

The Role of Banking in sustainable Development: A study of Environmental and social Governance Factors

Pritam Lanjewar¹, Dr. Kanchan Naidu², Dr. Gayathri Band², Dr. Vijaykumar Kaluvala³, Dr. Arvinder Kour Mehta⁴, Shubham Ramteke⁵

¹Assistant Professor, Datta Meghe Institute of Management studies, India

²Ramdeobaba University, India

³Associate Professor, MBA department, KL university Hyderabad, India

⁴Assistant Professor, Yeshwantrao Chavan College of Engineering, India

⁵Student, Datta Meghe Institute of Management studies, India

Email: pritamlanjewar002@gmail.com

Abstract: Global economic tides have shifted, and sustainability has key priorities stemming from these trends — where banks have a fundamental function in addressing and funding sustainable processes. This paper seeks to investigate the significant influence of the banking sector in facilitating sustainable development by adopting it through the inclusion of Environmental, Social, and Governance (ESG) considerations in their operations, investment activities and policies. The paper explores how public and private sector banking institutions can urge corporates to align themselves with corporate and green financing by conducting an ESG practice in the finalizing of financial positions. The study employs a mix of primary and secondary data to examine the degree to which ESG is embedded in banking strategies and had influence on lending, risk management, and stakeholder engagement. The results show that banks with proactive ESG policies make, on average, a strong contribution on all three dimensions of ESG: environmental protection, social welfare and long-term economic sustainability. With this study proposes policy recommendations that would aid ESG compliance and bolster the role of banks as drivers for sustainable development in India and abroad.

Keywords: Sustainable Development, Banking Sector, ESG Factors, Green Finance, Social Responsibility, Environmental Governance, Financial Inclusion, India.

1. Introduction

Sustainable development has emerged as one of the most important global agendas in the twenty-first century, which balances economic growth with environmental protection and social well-being. Based on whether we consider the problems the world faces today, such as climate change, resource depletion, income inequality, and social injustice, the need for a more inclusive and responsible development model has also become evident. Transforming the industry in this manner needs a key figure like financial institutions, especially banks. Banks can direct capital to ensure these projects are green and socially responsible, which has the potential to change business practices and also shape the course of national and global development. ESG factors have emerged as foundational for banks over the past several years, helping to align the finance and banking sector with sustainability goals.

Banks are unique as intermediaries in the economy, lending, investing, and advising across sectors, and they can promote sustainable practices in this way. Integrating ESG considerations into decisions enables banks to better navigate risks, promote long-term economic sustainability, and support development of a low-carbon, inclusive economy. Environmental factors involve the funding of renewable energy sources, reducing carbon footprints, and maintaining infrastructure development with minimal environmental impact. The “Social” portion of ESG focuses on what impact a company has on mundanities like labor rights and gender equality to community engagement and customer protection,

and “Governance” speaks to issues of transparency, ethical practices and accountability in corporate operations. Together, these pillars create the prerequisites for prudent banking practices in agreement with sustainable development goals (SDGs).

The growing importance of banking for sustainable development in India As one of the fastest growing major economies, India now has the dual challenge of achieving robust growth without degradation of the environment and social-economic inequalities. Indian commercial banks, both public and private, have touched the role of ESG in their operations in varying degrees and different forms. Further, the introduction of regulations by Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI) and even global treaties like the Paris Climate Accord have provided banks the impetus to align against the sustainability imperatives. New instruments such as green bonds, social impact investing, sustainability-linked loans are emerging as innovations in the Indian financial world.

These advances aside, problems persist. There is a perception among many banks that ESG compliance is more of a regulatory mandate than a strategic opportunity. ESG metrics are not standardised, awareness is limited, and expertise in determining non-financial risk is somewhat lacking. Moreover, the need to make trade-offs between short-term profitability and long-term sustainability goals impedes the mainstreaming of ESG practices. As such, this research seeks to explore how banks incorporate ESG factors into their functions now, the benefits and drawbacks of these practices, and the role these initiatives continue to play in more extensive sustainable development goals.

This study aims to present a thorough examination of ESG adoption within the banking industry, placing particular emphasis on its impact on environmental and social results. In this respect, struggles towards unveiling best practices and policy gaps and proposing measures to further strengthen the role of banks as important catalysts for sustainable development underpin this study's aim.

2. Literature Review

Over the past 10 years, the economic sector that has attracted the most academic interest in the field of sustainable development is the banking sector. This literature review aims to consolidate pertinent contributions pertaining to environmental, social, and governance (ESG) dimensions in the context of banking and financial institutions and the respective state of responsible banking practices observed in both the global and regional landscapes.

Alexander (2014) critically analyzes the shortcomings of Basel III, emphasizing that any elements of financial stability that the reform achieves do not apply to environmental risks that are gaining relevance, especially with climate change. This reflects a wider gap in regulation where sustainability risks are still under-emphasised. In the same way, Bahl (2012) describes "green banking" as a strategic imperative for financial institutions in developing nations such as India. Her evidence emphasises the importance for banks of reorienting from traditional business models to sustainability-oriented practices in line with environmental objectives.

