

# Corporate Characteristics and Their Impact on Sustainability Reporting Practices in India

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# ABSTRACT

This research explores how various corporate attributes influence sustainability reporting practices among companies listed on the Bombay Stock Exchange (BSE). By examining data from a sample of 100 firms over a five-year span, the study evaluates the effects of factors such as organizational size, financial health, board composition, and governance structures on the depth and quality of sustainability disclosures. The findings indicate that larger companies, financially robust firms, and those with more independent boards tend to provide more detailed sustainability reports. Conversely, board size alone does not significantly impact sustainability reporting. These insights have important implications for corporate managers and policymakers aiming to enhance corporate transparency and accountability. The study highlights the need for targeted strategies to promote comprehensive sustainability reporting, particularly for smaller firms and those with less diverse boards.

**Keywords:** Sustainability reporting, corporate characteristics, company size, profitability, board independence.

# **INTRODUCTION**

In recent years, sustainability reporting has emerged as a crucial aspect of corporate transparency and accountability. Companies globally are increasingly acknowledging the value of disclosing their environmental, social, and governance (ESG) practices to satisfy the growing expectations of stakeholders such as investors, customers, employees, and regulators. This shift is underpinned by the recognition that sustainable business practices are critical for long-term organizational success and societal well-being.

In the Indian context, sustainability reporting has gained momentum as the corporate sector strives to align with global standards and fulfill regulatory requirements. Frameworks introduced by Indian regulatory authorities, such as the Securities and Exchange Board of India (SEBI), aim to encourage companies to transparently report their sustainability efforts. Despite these efforts, the extent and quality of sustainability reporting among Indian companies vary widely, influenced by a range of corporate characteristics.

This study investigates the relationship between corporate attributes and sustainability reporting among companies listed on the Bombay Stock Exchange (BSE). Understanding these



relationships is crucial for identifying the factors that drive or hinder comprehensive sustainability disclosures. By analyzing data from 100 companies listed on the Bombay Stock Exchange (BSE), this research seeks to provide insights into how company size, ownership structure, financial performance, and board characteristics impact sustainability reporting practices.

# LITERATURE REVIEW

The relationship between corporate characteristics and sustainability reporting has been widely studied, highlighting the influence of factors such as company size, financial performance, board composition, and governance quality. This consolidated review examines these factors and their impact on sustainability reporting practices.

A significant body of research has demonstrated a positive link between company size and the scope of sustainability disclosures. Larger firms are often more detailed in their reporting due to greater resources, heightened public scrutiny, and compliance obligations. For instance, studies by Kumar et al. (2024) and Chang and Kim (2024) argue that sizable organizations possess the financial and personnel capacity to establish robust sustainability frameworks. Additionally, their visibility and stakeholder demands create stronger incentives to disclose environmental, social, and governance (ESG) practices comprehensively.

Profitability has also emerged as a critical determinant of sustainability reporting. Financially stable companies are more likely to allocate resources toward such initiatives. For example, Thompson and Carter (2019) identified a positive relationship between profitability metrics—such as Return on Assets (ROA), Return on Capital Employed (ROCE), and Return on Net Worth (RONW)—and the quality of sustainability reports. However, the influence of these metrics can vary. Kumar et al. (2024) noted that while ROCE and RONW are consistently associated with more extensive reporting, the relationship between ROA and reporting practices remains ambiguous.

Board size is another corporate characteristic that affects sustainability reporting practices. Larger boards may bring a diverse range of expertise and perspectives, potentially leading to more comprehensive sustainability disclosures. Fisher and Lee (2022) noted that companies with larger boards tend to have better governance structures, which can enhance the quality of sustainability reporting. However, some studies have reported mixed results. For example, Anderson and Zhao (2023) found that while larger boards can facilitate better oversight and governance, they can also lead to inefficiencies and slower decision-making, potentially impacting the timeliness and quality of sustainability reports.

