

7

Green Banking and Financial Performance: A Study on State Bank of India

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Abstract

Linkages between ESG criteria with financial performance of the banks improve the reputation and acceptance of the banks in the society, which helps to increase the business volume. Green banking refers to the integration of technological advancements, operational efficiency and customer behavioural changes within the banking sector to promote environmental sustainability. This article finds out the different strategies adopted by Indian banks under green banking initiatives, with a particular focus on the State Bank of India. The research paper examines key developments and practices that contribute to sustainable banking. The major findings of this paper are that State Bank of India being the largest and the most dependable public bank of India, has become the first Indian bank to focus on green motives and has taken certain initiatives for introducing green banking to the system. Further there are positive relationship among CSR expenditure and financial performance of the banks and corporate Governance with financial performance.

Keywords: ESG, Green Banking, SBI, Environmental Managements, Green Banking Strategies and Sustainable Development.

Introduction

The integration of [ESG criteria](#) (environmental, social, and governance) with financial performance is an important part for banks, to generate goodwill in the society and to extend their business. To evaluate bank's performance, ESG scoring is useful because it reflects how banks are behaving with other stakeholders in the society. To determine ESG score of a bank, few key factors like financial support for reduction of carbon emissions, energy saving; social factors like financial support of community development, and improvement of customer relation; and finally, bank's governance practices, such as board composition, executive compensation, and transparency. Green banking is the practice of adopting sustainable and

environmentally conscious strategies with the banking sector. Through eco-friendly financial practices, banks can minimize their ecological footprint and contribute to the transition to a lower carbon economic. It requires joint efforts from governments, financial institutions and global organization to enhance policies encourage green investment and ensure financial resilience. Apart from monitoring and reducing GHG emissions, Domestic Banks have actively involved in planting of trees, shifting of digital practices from paper-based work, waste reduction & in building energy saving infrastructure. Banks are also extending loans towards financing renewable energy. Banks are also investing in green bonds/funds.

Review of Literature

This study has reviewed few articles on ESG and Green banking in India to get an idea of earlier research efforts, methodologies used and to identify lacuna of the earlier works.

Torre, Leo, & Panetta, (2021) in their article on “The relationship of ESG Performance and Corporate Financial Performance” have focused on ESG Risks than on ESG opportunities. This study has also recommended that regulatory framework may encourage bank managers to enjoy sustainable growth.

Svartzman, (2020) in his article on “Bank for International Settlements (BIS)” has focused on climate change as one of the reasons of financial instability. This study has recommended imposing ‘Carbon Taxation’ for protection of climate.

India CSR Network (2018) has mentioned that the State Bank of India (SBI) has taken initiatives to promote green banking. The primary objective is to raise public awareness about Environmental Protection alongside plantation of trees. The objective is to promote sustainable development of the society.

S Gopi (2016) has mentioned the effectiveness of green banking initiatives in promoting environmental protection. This study is based on a State Bank of India branch in Kerala. The findings have indicated that Net banking is more attractive green banking method compared to others like mobile banking and online bill payments.

C. A. Mahesh, M Nirosha, V Pavithra (2016) in their article on green banking products has mentioned that SBI as a first Indian bank actively pursue such practices. The study has also mentioned that green initiatives reduce paper usage, encourage taking environmentally friendly actions.

R. Jankiraman and S. Karthikeyan (2016) in their study on policies and guidelines of green banking initiatives of RBI has mentioned the challenges in transitioning from traditional to green banking.

O. Sharifi and B.N. Hossein (2015) have mentioned that the Indian banking system has faced problems in implementation of green banking practices

into its operations. The study has focused that the initiatives undertaken by public sector banks and their benefits. It recommended that banks should not only invest directly in green banking but adopt indirect approaches, which reduces cost and generate long term societal benefits.

Dipika (2015) in her article has mentioned the needs to develop awareness of green banking, along with effective implementation. The article has highlighted various strategies of banks in promoting awareness, saving energy, emphasizing social practices, developing clear policies, training staff and financing environmentally friendly projects.

Khawaspatil, S.G. and More, R.P. (2013) in their article has mentioned that green banking can contribute to environmental protection and foster energy consciousness. They also described that banks should raise customer awareness and adopt comprehensive strategies to enhance both environmental sustainability and their institutional image.

Nanda, Sibabrata and Bihari, Suresh Chandra (2012) in their study on "Profitability in Banks of India: An impact study of implementation of green banking" has examined the relationship between green banking effect on bank's profitability. The findings recommended that no significant relationship between green banking implementation and profitability.

Research Gap

From the literature review it is found that most studies primarily focus on the evaluation of green banking initiatives, environmental performance and policy frameworks, while comparatively limited attention has been given to the integrated analysis of environmental, social and governance changes on financial performance of the banks; especially Domestic Banks.

Green Banking Strategies

Green banking can serve as a viable business model for Indian banks to promote sustainability. However, several of the following strategies are incorporated in current practices.

- **Carbon Credit Initiatives:** The Kyoto Protocol mandates the reduction of greenhouse gas emission worldwide. These emission reductions are certified in the form of Certified Emission Reductions (CERs) commonly known as carbon credits.
- **Paperless Banking:** Banks are moving to Core Banking, ATMs and online services which reduces the need for paper. There's a good opportunity to add a paperless banking.
- **Financial Services:** Banks can offer eco-friendly financial products and provide green loans at lower interest rates.