This presents a distinct angle as Arend (2013) highlights dynamic ethical capabilities growing at smaller levels, indicating that ESG orientation can also enable innovation and resilience. In addition, Avrampou et al. Data highlights from across leading European banks, as shown by (2019), that proactive ESG adoption markedly accelerates Sustainable Development Goals (SDGs) (2019). Their research shows how banks can serve as agents of change, champions of inclusive and environmentally sustainable growth.

They also summarize CSR from a conventional perspective in a way that resonates with Hall's (2009) writing regarding CSR as "cost" in context to the business case; Barnett (2019), on the other hand, identifies the potential contradiction of using financial motives to endorse CSR and this undermines a stronger organizational performance attribute that could be attained by functioning in adherence with broad ethical values. His findings bolster the argument that banks that incorporate ESG into their DNA instead of treating it just as box-ticking exercise face fewer reputational and financial headwinds.

The pyramid complementary study of Beck, Demirgüç-Kunt, and Levine (2010) provides a solid foundation by tracing the historical development of financial institutions and markets, suggesting how structural changes can shape access to finance (and consequently economic inclusion). On that basis, Birindelli et al. (2015) explore the ethical motivations behind CSR initiatives in banks through an ethical rating model and find positive relationships between ethical sensibility and responsible banking practices.

In the study of Bouma and Jeucken (2017), sustainable finance practices are described with banks playing an active role in guiding funds to projects that generate social or ecological benefits, thereby cultivating an environment that can attract investments in sustainable initiatives. The authors' work also commendably emphasizes the importance of scaling sustainability criteria within risk assessments and investment decisions.

The continuing argument is carried on by Brogi and Lagasio (2019), who delay a report involving ESG achievement and the gainful progression, in particular for the financial intermediaries. Their findings imply that robust ESG practices in financial institutions can lead to improved profitability and investment bias, thereby reconciling sustainability with financial success.

Many studies repeatedly mention the key role of communication (and perception) for CSR's effectiveness. Eberle et al. (2013) show that interactive CSR communication can increase corporate reputation, which is an important aspect for banks trying to gain the trust of the general public. Similarly, Forcadell and Aracil (2017a, 2017b) examine CSR practices of European vs Latin American banks, demonstrating the role of regional context on scope and impact of sustainable banking activity. Choi et al. lastly cover tools and methodologies for sustainability-related data analysis (2011), Cobo et al. (2011) and Fabregat-Aibar et al. (2019) for bibliometric and keyword network analyses to predict knowledge evolution of responsible investment and banking. They're providing important insight about the expanding academic interest in ESG and the industry's growing recognition of its significance at the bank level.

The literature review indicates a strong case for ESG integration at a banking level, though shows of a lack of common standards amidst inconsistent regulation across all jurisdictions, fragmented disclosures, a lack of clarity on ESG metrics, and a lack of populism of ESG investing in certain developing economies. This review paves the way for an in-depth empirical investigation of how banks (especially in the Indian context) can further align their strategies with the sustainable development mission.

Objectives of the study

1. To examine the role of banking institutions in promoting sustainable development.
2. To assess the integration of Environmental, Social, and Governance (ESG) factors in banking practices.
3. To analyze the impact of ESG initiatives on the performance and reputation of banks.

hypothesis

Hypothesis (H₀): There is no significant integration of Environmental, Social, and Governance (ESG) factors in the current banking practices.

Alternative Hypothesis (H₁): There is significant integration of Environmental, Social, and Governance (ESG) factors in the current banking practices.

3. Research Methodology

Using descriptive and analytical research design, the current study investigates the influence of ESG practices on banking practices and how these practices help drive sustainable development. It includes both primary and secondary data sources to provide a broad perspective on the subject. The research utilizes primary data gathered from structured questionnaires and interviews of banking professionals, stakeholders, and customers through purposive sampling techniques that target individuals with expertise or experience regarding sustainable banking practices. Hypotheses testing has been combined through statistics: Frequency distribution; percentage; chi-square test; etc. The secondary data is collected from previous publications such as academic journal articles, annual sustainability reports of banks, regulatory documents (i.e. European Banking Authority guidelines), and databases such as Scopus, Web of Science and government portals. The use of both quantitative and qualitative methods provides an opportunity for a thorough assessment of ESG integration levels, banks' challenges, and the perceived impact of such practices on financial performance and reputation. The study also upholds ethical standards by ensuring confidentiality, informed consent, and voluntary participation.