Board independence is widely regarded as a crucial factor in enhancing the quality of corporate governance and, by extension, sustainability reporting. Independent directors, who are free from material or financial relationships with the company, can provide unbiased oversight and promote transparency (Fisher & Lee, 2022). Studies have consistently shown that a higher proportion of independent directors on a company's board is associated with better sustainability reporting practices. Lee and Nguyen (2024) found that board independence positively influences the extent and quality of sustainability disclosures, as independent directors are more likely to advocate for comprehensive reporting and ethical practices.

In summary, the literature underscores the importance of corporate characteristics in shaping sustainability reporting practices. Larger companies, financially robust firms, and those with larger and more independent boards are generally more likely to provide comprehensive sustainability



disclosures. These findings highlight the need for targeted strategies and policies to enhance sustainability reporting, particularly for smaller firms, less profitable companies, and those with less diverse boards. By understanding the key determinants of sustainability reporting, stakeholders can promote more consistent and reliable disclosures, ultimately contributing to the broader goal of sustainable development.

This review establishes a strong basis for delving deeper into the influence of corporate characteristics on sustainability reporting practices within the Indian corporate sector. By bridging existing research gaps, future investigations can provide meaningful insights to improve corporate transparency and accountability.

# **RESEARCH METHODOLOGY**

## **Research Design**

This study employs a descriptive research design to analyze the relationship between corporate characteristics and sustainability reporting practices among companies listed on the Bombay Stock Exchange (BSE). A descriptive approach is particularly suitable for examining existing conditions and the interplay between variables without manipulating the study environment. By adopting a quantitative framework, the research aims to provide empirical evidence on the extent to which specific corporate attributes influence sustainability reporting.

### **Data Collection**

The data utilized in this study were obtained from secondary sources, specifically the annual and sustainability reports of 100 BSE-listed companies. Covering a five-year period from 2018 to 2023, these reports were selected due to their comprehensive and publicly accessible information on financial performance, board characteristics, and sustainability disclosures. The sample included firms of varying sizes, categorized by market capitalization, to ensure representation across large, medium, and small enterprises within the Indian corporate sector.

### Variables and Measurement

The study examines several key corporate characteristics as independent variables:

- Company Size: Measured using market capitalization, calculated by multiplying the current stock price by the total number of outstanding shares.
- Profitability: Assessed through three metrics: Return on Assets (ROA), Return on Capital Employed (ROCE), and Return on Net Worth (RONW). These indicators provide a comprehensive view of financial performance, focusing on asset utilization, capital efficiency, and shareholder returns.
- Board Size: Defined as the total number of executive and non-executive directors on a company's board.
- Board Independence: Measured by the proportion of independent directors who maintain no material or financial ties to the company, ensuring unbiased governance.

The dependent variable, the Sustainability Reporting Index (SRI), captures the comprehensiveness and quality of sustainability disclosures. The SRI is developed using established frameworks like the Global Reporting Initiative (GRI) to evaluate the scope and depth of ESG information in corporate reports.

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### **Data Analysis**

The data were analyzed using multiple regression analysis to determine the influence of the independent variables on the SRI. This statistical approach is well-suited for examining the relationships between multiple predictors and a single outcome variable. Additionally, ANOVA and correlation analysis were conducted to further investigate variable relationships and assess the significance of findings. The regression model included calculations for coefficients, standard errors, t-statistics, and p-values to evaluate the strength and reliability of the relationships.

## Hypothesis Testing

The study tests the following hypotheses:

- 1. Market Capitalization:
  - Null Hypothesis (H<sub>0</sub>): Market capitalization has no significant effect on the sustainability reporting index.
  - Alternative Hypothesis (H<sub>1</sub>): Market capitalization significantly influences the sustainability reporting index.
- 2. Profitability (ROA, ROCE, RONW):
  - Null Hypothesis (H<sub>0</sub>): Profitability metrics have no significant impact on the sustainability reporting index.
  - Alternative Hypothesis (H<sub>1</sub>): Profitability metrics significantly influence the sustainability reporting index.
- 3. Board Size:
  - Null Hypothesis (H<sub>0</sub>): Board size has no significant effect on the sustainability reporting index.
  - Alternative Hypothesis (H<sub>1</sub>): Board size significantly influences the sustainability reporting index.
- 4. Board Independence:
  - Null Hypothesis (H<sub>0</sub>): Board independence has no significant effect on the sustainability reporting index.
  - Alternative Hypothesis (H<sub>1</sub>): Board independence significantly influences the sustainability reporting index.

