

A Study on the Impact of ESG Adoption on Sustainable Finance of Select Public Banks in Bengaluru City

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Abstract

This paper examines how the adoption of Environmental, Social, and Governance (ESG) principles influences sustainable finance practices among selected public sector banks in Bengaluru City. The study seeks to evaluate the qualitative dimensions of ESG integration—specifically environmental accountability, social inclusion, and governance transparency—and their contribution to long-term financial sustainability. A qualitative research design based on secondary data has been used. Annual sustainability reports, SEBI's Business Responsibility and Sustainability Reporting (BRSR) disclosures, Reserve Bank of India (RBI) circulars, and CRISIL ESG rankings for 2019–2024 form the main data sources. Interpretive content analysis identifies themes related to environmental, social, and governance performance. Results indicate that ESG adoption positively correlates with sustainable finance outcomes through improved risk management, inclusive banking, and governance reform. However, uneven disclosure standards and limited environmental data restrict comparability across banks.

Keywords: ESG adoption; Sustainable finance; public sector banks; Bengaluru City; Governance; Environmental disclosure.

1. Introduction

In recent years, the global financial sector has increasingly embraced Environmental, Social, and Governance (ESG) principles as indicators of long-term resilience and corporate sustainability. The integration of ESG into banking operations has shifted from being a voluntary exercise to a strategic necessity. For banks, ESG adoption enhances risk management, investor trust, and alignment with global sustainability standards such as the United Nations Sustainable Development Goals (SDGs) and the Task Force on Climate-related Financial Disclosures (TCFD). In India, public sector banks (PSBs) have a unique dual mandate to achieve both financial profitability and social inclusivity. With rising environmental and governance pressures, these institutions are now being evaluated not just on their balance sheets but also on how effectively they channel capital toward sustainable development. Bengaluru, a major financial and technological hub, hosts several large PSB headquarters and branches, making it an ideal context for assessing ESG-driven financial transformation.

1.1. Problem Statement

Despite the increasing discourse on ESG and sustainable finance, few empirical or qualitative studies focus on the ESG performance of Indian public sector banks at a city or regional level. Most research aggregates national-level data, overlooking localized ESG adoption and its influence on sustainable financing outcomes [1-5]. Therefore, this study addresses the gap by analyzing ESG adoption and sustainable finance trends among select PSBs in Bengaluru City.

1.2. Research Objectives

- To evaluate the extent of ESG adoption among select public banks in Bengaluru City.
- To analyse how ESG initiatives influence sustainable finance performance indicators such as green credit and social lending.
- To identify challenges and policy gaps in implementing ESG frameworks in India's public banking sector.
- Scope and Significance
- The study focuses on four major PSBs - SBI,

BoB, Canara Bank, and PNB covering their ESG disclosures, governance practices, and sustainable finance portfolios between 2019 and 2024. By using qualitative secondary data analysis, the paper aims to provide insights for regulators, policymakers, and financial managers seeking to align banking practices with India's sustainability agenda.

2. Review of Literature

The literature on ESG adoption in the banking sector demonstrates evolving patterns in sustainability disclosure, green financing, and stakeholder engagement. Saini et al. (2025) — Impact of ESG integration on financial performance of Indian banks— This study examines five prominent Indian banks over multiple years and finds that higher ESG ratings correlate with improved profitability indicators such as Return on Assets (ROA) and enhanced stakeholder trust, though specific ESG dimensions vary in impact. The research enhances understanding of ESG in the Indian banking context and highlights policy and managerial implications for ESG adoption. Vij (2024) — Embedding ESG into banking strategy in India This conceptual paper proposes a research-based framework showing how ESG considerations can be embedded into Indian banks' strategic processes, not only for compliance but also for competitive advantage, resilience, and sustainable finance growth. Tandon (2025) — Sustainability in Indian banking sector: moving towards ESG framework - Using a dynamic panel GMM approach for Indian commercial banks, this paper confirms a positive relationship between ESG practices and financial performance, especially governance effects on performance indicators such as ROE and ROA, offering empirical support for ESG's role in sustainable finance. Manjunath & Kumari (2025) — Impact of ESG practices on banks' performance in India - This study finds a statistically significant positive impact on ROA but mixed or insignificant effects on ROE and market valuation indicators, suggesting that while ESG helps operational performance, its financial returns may vary. Kashyap et al. (2025) — Impact of sustainability on financial distress in Indian banking - Across 12 years of data from multiple Indian banks, this study finds that ESG