Table: Descriptive Statistics on ESG Integration in Banking Practices
(N = 120 respondents)

ESG Integration Statements	Mean	Standard Deviation	Minimum	Maximum
Environmental policies are actively implemented in the bank.	4.12	0.76	2	5
Social responsibility is a core value in the bank's strategy.	4.05	0.81	2	5
Governance mechanisms support ethical and transparent operations.	4.18	0.72	3	5
ESG considerations are integrated into lending and investment decisions.	3.98	0.84	2	5
The bank publishes ESG-related disclosures and sustainability reports.	4.21	0.68	3	5
Training on ESG issues is provided to employees regularly.	3.87	0.91	2	5

Analysis of Descriptive Statistics

The descriptive statistics reported show that the overall perception of the role of Environmental, Social, and Governance (ESG) factors in the present banking system was positive. The mean values for all statements in this scale vary from 3.87 to 4.21, which reflects that most of the respondents are somewhat agree with the statements relevant to ESG implementations. The statement with the highest mean was "ESG-related disclosures and sustainability reports published by banks", 4.21, indicating the bank's commitment to transparency and accountability. It was, similarly, statements about ethical governance practices (mean = 4.18) and active implementation of environmental policies (mean = 4.12) that received high ratings, again suggesting effective governance structures and environmental initiatives. Even in the context of the relatively lower, but still positive, mean employee training on ESG issues (3.87), banks might benefit from investing in capacity-building training and establishing awareness to an extent. Found with standard deviations between 0.68 (for Q5) and 0.91 (for Q8), it indicates moderate spread of response variations, while stemming a general consensus among the participants along with individual differences. In sum, the results affirm the alternative hypothesis that ESG factors have been significantly absorbed in the absolute current practices of banks, showing a broad transition of banks towards sustainable development.

Table: One-Sample t-Test for ESG Integration in Banking Practices

Test Value = 3 (Neutral)					
ESG Integration (Composite Mean Score)	N	Mean	Std. Deviation	t	df
	120	4.07	0.68	16.87	119

Analysis of Hypothesis Testing

A one-sample t-test with a threshold value of 0.033 clearly depicts a statistically significant integration of ESG criteria in current banking practices. The test is run for test-value equal to 3 being neutral i.e. for a scale of Likert of 5. The sample mean and standard deviation were found to be $\bar{x}=4.07$ and $s=0.68$ respectively. The t-statistic of 16.87 and the p-value of 0.000 ($p < 0.05$) indicate that the means of the observed data is significantly different from the test value. In other words, the null hypothesis, which claimed no meaningful integration of ESG factors, was rejected in support of the alternative hypothesis. Aimed at its own members, these findings confirm that ESG risk is being meaningfully and actively used by banking practitioners, and appears to be embedded within practice and processes of banks. It implies a paradigm shift in the banking industry, aiming for a responsible, sustainable, and ethical model of banking with developmental outcomes.

4. Discussion

These study findings highlight the importance of the Environmental, Social and Governance (ESG) factors in the banking sector process to sustainable development. Statistical tests performed as a part of hypothesis testing also proved that embeddedness of ESG principles in banking practices is indeed statistically significant and confirms the global phenomenon of financial institutions moving towards integration of sustainability in their core business functions. This change is largely guided by growing

stakeholder expectations, regulatory frameworks, and market competitiveness that seeks responsible and transparent business conduct.

Banks are also going green and trying to reduce their carbon footprints by investing in eco-friendly projects and launching green banking initiatives. From a social aspect, they are promoting financial inclusion, ethical lending practices, building good community relations, and fair treatment of their customers and employees. This has led to better transparency, risk management and accountability measures in governance-related practices.

This evolution is also supported by the literature. Researchers like Avrampou et al. (2019) and Brogi & Lagasio (2019) have suggested that ESG Banks enjoy superior reputational capital and better long-term financial performance. Also, regulatory authorities and systems such as UNEP-FI and Basel III (Alexander, 2014) are encouraging banks to identify environmental and social risks as part of financial risk management.

The extent to which this has been integrated into the bank varies by institution and larger, more internationally exposed banks tend to lead the charge with regional and smaller banks spending most of their time simply squeezing the toothpaste tube. In addition, the need to standardize and measure ESG practices only adds to the challenge, particularly in developing economies where regulatory oversight and ESG literacy are still in their infancy.

In summary, we hope this study joins the already substantial list of studies where ESG integration is positioned not just as a moral or ethical duty but as a worthwhile strategic imperative for risk mitigation and long-term value creation. It emphasizes the importance of organizations ensuring that they have strong ESG frameworks, trained personnel, stakeholder engagement, and transparent reporting of ESG performance to maintain credibility and facilitate sustainable economic growth.

5. Overall Conclusion of the Study

The findings indicate that ESG has become a vital driver toward responsible and sustainable development in the banking industry, and underscores how ESG factors now form an essential consideration in contemporary banking practices. Based on statistical analysis and hypothesis testing, it was clearly shown that banks are significantly embedding ESG in their overall operations, strategy and the decision-making processes. "Such an integration is propelled by increasing societal expectations, regulatory demands and, importantly, the recognition that long-term financial performance is correlated with responsible and ethical conduct."

Banking with an ESG focus enhances both reputational value and stakeholder trust, as this research further emphasizes its essential role in addressing environmental concerns, promoting social equity, and strengthening governance structures. Banks are not only considered as financial intermediaries, instead, they are critical players to enable sustainable and inclusive economic growth.

Despite the promising progress, the study also highlights the need for continued efforts to improve ESG reporting standards, build the capacity of financial institutions, and encourage wider adoption across banks of all sizes and regions. Collectively, the findings argue for positive, intentional integration of ESG, making it a pathway to not only support agenda-forward development goals but also being a financial hedge against long-tail risks to institutional viability.

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