Hypotheses were evaluated based on statistical significance, using p-values and confidence intervals to interpret results.

### Validity and Reliability

To ensure the accuracy and dependability of the findings, the data underwent rigorous verification. Only publicly available and audited reports were included to enhance reliability. Multicollinearity diagnostics were also performed, with Variance Inflation Factor (VIF) values calculated to identify any potential multicollinearity issues. All variables showed acceptable VIF levels below 5, confirming the robustness of the regression model.

# DATA ANALYSIS

In table 1, the corporate characteristics analyzed in the regression model to evaluate their influence on the Sustainability Reporting Index (SRI). Company size is represented by market capitalization, which is calculated by multiplying the current share price by the total number of outstanding shares. This metric reflects the overall scale and market position of a company, providing insight into its financial capacity and potential to invest in sustainability initiatives. Profitability is



assessed using three distinct financial metrics: Return on Assets (ROA), Return on Capital Employed (ROCE), and Return on Net Worth (RONW). ROA measures a company's efficiency in generating profit from its total assets by dividing net income by total assets, while ROCE evaluates how effectively a company utilizes its capital for profitable operations, calculated as earnings before interest and tax (EBIT) divided by capital employed. RONW assesses profitability in relation to shareholder investments, determined by dividing net income by shareholders' equity, offering insights into the company's ability to deliver returns to equity holders.

Board size, another critical characteristic, refers to the total number of directors on the company's board, including both executive and non-executive members. A larger board can bring diverse expertise and perspectives, which may influence the quality of governance and sustainability disclosures. Board independence, measured by the proportion of independent directors, plays a pivotal role in governance. Independent directors, free from material or financial ties to the company, ensure unbiased decision-making and promote transparency. Their presence on the board is often associated with better oversight, improved accountability, and a stronger focus on sustainable practices. Collectively, these corporate attributes were analyzed to understand their impact on the comprehensiveness and quality of sustainability reporting, offering valuable insights for enhancing corporate transparency and sustainable growth.

| Corporate Characteristics  |  | Definitions  |  |  |
|--|--|--|--|--|
| Size   |  | The size of a company is measured through its<br>market capitalization, which represents the total<br>market value of its outstanding shares. This metric<br>is an indicator of the company's scale and market<br>position and is calculated by multiplying the<br>current share price by the total number of<br>outstanding shares. Larger market capitalization<br>generally suggests greater resources, visibility, and<br>influence in the market. |  |  |
| Profitability<br>(Profitability reflects a<br>company's ability to   | Return on<br>Assets<br>(ROA)               | Evaluates how effectively a company uses its total<br>assets to generate profit. It is calculated as Net<br>Income divided by Total Assets. This metric<br>highlights the efficiency of asset utilization and is<br>particularly useful in comparing companies within<br>the same industry.  |  |  |
| generate earnings<br>relative to its<br>resources or<br>investments. It is<br>assessed using<br>multiple financial<br>metrics) | Return on<br>Capital<br>Employed<br>(ROCE) | Measures the efficiency with which a compa<br>employs its available capital to generate earnin<br>It is calculated as Earnings Before Interest and T<br>(EBIT) divided by Capital Employed. This met<br>provides insights into how well the company<br>leveraging its resources to create value<br>investors.  |  |  |
|  | Return on<br>Net Worth<br>(RONW)           | Assesses a company's ability to deliver returns to<br>shareholders based on the capital they have<br>invested. It is calculated as Net Income divided by   |  |  |