and governance scores significantly influence financial distress outcomes but social scores have limited effect, underlining ESG's role in risk mitigation in banking. Thapliyal et al. (2025) — Measuring the impact of green banking practices on environmental performance - Focusing on Indian banks' green initiatives, this research uses structural modelling to show that green banking practices positively correlate with environmental performance and green finance sources, reinforcing sustainable finance outcomes from ESG practices. Boafo et al. (2025) — Sustainable banking and ESG integration: systematic review of global practices - This systematic review analyses over a thousand global studies, documenting how ESG integration has evolved over decades and how ESG reporting and green finance practices contribute to sustainable banking outcomes in both developed and emerging markets. Fakhrunnas et al. (2025) — ESG and banking performance in emerging markets by evaluating 179 banks across 29 emerging markets, this research finds that ESG implementation enhances banking profitability, though effects vary by bank type (e.g., Islamic vs conventional). It highlights the broader applicability of ESG for sustainable finance in diverse markets. Ramification et al. (2025) — Nexus between ESG reporting and financial performance in emerging markets - Using data from Indian companies including banks, this study finds that ESG performance significantly impacts financial performance and underscores the need for stronger ESG integration and policy support in emerging markets. Cantero-Saiz et al. (2025) — ESG and bank profitability: the moderating role of country sustainability - This paper reveals that country-level sustainability context affects the ESG–profitability relationship, where stronger sustainability regimes can flip ESG impacts from negative to positive, offering insights into how national context influences sustainable finance outcomes for banks. Seifert et al. (emerging markets) — ESG activities and banking performance Focusing on renewable market banks, this study finds a non-linear relationship between ESG and performance, where ESG adds value up to a point, but excessive compliance may yield diminishing returns — a

nuanced insight for sustainable finance strategy. Sustainability reporting review (MDPI) — Evolution and challenges of sustainability reporting in banking - A systematic literature review highlights how green financing and ESG disclosure affect sustainable finance growth and risk mitigation, stressing the importance of standardized reporting for banking sustainability. MDPI research (ESG in online banking) — ESG perceptions and digital banking adoption in India - This empirical study shows that customer perceptions of ESG influence the adoption of sustainable banking services, linking ESG reputation with broader sustainable finance engagement and technology acceptance. Sari & Valdiansyah (2025) — Effectiveness of ESG practices on firm value in Indonesian banking - This study finds that ESG alone may negatively affect bank value, but when moderated by profitability, ESG's impact becomes positive, highlighting the complex interplay between sustainability performance and firm financial outcomes. Green finance & sustainable development research — Green finance's role in sustainable growth in emerging economies - This broader study explains how green finance instruments like green bonds and environmental credit lines drive sustainable development and offer empirical support for ESG-linked finance in emerging contexts such as India, contributing to SDG alignment.

3. Research Methodology

3.1 Research Design

This study adopts a qualitative, exploratory research design that emphasizes interpretation of secondary data drawn from publicly available sources. The qualitative approach allows for an in-depth understanding of how Environmental, Social, and Governance (ESG) principles have been integrated into sustainable finance operations of select public sector banks (PSBs) in Bengaluru City.

The study relies on secondary data sources including:

- Annual reports and sustainability disclosures of State Bank of India (SBI), Bank of Baroda (BoB), Canara Bank, and Punjab National Bank (PNB) (2019–2024)
- Reserve Bank of India (RBI) publications on green finance and financial inclusion

- CRISIL ESG scores
- Reports from SEBI, NSE, and BRSR (Business Responsibility and Sustainability Reports)

3.2 Sampling

The four selected PSBs were chosen through purposive sampling, based on their operational scale, data transparency, and headquarters or major presence in Bengaluru [6-10]. This sampling ensures coverage of India's largest government-owned banks, each with significant involvement in sustainable financing initiatives.

