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Research Paper

Assessing The Impact of ESG Performance on Firm Profitability: Evidence from Analysis on Selected Indian Companies

Ms. Farheen Banu[1]*

ABSTRACT

The need for Sustainable development with already mandated Corporate Social Activities have led to a rise in ESG reforms. The Environmental, Social & Governance (ESG) factors have now become a crucial element in evaluating a company's sustainable commitment and ethical practices with a conscious view of generating financial returns. This study examines the relationship between ESG ratings and firm profitability. The dependent variables used to measure profitability are Return on Assets (ROA), Return on Capital Employed (ROCE) and Return on Equity (ROE). Individual Environment, Social, Governance and combined ESG ratings are used as Independent Variables. Panel Data Analysis is carried out for a period of two years 2023 & 2024 on top 50 Indian Companies based on market capitalization. Descriptive and Correlation analysis shows moderate ESG performance across firms. Hausman test is used to identify the appropriate regression model. Diagnostics tests such as Pesaran CD, Ramsey Reset Test and VIF factors is used to determine the better applicability of the model. The findings suggest that Environment ratings significantly effects ROA and ROCE. Social rating is negatively associated with the firm performance, Governance rating and ESG rating show no significant influence due short observation period. These findings suggest that ESG disclosure not only enhances social accountability but also aligns with financial returns. The study provided insights for investors & corporate managers to integrate ESG factors for strategic decision making.

Keywords: *ESG Ratings, Firm Profitability, Descriptive Study, Panel Regression Analysis, Indian Companies*

In recent years, the incorporation of Environmental, Social and Governance (ESG) factors has attracted considerable attention within corporate world and financial discussions. ESG incorporates a range of non-financial performance metrics that evaluates both ethical influence and sustainability efforts. The increasing focus on sustainable business practices is fueled by high stakeholder awareness and investor preferences. In India, ESG disclosures has significantly progressed with the Securities and Exchange Board of India (SEBI) implementing the Business Responsibility and Sustainability Report (BRSR) requirement for leading listed companies. This regulatory change has established sustainability reporting as a vital element of transparency and strategic planning. There has been a shift in the evaluation of firms, where non financial

[1]CWTT, Post graduate department of Commerce, The Bhawanipur Education Society College, India
*Corresponding Author

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performance complements the traditional financial indicators. Even with the gaining importance, the empirical data regarding ESG performance on profitability and firm value in Indian context remains inconclusive.

The study is grounded by in Stakeholder Theory and Legitimacy Theory, both of which suggests that socially responsible actions enhance a firm's legitimacy, improves reputation and promotes profitability.

About CRISIL ESG Ratings and Analytics Ltd

The top credit rating and research organization in India, CRISIL, has grown to be a significant force in influencing stakeholders' perceptions of financial credibility and business sustainability. Through its ESG rating system, CRISIL has expanded its position in corporate evaluation during the last ten years, going beyond standard credit assessment. This change reflects the increasing understanding that a company's social behavior, environmental responsibility, and governance quality are critical elements of long-term financial viability. One of the most reliable sustainability benchmarks for Indian businesses is CRISIL's ESG ratings, which combine industry-specific knowledge with open evaluation standards. Investors can use these ratings to choose companies that are resilient, ethical, and future-ready in addition to being financially healthy. CRISIL's methodology clarifies how effectively businesses comply with global sustainability standards through low-carbon operations and socially conscious governance. CRISIL's ESG assessments provide relevant insights in the current situation, where regulatory authorities like SEBI have increased disclosures through the BRSR framework. The organization assesses a number of factors, such as board independence, diversity pledges, labor welfare, emissions control, and moral behavior. This all-encompassing method makes it possible to comprehend a company's sustainability performance on a deeper level than just compliance.

Rating Framework

ESG ratings are assigned by Crisil ESG Ratings on a scale of 0 to 100, with 100 representing the highest rating and 0 the lowest. This is consistent with the standardized scale that SEBI established for Indian ESG rating providers (ERPs).

The ratings are divided into the following:

Weak	0-40
Below Average	41-50
Adequate	51-60
Strong	61-70
Leader	71-100

Although study on ESG-profitability relationship has expanded rapidly, empirical evidence is limited in Indian context. Most studies rely on aggregate ESG data overlooking the relevance of sub-dimensions. This study tries to fill the gap by decomposing ESG into its sub components, analyzing its effect on short term profitability to provide evidence on how ESG adoption influences firm performance in emerging economy.