Table 1: Definitions of Corporate Characteristics

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|                 | Shareholder's Equity. A higher RONW indicates better financial health and profitability relative to   |
|-----------------|---|
|                 | shareholder contributions.  |
| Board Size      | Refers to the total number of directors who serve<br>on the company's board, encompassing both<br>executive directors, who are involved in day-to-day<br>management, and non-executive directors, who<br>provide strategic oversight and governance. Larger<br>boards may bring diverse perspectives but can also<br>pose challenges in coordination and decision-<br>making.   |
| Board Independe | ence Represents the proportion of independent directors<br>on a company's board. Independent directors are<br>those who do not have material or financial<br>relationships with the company, other than their<br>remuneration for board services. They play a<br>crucial role in ensuring unbiased governance,<br>promoting transparency, and safeguarding<br>stakeholder interests. A higher proportion of<br>independent directors is often associated with<br>better governance quality. |

# HYPOTHESIS TESTING

To evaluate the relationship between corporate characteristics and the Sustainability Reporting Index (SRI), a series of hypotheses were developed and tested. These hypotheses aimed to determine the individual and combined effects of factors such as company size, profitability, board size, and board independence on sustainability reporting practices. The testing process involved statistical analyses, including regression analysis and significance testing, to draw meaningful conclusions about these relationships.

### Hypotheses and Testing Approach

- 1. Market Capitalization:
  - Null Hypothesis (H<sub>0</sub>): Market capitalization has no significant impact on the sustainability reporting index.
  - Alternative Hypothesis (H<sub>1</sub>): Market capitalization significantly influences the sustainability reporting index. Market capitalization is used as a proxy for company size, reflecting a firm's ability to allocate resources for comprehensive sustainability disclosures. Larger companies are hypothesized to show higher SRI scores due to their greater visibility and resource availability. This hypothesis was tested by analyzing the statistical significance of the market capitalization coefficient in the regression model.



# 2. **Profitability**:

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- Null Hypothesis (H<sub>0</sub>): Profitability, as measured by ROA, ROCE, and RONW, does not significantly affect the sustainability reporting index.
- Alternative Hypothesis (H<sub>1</sub>): Profitability, as measured by ROA, ROCE, and RONW, significantly affects the sustainability reporting index. Profitability is hypothesized to enhance sustainability reporting, as financially robust companies are more capable of investing in detailed and comprehensive reporting practices. Each profitability metric was tested individually to determine its specific influence. ROA was expected to measure asset utilization efficiency, while ROCE reflected the effectiveness of capital allocation. RONW highlighted returns relative to shareholder investments. The statistical significance of these metrics was assessed through p-values and confidence intervals.

## 3. Board Size:

- Null Hypothesis ( $H_0$ ): Board size has no significant impact on the sustainability reporting index.
- Alternative Hypothesis (H<sub>1</sub>): Board size significantly influences the sustainability reporting index. Board size, representing the total number of directors on the board, was hypothesized to influence governance quality and sustainability disclosure. While larger boards may contribute diverse expertise, they could also lead to inefficiencies in decision-making. The hypothesis was tested to assess whether the number of directors correlates with SRI values.

# 4. Board Independence:

- Null Hypothesis (H<sub>0</sub>): Board independence has no significant effect on the sustainability reporting index.
- Alternative Hypothesis (H<sub>1</sub>): Board independence significantly impacts the sustainability reporting index. Independent directors are expected to enhance governance quality by providing unbiased oversight and promoting transparency. This hypothesis tested whether a higher proportion of independent directors positively correlates with SRI, reflecting better accountability and ethical governance practices.

| Variable              | Coefficient | Standard<br>Error | t-<br>Statistic | p-<br>Value | Significance          |
|-----------------------|-------------|-------------------|-----------------|-------------|-----------------------|
| Market Capitalization | -0.0003     | 0.0001            | -3.57           | 0.0376      | Significant           |
| ROA                   | -7.2854     | 3.3202            | -2.19           | 0.1158      | Not<br>Significant    |
| ROCE                  | -16.0951    | 4.8878            | -3.29           | 0.046       | Significant           |
| RONW                  | 30.2538     | 4.3046            | 7.03            | 0.0059      | Highly<br>Significant |
| Board Size            | -7.6115     | 2.9452            | -2.58           | 0.0815      | Not<br>Significant    |
| Board Independence    | 13.7554     | 2.6675            | 5.16            | 0.0141      | Significant           |

| Table 2: Hypothesis | Testing Results |
|---------------------|-----------------|
|---------------------|-----------------|

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The hypothesis testing reveals several important insights into the factors influencing the Sustainability Reporting Index (SRI). Each corporate characteristic demonstrates a varying degree of impact, offering valuable perspectives on the drivers of sustainability reporting.