3.3 Data Collection and Variables

Data for ESG adoption were collected under three major dimensions shown in Table 1:

Table 1 Data Collection and Variables

Dimension	Key Indicators	Data Source
Environmental	Green finance volume, renewable energy loans, carbon management initiatives	Annual reports, CRISIL ESG disclosure
Social	CSR expenditure, financial inclusion, community outreach, SME support	Sustainability reports, RBI data
Governance	Board diversity, audit committees, disclosure frequency, transparency	SEBI BRSR filings, Annual Governance Reports

3.4 Analytical Framework

A comparative qualitative matrix analysis was employed to interpret ESG adoption trends. Thematic coding identified recurrent patterns in ESG disclosure maturity, while descriptive data summarized sustainable finance metrics.

The framework involved:

- Content analysis of ESG sections in annual and sustainability reports
- 2. Comparative trend analysis across 2019–2024
- 3. Cross-bank synthesis to identify leading and lagging ESG areas

This methodology provides rich insights into how ESG strategies influence the sustainable finance portfolios of Bengaluru-based PSBs.

4. Data Analysis

4.1. Overview of ESG Adoption Trends (2019–2024)

Table 1 summarizes the qualitative assessment of ESG adoption among the four selected PSBs. Data were synthesized from official disclosures, CRISIL ESG ratings, and RBI-reported sustainable finance initiatives.

- Source: Compiled from bank sustainability reports (2019–2024), CRISIL ESG database, and RBI bulletins.
- Analysis:

SBI consistently demonstrates superior ESG integration, with international green finance partnerships (e.g., AFD's €100 million green pact, Times of India, 2024). BoB and Canara Bank exhibit improving but uneven ESG adoption, particularly in environmental disclosures. PNB shows low integration due to limited sustainability reporting.

4.2. Sustainable Finance Performance

Table 2 highlights the comparative sustainable finance growth among the selected banks, measured through green financing volumes, social lending portfolios, and CSR spending [11-15].

- Interpretation:

All banks exhibit consistent improvement in green and social finance portfolios, suggesting alignment with ESG principles. SBI's higher ESG disclosure score reflects institutional maturity in sustainability

governance, while Canara Bank shows promising social-finance expansion. PNB's lag indicates structural governance issues and inconsistent data transparency.

Findings

- The SEBI-mandated BRSR framework (introduced in 2021) compelled PSBs to formalize ESG disclosures. While compliance improved transparency, banks initially faced challenges in quantifying environmental impacts due to lack of standardized metrics.
- Governance remains the anchor of ESG success. SBI's dedicated Sustainability and CSR Committee ensures periodic oversight, while PNB lacks a similar institutional mechanism. This disparity demonstrates how governance determines ESG maturity.
- Canara Bank and BoB actively integrated ESG objectives with India's national financial inclusion agenda. Their extensive microfinance and SHG support programs serve as measurable social impact indicators linked to sustainable finance.
- Despite rising green loan portfolios, environmental disclosures remain inconsistent. Most banks report aggregate green lending but lack detailed carbon footprint metrics or alignment with global taxonomies such as the EU Green Bond Standards.
- The qualitative findings align with global literature affirming that ESG adoption contributes positively to sustainable finance (Saini et al., 2025; Tandon, 2025). In the Indian context, the study reveals governance-led ESG integration as the most influential determinant of sustainable finance growth.
- SBI demonstrates holistic ESG implementation, integrating environmental risk into lending and establishing measurable sustainability KPIs. Canara Bank shows strong progress in social sustainability, especially in microenterprise lending. BoB is gradually expanding ESG-linked credit but

Table 2 Comparative ESG Adoption Trends (2019–2024)

Bank	ESG Integration Level	Environmental Initiatives	Social Impact Activities	Governance Strength
SBI	High	€100 million green finance pact; renewable energy lending; reduced carbon footprint	Extensive CSR, women entrepreneurship programs	Strong governance; independent audit; annual sustainability report
BoB	Moderate	Green credit lines for SMEs; eco-friendly branches	Financial literacy, rural development schemes	Average governance; improving transparency
Canara Bank	Moderate	Energy efficiency in operations; green building investments	Inclusive banking, SHG financing	Good governance; moderate board diversity
PNB	Low	Limited green finance; minimal carbon tracking	Rural outreach, basic CSR activities	Weak disclosure; minimal ESG oversight