LITERATURE REVIEW

Aydogmuş, Güla, & Ergun (2022) in their study "Impact of ESG performance on firm value and profitability" examined the relationship between ESG performance, firm value and profitability. The results suggested a positive and significant relationship of combined ESG Score with firm value and profitability. Individual Social and Governance score has a positive impact with firm value but environment score does not supports the same.

Bamel, Khatri, Bamel, and Kumar (2025) examined the relationship between ESG disclosure, operational, accounting, financial, and market performance using Panel Data for 237 BSE listed firms. They found a positive association between the variables. Environmental and Social disclosures have positive impact related to operational and market performance but governance disclosure shows consistent positive relationship will all the factors.

Bissoondoyal-Bheenick, Brooks, & Do (2022) examined the relationship between firm and ESG Performance using moderating effects of firm size and media channels. Their study confirmed regarding the positive influence but a fluctuating depending upon company size and media visibility.

Chen, Zhang, Elston, Chen & Hsu (2025) used Effect-decomposition regression (EDR) framework and confirmed that ESG benefits smaller firms in linear fashion and larger firms have U shaped relationship which indicates that ESG scores initially may reduce firm performance but may later have a positive impact on total revenue.

Devi & Sapna (2024) in their paper titled "Relationship of ESG Scores with Firm Performance: A Study of Indian Listed Companies" reported a negative linkage of ESG scores and ROA of the company. The study also incorporated Firm Size and Leverage as control variables along with ROA as dependent variable.

Huang (2021) provided evidence for a moderate relationship between ESG and corporate financial performance stating that ESG initiatives may not be driven by profit motives. The effects depend upon different size, industry or disclosure quality.

Inamdar (2024) focuses on Indian Listed Companies over past 10 years to examine the relationship between ESG disclosures and financial performance. The study finds a positive and significant impact between firm financial position, stock valuation, cost of capital and social disclosures. Piotroski F- scores was used as proxy for financial position.

Khan (2022) conducted a comprehensive bibliometric and meta-analysis to find out the relationship between ESG disclosure and firm performance. The study highlights three research areas concerning financial materiality of ESG disclosures, influence of firm characteristics and role of corporate governance on firm performance.

Moolkham (2025) investigates the impact of the Stock Exchange of Thailand (SET) ESG ratings on firm value. The study reported a significant and positive relationship between firm value and higher ESG ratings. Investors perceive that firms with better ESG performance are less risky and more sustainable leading to higher stock prices.

Nian & Said (2025) conducted a systematic literature review to establish a linkage between ESG ratings firm risk and performance. The study found out that ESG reduces firm risk and enhances financial performance. ESG practices can create long term value and be a strategic tool for risk mitigation.

Objectives of the Study

1. To see the impact of Environment ratings on Firm profitability i.e. ROA, ROE & ROCE
2. To see the impact of social rating on Firm profitability i.e. ROA, ROE & ROCE.
3. To see the impact of Governance rating on Firm profitability i.e. ROA, ROE & ROCE.
4. To see the impact of combined ESG ratings on Firm profitability i.e. ROA, ROE & ROCE.

RESEARCH METHODOLOGY

1 Sample Size - Top 50 companies based on market capitalization is selected for the study.

2 Period of Study- 2023 & 2024

3 Data Sources- The list of companies are taken from Screener, financial data is collected from Money Control and Capital Line. ESG ratings data is taken from CRISIL.

4 Type of Study- Panel Study.

5 Variables used in the Study

Dependent Variables	ROA, ROCE, ROE
Independent Variables	Environment Rating, Social Rating, Governance Rating, ESG Ratings
Control Variables	Firm size & Leverage.

DATA ANALYSIS AND FINDINGS

1 Descriptive Study

Variables	Mean	Median	Max	Min	Std.Dev	Skewness	Kurtosis	Jarque-Bera(p)
ENV_Rating	50.50	48.50	78	31	11.32	0.66	2.75	0.022
SOC_Rating	59.89	61	73	42	5.70	-0.63	3.95	0.006
GOV_Rating	68.21	68	83	49	6.63	-0.35	2.88	0.356
ESG_Ratings	59.91	59	77	43	6.85	0.55	3.21	0.076
ROA	10.96	7.05	65.57	-0.6	11.57	2.32	10.33	0.000
ROCE	20.93	17.29	86.77	0.58	18.43	1.63	5.68	0.000
ROE	27.15	16.6	422.76	-1.68	45.67	6.78	57.80	0.000
Leverage	0.73	0.165	4.14	-0.36	1.14	1.70	4.73	0.000
Firm Size	12.27	5.10	187.35	0.13	30.35	4.71	25.15	0.000

Compiled by the author using E-views 12.