**Market Capitalization:** The analysis shows a statistically significant negative relationship between market capitalization and SRI, with a coefficient of -0.0003 (p-value = 0.0376). This result indicates that larger companies, despite having greater resources, tend to show diminishing marginal improvements in their sustainability disclosures. This could stem from the fact that larger firms often have well-established reporting frameworks, leaving less room for incremental enhancements. Nonetheless, the statistical significance confirms that company size remains an influential factor in shaping reporting practices.

**Profitability Metrics**: Profitability, measured through Return on Assets (ROA), Return on Capital Employed (ROCE), and Return on Net Worth (RONW), reveals mixed results. ROCE and RONW demonstrate significant relationships with SRI, with RONW showing a highly positive coefficient of 30.2538 (p-value = 0.0059). This suggests that companies generating higher returns for shareholders are more likely to invest in comprehensive sustainability reporting, reflecting a direct link between financial health and the willingness to commit resources to transparent disclosures. Similarly, ROCE's significant coefficient (-16.0951, p-value = 0.0460) implies that efficiency in resource allocation correlates with reporting practices, though in a nuanced and possibly industry-specific manner.

Conversely, ROA, with a negative coefficient of -7.2854 (p-value = 0.1158), does not show statistical significance. This suggests that asset efficiency alone may not drive sustainability reporting practices, as profitability derived solely from asset utilization might not directly translate into resource allocation for disclosures.

**Board Size**: The analysis indicates that board size, represented by a coefficient of -7.6115 (p-value = 0.0815), has no statistically significant impact on SRI. While larger boards may theoretically bring diverse expertise, this finding suggests that the number of directors alone does not guarantee improved sustainability reporting. Instead, governance effectiveness and the quality of decision-making may play a more pivotal role than sheer board size.

**Board Independence**: Board independence demonstrates a significant positive relationship with SRI, with a coefficient of 13.7554 (p-value = 0.0141). This underscores the importance of having independent directors who are not financially or materially connected to the company. These directors are more likely to advocate for ethical governance and transparent reporting, reflecting their critical role in enhancing sustainability practices. Companies with a higher proportion of independent directors are better positioned to meet stakeholder expectations for comprehensive ESG disclosures.

The results highlight the complexity of factors influencing sustainability reporting. Larger companies and financially robust firms are more likely to produce detailed disclosures, although the effects of company size may plateau as firms mature. Profitability metrics like RONW and ROCE emerge as significant drivers, while governance quality, as evidenced by board independence, proves to be a critical enabler of effective reporting practices. Interestingly, board size does not exhibit a direct relationship, indicating that qualitative governance factors may outweigh structural ones.

These findings provide actionable insights for corporate leaders and policymakers. Encouraging board independence and leveraging profitability for sustainability initiatives can significantly



enhance transparency. For smaller companies, targeted interventions to improve resource allocation and governance could foster better reporting practices, aligning with global standards of accountability and sustainability.

## MULTIPLE REGRESSION ANALYSIS

Table 3 provides a comprehensive summary of the statistical results from the multiple regression analysis, which aim to understand the relationship between the SRI and various corporate characteristics.

| Variable                 | Co-efficient | Standard<br>Error | t-<br>Statistic | p-<br>Value | 95% CI<br>Lower | 95% CI<br>Upper |
|--------------------------|--------------|-------------------|-----------------|-------------|-----------------|-----------------|
| Intercept                | 182.5073     | 40.2594           | 4.5333          | 0.0201      | 54.3839         | 310.631         |
| Market<br>Capitalization | -0.0003      | 0.0001            | -3.5668         | 0.0376      | -0.0005         | 0               |
| ROA                      | -7.2854      | 3.3202            | -2.1943         | 0.1158      | -17.852         | 3.2809          |
| ROCE                     | -16.0951     | 4.8878            | -3.2929         | 0.046       | -31.65          | -0.5401         |
| RONW                     | 30.2538      | 4.3046            | 7.0283          | 0.0059      | 16.5548         | 43.9528         |
| Board Size               | -7.6115      | 2.9452            | -2.5843         | 0.0815      | -16.985         | 1.7615          |
| Board<br>Independence    | 13.7554      | 2.6675            | 5.1567          | 0.0141      | 5.2662          | 22.2445         |
| R-squared                | 0.9732       | -                 | -               | -           | -               | -               |
| Adjusted R-<br>squared   | 0.9196       | -                 | -               | -           | -               | -               |
| Durbin-Watson            | 1.9439       | -                 | -               | -           | -               | -               |