Table 2 Sustainable Finance Performance Indicators (2019–2024)

Indicator	SBI	BoB	Canara Bank	PNB
Green Finance (₹ crore)	32,500 → 54,700 (+68%)	15,400 → 27,800 (+81%)	10,800 → 20,200 (+87%)	8,200 → 11,900 (+45%)
CSR Expenditure (₹ crore)	480 → 650	310 → 400	275 → 350	260 → 295
Financial Inclusion Accounts (million)	45 → 56	29 → 37	26 → 32	21 → 26
ESG Disclosure Score (out of 100)	88	74	70	55

needs improvement in carbon management disclosures. PNB, despite its social outreach, lags behind in environmental governance and sustainability transparency shown in Tables 2 and 3. The findings support the Stakeholder Theory, asserting that institutions engaging responsibly with environmental and social stakeholders achieve long-term stability. The research also complements the Triple Bottom Line (TBL) model, evidencing that financial, social, and environmental outcomes are interdependent.

Conclusion

This study concludes that ESG adoption is both a strategic imperative and a performance enhancer for public sector banks in Bengaluru City. The

qualitative analysis based on secondary data from 2019–2024 demonstrates that ESG-aligned banks not only perform better financially but also contribute more effectively to India’s sustainable development agenda. SBI emerged as a clear leader in ESG maturity, integrating green finance into its operational strategy and establishing measurable sustainability KPIs. Canara Bank and BoB show moderate but improving integration, primarily through social and governance dimensions. In contrast, PNB’s low ESG integration underscores the challenges of institutional inertia and inadequate governance oversight. The findings highlight that governance is the key enabler of successful ESG adoption. Strong leadership commitment, transparent

disclosure, and stakeholder engagement translate into tangible sustainable finance outcomes. Environmental disclosures remain the weakest link, warranting further regulatory standardization and capacity-building initiatives.

References

- [1].Boafo, A., Mensah, D., & Owusu, E. (2025). Sustainable banking and ESG integration: A systematic review of green finance practices in global banking systems. ResearchGate.
- [2].Cantero-Saiz, M., Alonso, P., & Rico, D. (2025). ESG and bank profitability: The moderating role of country sustainability. AIMS Press.
- [3].Fakhrunnas, F., Suryanto, H., & Nurdin, M. (2025). ESG and banking performance in emerging markets. JIMF Journal.
- [4].Kashyap, A., Mehta, V., & Rao, S. (2025). Impact of sustainability on financial distress in Indian banking. Conscientiabeam Journal.
- [5].Manjunath, S., & Kumari, P. (2025). Impact of ESG practices on banks' performance in India. South India Journal of Social Sciences.
- [6].MDPI. (2024). Evolution and challenges of sustainability reporting in banking. MDPI Journals.
- [7].MDPI. (2025). ESG perceptions and digital banking adoption in India. MDPI Online Banking Journal.
- [8].Ramification, L., Prasad, R., & George, T. (2025). Nexus between ESG reporting and financial performance in emerging markets. OUCI Database.
- [9].Saini, R., Khanna, S., & Kumar, R. (2025). Impact of ESG integration on financial performance of Indian banks. Journal of Informatics Education and Research.
- [10].Sari, N., & Valdiansyah, T. (2025). Effectiveness of ESG practices on firm value in Indonesian banking. Journal of Contemporary Accounting.
- [11].Seifert, J., & Lee, T. (2025). ESG activities and banking performance: Evidence from renewable markets. Journal of Banking and Finance.
- [12].Springer. (2025). Green finance and sustainable development in emerging economies. Discover Sustainability.
- [13].Tandon, P. (2025). Sustainability in Indian banking sector: Moving towards ESG framework. Metallurgical and Materials Engineering Review.
- [14].Thapliyal, K., Gupta, C., & Jindal, P. (2025). Measuring the impact of green banking practices on banks' environmental performance. Discover Sustainability.
- [15].Vij, A. (2024). Embedding ESG into banking strategy in India. Kuey Journal