The sample organizations exhibit moderate ESG performance overall, with governance scoring best on average. The environmental rating is 50.50 (SD = 11.32), the social rating mean is 59.89 (SD = 5.70), the governance mean is 68.21 (SD = 6.63), and the combined ESG mean is 59.91 (SD = 6.85). Wider dispersion is seen in profitability metrics: mean ROA = 10.96 (SD = 11.57), ROCE = 20.93 (SD = 18.43), and ROE = 27.15 (SD = 45.67). The high ROE maximum (422.76) and big standard deviation indicate the existence of outliers or companies with extraordinary shareholder returns.

For a number of variables, skewness and kurtosis statistics show deviations from normality. Specifically, profitability metrics exhibit significant kurtosis (ROE = 57.80) and positive skewness (ROA = 2.32; ROE = 6.78). The Jarque–Bera tests reject normality for ROA, ROCE, ROE, Firm Size, and Leverage ($p < 0.01$). Governance and ESG sub-scores, on the other hand, are closer to a symmetric distribution (GOV = −0.35, Jarque-Bera = 0.356), supporting their use in parametric regressions without adjustment.

2. Results of Multicollinearity test

	VARIANCE INFLATION FACTORS
ENV_RATING	2.458
SOC_RATING	1.362
GOV_RATING	1.847
FIRM SIZE	1.047
LEVERAGE	1.155

Compiled by the author using E-views 12

The VIF factors are less than 10 which suggests the explanatory variables employed in the study does not face the issue of severe multicollinearity. The combined ESG ratings have been eliminated as they might show a high correlation with its sub components.

3. Result of Cross Section dependence test

H_0= No cross-section dependence exists

H_1= Cross section dependence exists

Decision Criteria: p-values > 0.05 we fail to reject null hypothesis, thus accept H_0

TEST	**Statistic**	**P-Values**	**Result**
Breusch-Pagan LM	2450.000	0.0000	Cross Section Dependence exists
Pesaran scaled LM	24.7484	0.0000	Cross Section Dependence exists
Pesaran CD	1.0101	0.3124	Cross Section Dependence does not exists

Compiled by the author using E-views 12

The results of Breusch Pagan LM test and Pesaran CD test vary due to difference in their underlying assumptions. Breusch Pagan test is made for panel with small cross section(N) and larger time section (T), conversely Pesaran CD is applicable for both larger and shorter time period but more appropriate for shorter T. If we see the results we can see that the model has some cross sectional dependence as per the LM tests.

4 Stability diagnostic test

Ramsey RESET test is performed to check the functional form of the models. Even though the time dimension is short, the test is valid for checking major misspecifications.

H_0= The model is correctly modified

H_1= The model is mis specified

Decision Criteria: p-values > 0.05 we fail to reject null hypothesis, thus accept H_0

Dependent Variable	**F-Statistic**	**P-values**	**Result**
ROA	3.561	0.0623	H_0 accepted
ROCE	0.015	0.9021	H_0 accepted
ROE	0.383	0.5371	H_0 accepted

Complied by the author using E-views 12

All p-values exceeds 0.05, suggesting no evidence of functional form errors.

5 Hypothesis & Results of the Hausman Test
H_0= Random effects model is appropriate
H_1= Fixed effects model is appropriate

Decision Criteria: p-values > 0.05 we fail to reject null hypothesis, thus accept H_0

Dependent Variable	**Chi-Sq Statistic**	**Chi-Sq d.f.**	**P-Values**	**Model Selected**
ROA	17.8784	6	0.0065	Fixed Effects Model
ROCE	10.8361	6	0.0936	Random Effects Model
ROE	24.9974	6	0.0003	Fixed Effects Model

6 PANEL REGRESSION MODEL SUMMARY
Dependent Variable- Return On Assets (ROA)
Model Equation-

$ROA_{it}=\beta_0+\beta_1 ENV\_RATING_{it}+\beta_2 SOC\_RATING_{it}+\beta_3 GOV\_RATING_{it}+\beta_4 ESG\_RATINGS_{it}$ + FIRM SIZE + LEVERAGE+ ε_i