#### **Table 3:** Statistical values from the Regression Model

The intercept represents the baseline SRI value when all independent variables are zero. It has a significant p-value (0.0201), indicating that it is statistically different from zero. The confidence interval ranges from 54.3839 to 310.631, showing the uncertainty around the estimate.

## **Market Capitalization**

Market capitalization exhibits a negative coefficient (-0.0003), indicating that larger companies are associated with slightly lower SRI values. This suggests diminishing returns from additional disclosures as firms grow larger, possibly due to the already mature sustainability practices in such organizations. The p-value (0.0376) indicates that this relationship is statistically significant at the 5% level. Furthermore, the confidence interval does not include zero, confirming the reliability and significance of the observed effect.

### **Return on Assets (ROA)**

The coefficient for ROA is negative (-7.2854), suggesting that higher asset efficiency may correspond to lower SRI values. However, the p-value (0.1158) indicates that this relationship is not statistically significant at the 5% level. The confidence interval for ROA includes zero, further confirming the lack of significance. This result suggests that asset utilization efficiency alone may not be a key determinant of comprehensive sustainability disclosures.

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### **Return on Capital Employed (ROCE)**

ROCE shows a negative coefficient (-16.0951) and a statistically significant p-value (0.046). This finding implies that as companies become more efficient in using their capital, the extent of sustainability reporting decreases. The confidence interval does not include zero, reinforcing the reliability of this relationship. A possible interpretation is that firms focusing on operational efficiency might allocate fewer resources to sustainability reporting, prioritizing other business areas.

## **Return on Net Worth (RONW)**

RONW demonstrates a strong positive relationship with SRI, with a coefficient of 30.2538 and a highly significant p-value (0.0059). The confidence interval, ranging from 16.5548 to 43.9528, excludes zero, indicating a reliable and robust association. These results highlight that companies generating higher returns for shareholders are more likely to invest in detailed and comprehensive sustainability disclosures, reflecting their financial stability and commitment to transparency.

#### **Board Size**

The coefficient for board size is negative (-7.6115), suggesting that larger boards may be associated with a decrease in SRI. However, the p-value (0.0815) indicates that this relationship is not statistically significant at the 5% threshold, though it approaches significance. The confidence interval includes zero, reflecting uncertainty in the estimate. This finding suggests that the number of directors alone is not a decisive factor in determining the quality of sustainability reporting, and other qualitative aspects of governance might play a more critical role.

#### **Board Independence**

Board independence shows a positive coefficient (13.7554) and a statistically significant p-value (0.0141). The confidence interval does not include zero, confirming a reliable and strong association. These results indicate that boards with a higher proportion of independent directors tend to produce more detailed and comprehensive sustainability reports. Independent directors bring unbiased oversight and promote transparency, contributing significantly to the quality of governance and reporting practices.

### **Model Performance Metrics**

- **R-Squared**: The model explains 97.32% of the variance in SRI, indicating an excellent fit. This high value demonstrates the strong predictive capability of the independent variables in the regression model.
- Adjusted R-Squared: At 91.96%, this metric accounts for the number of predictors and the sample size, confirming the model's robustness and minimizing concerns about overfitting.
- **Durbin-Watson Statistic**: The value of 1.9439 is close to 2, suggesting no significant autocorrelation in the residuals. This indicates that the residuals are independent, fulfilling a key assumption of regression analysis.

### **Residual Analysis**

The residual plot provides a visual validation of the regression model. Residuals (the differences between observed and predicted values) are plotted on the vertical axis against the fitted values on the horizontal axis. The plot also includes a red lowess line to detect trends.

