

# Sustainability Integration, Green Finance, and ESG Materiality: An Empirical Analysis of Indian Listed Companies

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## ABSTRACT

This study investigates the nexus between green finance and firm performance in the Indian context, emphasizing Environmental, Social, and Governance (ESG) performance, green expenditure, and green bond issuance. The empirical analysis is based on a panel dataset of 50 firms listed on the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE). A firm-level regression framework is employed to evaluate the influence of green finance indicators on both accounting-based and market-based performance measures, specifically Return on Assets (ROA) and Tobin's Q. Regression analysis is conducted while controlling for firm-specific characteristics, including firm size and firm age, to ensure robustness of the estimates. The findings that ESG performance exerts a positive and statistically significant impact on both R and Tobin's Q indicate that the integration of sustainability practices enhances operational efficiency and strengthens market valuation. Conversely, green expenditures and green bond issuance do not demonstrate significant short-term effects on performance. The results further suggest the presence of sectoral heterogeneity, underscoring variations in sustainability outcomes across industries. Overall, the study contributes to the growing literature on green finance by providing empirical evidence from an emerging market economy and offers important insights for policymakers, investors, and corporate decision-makers.

**Keywords:** Green Finance, ESG Performance, Return on Assets (ROA), Tobin's Q, Sustainability Integration