Test Summary of Fixed Effects Model Regression

CROSS-SECTION FIXED (DUMMY VARIABLES)		
R-Squared	0.977	
Adjusted R- Square	0.949	
F-Statistic	34.625	
P- Value	0.000	
Durbin-Watson Stat	3.921	
	Coefficients	**P-values**
Intercept	48.747	0.0133
ENV_RATING	0.403	0.0150
SOC_RATING	-0.656	0.0019
GOV_RATING	-0.274	0.1600
ESG_RATINGS	-0.013	0.9447
FIRM SIZE	0.007	0.7889
LEVERAGE	0.778	0.6279

Compiled by the author using E-views 12

The R- squared value of the model stands at **97.74%** which implies that a majority of variation in dependent variable is explained by the independent variables. The Environment rating and Social Rating have p-values < 0.05 hence they are significant with Environment rating having a positive effect and Social Rating having a negative effect implying that spending on social welfare can reduce asset based returns.

The governance and combined ESG ratings are insignificant with a p-value > 0.05. Thus the combined ESG ratings has a negative and insignificant impact. The control variables Firm Size and leverage are both insignificant.

The F-statistic implies that the overall model is statistically significant, this can be confirmed as the p-value is < 0.05.

We can identify a problem of autocorrelation as the value of Durbin Watson is closer to 4 clearly stating the problem of negative autocorrelation.

Dependent Variable- Return On Capital Employed (ROCE)

Model Equation-

$ROCE_{it}=\beta_0+\beta_1 ENV\_RATING_{it}+\beta_2 SOC\_RATING_{it}+\beta_3 GOV\_RATING_{it}+\beta_4 ESG\_RATINGS_{it}+ \text{FIRM SIZE} + \text{LEVERAGE}+ \varepsilon_{it}$

Test Summary of Random Effects Model Regression

Panel EGLS (Cross-section random effects)		
R-Squared	0.12	
Adjusted R- Square	0.06	
F-Statistic	2.09	
P- Value	0.061	
Durbin-Watson Stat	2.008	
	Coefficients	**P-values**
Intercept	51.110	0.0478
ENV_RATING	0.685	0.0078
SOC_RATING	-0.297	0.3461
GOV_RATING	-0.458	0.1531
ESG_RATINGS	-0.221	0.5452
FIRM SIZE	0.033	0.5013
LEVERAGE	-3.929	0.0433

Compiled by the author using E-views 12

The R-squared value is 0.12 which implies that only 12% variation in ROCE is explained by the variables. Environmental Performance has a positive influence on ROCE with p-value 0.0078 suggesting that the firms utilize capital more efficiently due to innovation. All other ESG components have statistically insignificant(p-values>0.05) and is negatively associated.

F-statistic is 2.09 comparatively lower than ROA but is significant at 10% level and effects ROCE (p-value=0.06)

Leverage has a negative influence indicating that higher debt component may reduce the returns on capital employed. The firm size exhibits a mild positive but insignificant impact.

Dependent Variable- Return on Equity (ROE)

Model Equation-

$ROE_{it}=\beta_0+\beta_1 ENV\_RATING_{it}+\beta_2 SOC\_RATING_{it}+\beta_3 GOV\_RATING_{it}+\beta_4 ESG\_RATINGS_{it}+ \text{FIRM SIZE} + \text{LEVERAGE}+ \varepsilon_{it}$

Test Summary of Fixed Effects Model Regression

CROSS-SECTION FIXED (DUMMY VARIABLES)	
R-Squared	0.715
Adjusted R- Square	0.358
F-Statistic	2.006

P- Value	0.009	
Durbin-Watson Stat	3.921	
	Coefficients	**P-values**
Intercept	121.864	0.6479
ENV_RATING	1.061	0.6368
SOC_RATING	-4.753	0.0948
GOV_RATING	-3.021	0.2683
ESG_RATINGS	4.494	0.0888
FIRM SIZE	0.025	0.9516
LEVERAGE	99.050	0.0001

Compiled by the author using E-views 12

Leverage turns out to be the strong significant element in the model. The value of R^2 is around 71% thus the variations are explained moderately.