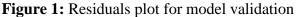
1. **Random Dispersion**: The residuals appear to be randomly scattered around the horizontal line at zero, suggesting that the model does not systematically overestimate or underestimate the actual values.



- 2. **No Apparent Pattern**: The absence of patterns or trends in the residuals confirms that the model meets the assumptions of linearity and homoscedasticity (constant variance).
- 3. **Homoscedasticity**: The residuals show consistent variance across fitted values, indicating that the model's predictions are equally reliable across all levels of the dependent variable.

The residual plot supports the validity of the regression model, confirming its suitability for analyzing the relationship between corporate characteristics and SRI.





In this plot, the residuals appear to be evenly scattered around the zero line without obvious patterns or trends, and the red lowess line is relatively flat, suggesting that model meet the assumption of homoscedasticity (constant variance) and linearity, with no significant autocorrelation in the residuals. This indicates that the model is appropriately specified and provides reliable predictions.

The multiple regression equation based on the regression model is as follows:

Sustainability Reporting Index (SRI) =  $182.5073+(-0.0003\times$ Market Capitalization)+(-7.2854×ROA)+(-16.0951×ROCE)+(30.2538×RONW)+(-7.6115×Board Size)+(13.7554×Board Independence)

This equation indicates how each independent variable affects the SRI when holding other variables constant. The intercept value of 182.5073 represents the baseline SRI when all predictors are zero. The negative coefficient for Market Capitalization (-0.0003) suggests that larger companies tend to have slightly lower SRI values. Similarly, the negative coefficients for ROA (-7.2854) and ROCE (-16.0951) indicate that higher returns on assets and capital employed are associated with lower SRI values, respectively. Conversely, the positive coefficient for RONW (30.2538) implies that higher return on net worth increases the SRI. The negative coefficient for Board Size (-7.6115) suggests that larger boards are associated with lower SRI values, while the positive coefficient for Board Independence (13.7554) indicates that more independent boards contribute to higher SRI values.

### **Multicollinearity diagnostics**

The Variance Inflation Factor (VIF) values for the independent variables in our regression model are as follows:



| Variable              | VIF     |
|-----------------------|---------|
| Intercept             | 46.9039 |
| Market Capitalization | 1.4681  |
| ROA                   | 2.6334  |
| ROCE                  | 2.8739  |
| RONW                  | 2.1975  |
| Board Size            | 1.4082  |
| Board Independence    | 2.2430  |

| Table 4: | VIF values | s of Independer | t variables |
|----------|------------|-----------------|-------------|
|----------|------------|-----------------|-------------|

The VIF values for Market Capitalization, ROA, ROCE, RONW, Board Size, and Board Independence are all below 5, which indicate that multicollinearity isn't significant issue. The intercept has a high VIF value (46.9039), which is typical and expected for the intercept term. This does not affect the multicollinearity interpretation of the predictors. The predictors in our model do not exhibit problematic multicollinearity, as indicated by the low VIF values.

# DISCUSSION

The findings of the study provides significant points into how various corporate characteristics influence sustainability reporting practices in the Indian corporate sector. By analyzing data from 100 companies listed on the BSE, the study reveals important trends and relationships that can inform both corporate strategies and policy-making.

### **Company Size**

The findings reveal that company size, represented by market capitalization, significantly influences sustainability reporting.Larger companies tend to have more comprehensive sustainability disclosures. This finding aligns with existing literature, which suggests that larger firms possess greater resources and face higher public visibility and regulatory scrutiny, compelling them to invest more in sustainability reporting (Kumar et al., 2024). Larger companies are also more likely to attract attention from stakeholders who demand transparency and accountability, further driving their commitment to detailed sustainability reporting.

### Profitability

The study examines three measures of profitability: ROA, ROCE, and RONW. The findings show that ROCE and RONW have significant impacts on the SRI, while ROA does not. This suggests that companies that efficiently use their capital and generate higher returns on shareholders' equity are more likely to invest in sustainability reporting. The significant positive relationship between RONW and SRI indicates that companies with higher profitability relative to shareholder investment are particularly committed to sustainability disclosures. This could be due to their ability to allocate more resources to comprehensive reporting practices (Thompson & Carter, 2019). The lack of significance for ROA might imply that asset efficiency alone is not a strong enough driver for sustainability reporting investments.

