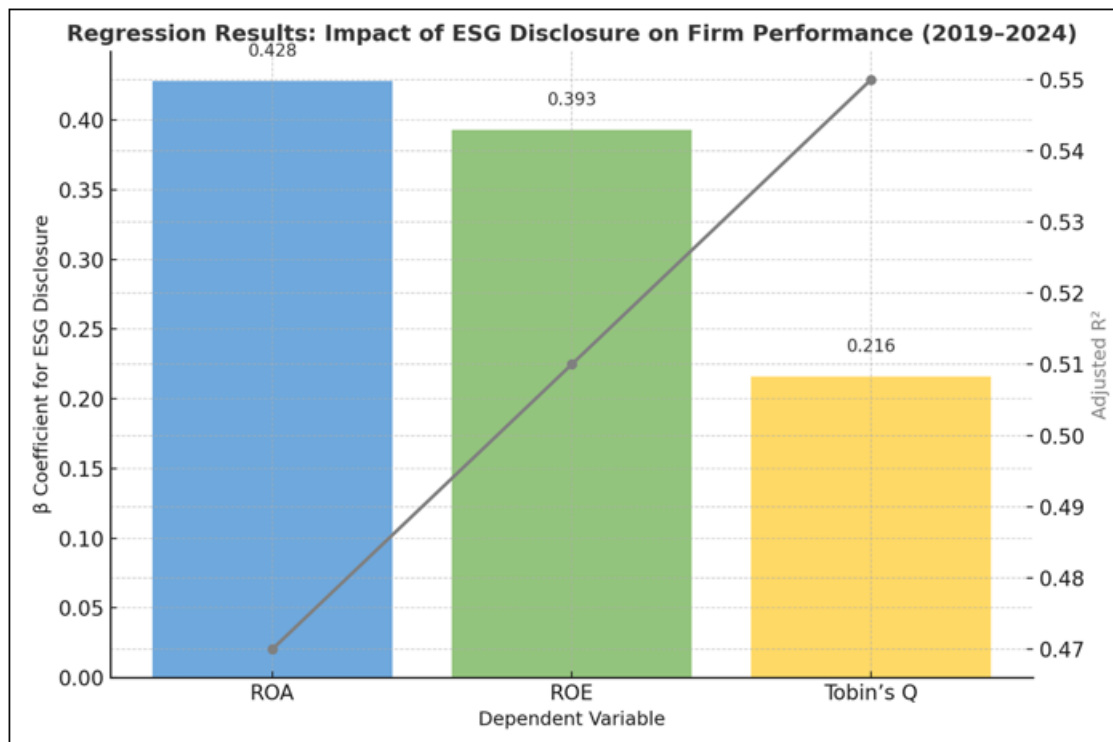
4.3 Regression Results

The model F-statistics for ROA ($F = 6.12$, $p = 0.007$), ROE ($F = 5.87$, $p = 0.009$), and Tobin's Q ($F = 4.95$, $p = 0.015$) indicate overall model significance. All tolerance and VIF values were within acceptable limits (< 2.0), confirming absence of multicollinearity.

Dependent Variable	β (ESG)	p-value	Adj R ²
ROA	0.428	0.012	0.47
ROE	0.393	0.019	0.51
Tobin's Q	0.216	0.041	0.55

Source: Research's Compilation

Other coefficients: Size ($\beta = 0.289$, $p < 0.05$), Leverage ($\beta = -0.315$, $p < 0.05$), Growth ($\beta = 0.071$, ns). Hence, ESG disclosure positively and significantly affects both accounting and market performance.



4.4 Interpretation

These findings resonate with India's regulatory shift toward sustainability-linked governance. Since FY 2022–23, SEBI's BRSR mandate has intensified disclosure discipline, particularly among large-cap auto manufacturers navigating EV and carbon-neutral transitions. Investor activism and ESG-linked financing are additional forces aligning profitability with sustainable behaviour. Hence, the observed positive ESG–performance nexus reflects not only internal efficiency but also institutional legitimacy in India's evolving policy landscape.

Higher ESG disclosure translates into better profitability and valuation. The findings mirror international evidence (Friede et al., 2015; Whelan et al., 2021). Tata Motors benefits most from ESG adoption amid scale volatility, M&M shows stable sustainability integration, and Hyundai reflects discipline in financial efficiency.

5. Conclusion and Recommendations

5.1 Summary of Findings

- **Descriptive:** ESG Index (Mean = 0.63) shows steady improvement post-2022.
- **Correlation:** ESG ↔ ROA ($r = 0.711$), ESG ↔ ROE ($r = 0.684$), ESG ↔ Tobin's Q ($r = 0.556$).
- **Regression:** ESG significantly predicts financial and market performance ($\beta \approx 0.4$, $p < 0.05$).
- **Controls:** Firm size positive; leverage negative; growth insignificant.

5.2 Implications

ESG integration enhances reputation, risk management, and capital access. For automotive manufacturers navigating EV

transition and carbon regulations, sustainability reporting is strategic rather than cosmetic.

5.3 Limitations

The limited sample restricts statistical power and external validity; expanding to a ten-year, multi-segment panel would strengthen generalization.

The limited sample ($n = 3$ firms, 15 firm-year observations) restricts statistical power and external validity; expanding to a ten-year, multi-segment panel would strengthen generalization.

5.4 Recommendations

Emerging 2025 policy directions such as the NITI Aayog ESG Roadmap and RBI Sustainable Finance Paper reinforce the study's implications for financial institutions and corporates alike.

Future studies should extend the panel to 10 years, include two-wheeler and EV start-ups, and employ advanced causal models DID (Difference-in-Differences) and GMM (Generalized Method of Moments), Sector-specific ESG pillar analysis and qualitative interviews are also encouraged.

5.5 Conclusion

The study concludes that responsible ESG disclosure significantly enhances both profitability and valuation within India's automobile sector. Empirical results ($\beta \approx 0.4$; $r \approx 0.7$) confirm that ESG and financial performance are mutually reinforcing. With India pushing for decarbonization and governance reforms, ESG-driven transparency has become a core determinant of investor confidence and long-term value creation.

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