Environmental rating, ESG ratings have positive association but are insignificant at 5%. Social and Governance ratings have negative association. We can assume from the results that the capital structure remains the strong predictor for determining shareholder returns.

CONCLUSION

The study focuses on exploring the influence of ESG ratings on profitability among the top 50 Indian companies during the year 2023 and 2024. The major conclusions that can be drawn are:

i. **Strongest positive influence of Environmental performance**
ROA and ROCE are significantly improved indicating that environmentally responsible practices are more efficient and leads to better resource management. This supports the recent studies which emphasise the growing relevance of environmental initiatives. This also suggests that SEBI should strengthen incentives for green operations, climate-risk disclosures

ii. **Reduction in short term profitability due to social performance**.
Social expenses often are very immediate in nature but the returns of these investments may not be immediate. This explains the negative linkage between ROA and ESG. Policy makers should consider guidelines that helps to evaluate long term financial benefits of these social investments.

iii. **Overall ESG ratings and governance factors show no significant impact**.
These factors do not show a measurable impact within a limited time period. The ESG benefits take time to materialize where disclosure practices are still evolving. Indian ESG disclosure practices are requiring more standardization and thus SEBI and rating agencies should collaboratively improve comparability and transparency.

Overall, the study highlights the importance of strategic and transparent ESG integration. With increasing need for sustainability, the focus should be more on environmental initiatives which which is a more financially reliable factor. The results serve as a guide for the investors to understand how ESG practices can impact the business performance. Companies can do more with regards to sustainability, proper governance with keeping in mind the profit motive as well. Active ESG engagements should be promoted through policies that focus on operational efficiency, and foster development.

Limitations And Future Scope of The Study

1. The study is constrained by a very short period observation. Increasing the time period could improve the model prediction.
2. CRISIL Ratings and Analytics Ltd is used to collect data about ESG ratings, other reliable sources can be used.
3. The sample size can be expanded and industry level analysis can be done.

REFERENCES

Aydogmuş, M., Gulay, G., & Ergun, K. (2022). Impact of ESG performance on firm value and profitability. *Borsa Istanbul Review*, 22(Supplement 1), S119–S127. https://doi.org/10.1016/j.bir.2022.09.004

Bamel, N., Khatri, K., Bamel, U., & Kumar, S. (2025). ESG disclosure and firm performance in Global South economy: Does industry profile and board independence moderate the relationship. *International Review of Economics & Finance, 100*, 104093. https://doi.org/10.1016/j.iref.2025.104093

Bissoondoyal-Bheenick, E., Brooks, R., & Do, H. X. (2022). *ESG and firm performance: The role of size and media channels*. *Finance Research Letters, 45*, 102166. https://doi.org/10.1016/j.frl.2021.102166

Chen, K.-H., Zhang, Y., Elston, J. A., Chen, P.-H., & Hsu, K.-H. (2025). Environmental, social, and governance (ESG) initiative scores and firm performance: The importance and role of firm size. *Small Business Economics*. Advance online publication. https://doi.org/10.1007/s11187-025-01096-1

Devi, P., & Sapna. (2024). Relationship of ESG scores with firm performance: A study of Indian listed companies. *Journal of Indian Business and Management*, 2(2), 1–15. https://doi.org/10.1177/jinm.241242865

Huang, D. Z. X. (2021). Environmental, social and governance (ESG) activity and firm performance: A review and consolidation. *Accounting & Finance, 61*(1), 335–360. https://doi.org/10.1111/acfi.12569

Inamdar, M. M. (2024). Moderating role of ESG disclosures and its impact on firm financial performance. *The Quarterly Review of Economics and Finance, 97*, 101892. https://doi.org/10.1016/j.qref.2024.101892

Khan, M. A. (2022). ESG disclosure and firm performance: A bibliometric and meta-analysis. *Research in International Business and Finance, 61*, 101668. https://doi.org/10.1016/j.ribaf.2022.101668

Moolkham, M. (2025). SET ESG ratings and firm value: The new sustainability performance assessment tool in Thailand. *PLOS ONE, 20*(2), e0315935. https://doi.org/10.1371/journal.pone.0315935

Nian, H., & Said, F. F. (2025, January 11). *The impact of ESG on firm risk and financial performance: A systematic literature review*. *Journal of Scientometric Research, 13*(3 Supplement), s144-s155. https://doi.org/10.5530/jscires.20041187

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