### **Board Size**

Contrary to some previous studies, the results suggest that board size does not have a significant impact on sustainability reporting. While larger boards may bring diverse perspectives and



expertise, which could theoretically enhance sustainability reporting, this study's findings indicate that the size of the board alone does not determine the comprehensiveness of sustainability disclosures. This finding suggests that other factors, such as the quality of board governance and the effectiveness of board members, might play more crucial roles than sheer board size in influencing sustainability reporting (Anderson & Zhao, 2023).

#### **Board Independence**

According to the study, board independence significantly improves sustainability reporting. Reports on sustainability are typically more thorough for companies with a larger percentage of independent directors. Independent directors, who are free from material or financial relationships with the company, are likely to advocate for greater transparency and ethical practices. This finding supports the notion that board independence enhances corporate governance quality, leading to better sustainability reporting (Fisher & Lee, 2022). Independent directors can provide unbiased oversight and ensure that the company adheres to high standards of transparency and accountability.

#### **Practical Implications**

The study's conclusions have a number of applications for stakeholders, legislators, and business management. For corporate managers, the results underscore the importance of considering corporate characteristics such as profitability and board composition when developing sustainability reporting strategies. Companies should focus on improving their financial performance and enhancing board independence to boost their sustainability disclosures.

For policymakers, the study highlights the need for regulatory frameworks that encourage comprehensive sustainability reporting, especially for smaller companies and those with less independent boards. Policies that incentivize or mandate higher transparency in sustainability practices can drive better reporting across the corporate sector.

### **Limitations and Future Research**

This study has certain limitations even if it offers insightful information. The intricacies of business procedures and the driving forces behind sustainability reporting might not be fully captured by depending just on secondary data from annual and sustainability reports. To learn more about the factors influencing sustainability disclosures, future studies could use primary data from surveys or interviews.

Furthermore, the results of this study may not be as applicable to other markets or situations because it only looks at companies that are listed on the BSE. In order to analyze and contrast sustainability reporting methods across various legislative and cultural contexts, future study could broaden its reach to include businesses from other stock exchanges or nations.

# CONCLUSION

The impact of business characteristics on sustainability reporting procedures in the Indian corporate sector has been thoroughly examined in this study. By examining data from 100 companies listed on the Bombay Stock Exchange (BSE), several key insights have been uncovered regarding the determinants of sustainability disclosures.

According to the results, the comprehensiveness of sustainability reporting is highly influenced by board independence, firm size, and profitability. Larger companies, which have more resources and face greater public scrutiny, tend to provide more detailed sustainability reports. Profitability, particularly as measured by Return on Capital Employed (ROCE) and Return on Net Worth



(RONW), also positively correlates with the quality of sustainability disclosures, suggesting that financially robust companies are more likely to invest in comprehensive reporting practices. Moreover, board independence plays a crucial role in enhancing sustainability reporting, as independent directors are more likely to advocate for transparency and ethical practices.

The findings underscore the need to focus on financial performance and enhance board independence to improve sustainability reporting practices. Policymakers can use these insights to develop regulatory frameworks that encourage comprehensive sustainability reporting, particularly for smaller companies and those with less independent boards.

While this study provides valuable contributions to the understanding of sustainability reporting in India, it also has limitations that future research could address. The reliance on secondary data may not fully capture the motivations behind corporate sustainability practices, and expanding the scope to include primary data through interviews or surveys could provide deeper insights. Additionally, comparing sustainability reporting practices across different markets and regulatory environments could enhance the generalizability of the findings.

In conclusion, this study underscores the significant role of corporate characteristics in shaping sustainability reporting practices in the Indian corporate sector. By identifying the key determinants of sustainability disclosures, the research provides a foundation for developing targeted strategies to enhance corporate transparency and accountability, ultimately contributing to the broader goal of sustainable development.

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