- **Eco-friendly Infrastructure:** Banks are providing loans to residential units; therefore, branches can provide implement green building loans facilities at cheaper rate of interest to help for protection of the environment.
- **Afforestation:** A number of banks provide loans for plantation during the monsoon season to support environmental protection. These initiatives include plantation trees in public spaces such as gardens, schools, colleges etc.
- **Energy Awareness:** Banking institutions needs to install energy efficient devices in their offices to promote the use of CFL lighting and ensure the proper utilization of resources. Green banking practices should be reflected in hardware upgrades, effective office waste management and energy efficient technologies. Banks may also support communities by donating energy saving equipment to educational and healthcare institutions.
- **Transport Facilities:** Banks should encourage the use of common transport arrangement for employees working in the same office, loans to vehicles run by electricity to protect environment from pollution.

Objectives of the Study

The objectives of the present study are:

- Examine the impact of CSR expenditure on the profitability of the banks.
- Analyze the impact of corporate Governance on the financial performance of the banks.
- Evaluate the green banking initiatives of the State Bank of India.
- Hypothesis applying to study the relationship between X and Y:
 - There is no significant impact of Amount Spent on Corporate Social Responsibility (CSR) on the profitability of banks.
 - (ii) There is no significant impact of No. of Board Meetings on the profitability of banks.

Research Methodology

For this study we have taken State Bank of India's (being the largest public sector bank) secondary data available from 2018-25.

ESG dimensions Parameter Environmental

(E) is ignored due to lack of data (GHG Emissions) Social (S) Amount Spent on CSR Governance (G) No. of Board Meetings conducted

It is mainly a descriptive study and data are collected from various sources like articles, annual reports of SBI, academic papers and bank's official websites. 't' test is used for testing of hypothesis.

Data Analysis and Findings

We have taken No. Of Board meetings, CSR spent and NP (after tax) for the period 2018-2025 of SBI and presented in **Table-1**:

Parameters	No. Of Board Meeting	CSR (Rs. Crore)	NP After Tax (Rs. Crore)
2024-25	16	610.77	70901
2023-24	15	502.32	61077
2022-23	14	316.76	50232
2021-22	15	204.10	31676
2020-21	14	144.88	22573
2019-20	11	27.47	14448
2018-19	14	22.70	3069.07

Table 2: T Test Between Net Profit and No. of Board Meetings

	NP (Rs. Crore)	No. Of Board meetings
Mean	36282.30	14.1428
Variance	632807313	2.47619
observations	7	
df	6	
t stat	10.096	
P(T<=t) one tail		
t critical one tail	1.44	
P(T<=t) two tail		
t critical two tail	1.943	

Table 3: T Test Between Net Profit and CSR Spent

	NP (Rs. Crore)	CSR Spent
Mean	36282.30	261.28
Variance	632807313	51954.6
observations	7	
df	6	
t stat	3.79	
P(T<=t) one tail		
t critical one tail	1.44	
P(T<=t) two tail		
t critical two tail	1.943	

Findings

Table-2 displays the t test result of hypothesis: (i). The result shows calculated value of t statistics is 10.09, which is more than critical value at 1% at one tail and two tails with degree of freedom 6. Therefore, null hypothesis is rejected and

conclude that there is a significant impact of number of board meetings conducted during a year on the profitability of banks.

Table-3 displays the t test result of hypothesis: (ii). The result shows calculated value of t statistics is 3.79, which is more than critical value at 1% at one tail and two tails with degree of freedom 6. Therefore, null hypothesis is rejected and conclude that there is a significant impact of CSR expenditure during a year on the profitability of banks.

SBI's Strategic Initiatives Over the Period of 2000-2025

- **Installation of Windmills SBI**

SBI being a pioneer in green power generation among Indian banks, has setup windmills with a combined capacity of 15 MW in Gujarat, Tamil Nadu and Maharashtra. The key motive is not merely profitability but also environmental sustainability through reduced dependence on fossil fuels.

- **Financing Rooftop Solar Projects**

SBI has contributed to the green initiative by providing financial support for the development of solar rooftop systems. The bank will finance solar panels with a total capacity of 100 MW, amounting to rupees 400 crores with assistance from the World Bank (moneycontrol.com).

- **Green Marathon**

SBI has recently introduced the initiative of organizing annual marathons to promote sustainability goals. The event was themed “Run for Green” and participants were provided with saplings to plant after completing the run, encouraging the development of greener cities.

- **Green Housing**

Green housing is a major initiative undertaken by SBI to promote a lower carbon society. The bank provides financial assistance to individuals engaged in environmentally sustainable housing projects. Green buildings through efficient design and operational practices, help reduce environmental impact. SBI as a pioneer in this domain has introduced the “SBI Green Home Loan”, offering translations such as a 5% reduction in margin, 0.25% lower interest rate and zero processing fees. These projects emphasize conservation practices like natural lighting and the use of recycled water.

- **Green Channel Counter (GCC)**

SBI advanced its green banking initiatives by adopting Green Channel Counters (GCC) instead of traditional paper-based procedures from 1st July 2010. This measure is highly significant as the banking sector is a major consumer of paper, resulting in excessive waste and increased pressure on forest resources, ultimately leading to environmental degradation.

- **Solar ATMs**

SBI claims to be the largest operator of solar powered ATMs in the country. Since its initiation in 2008, this initiative has significantly reduced CO2 emissions by nearly 2000 tons annually. By September 2018, the bank had installed around 250 solar ATMs and equipped nearly 150 buildings with rooftop solar panels with plans to deploy approximately 10,000 such ATMs in the following two years. The project primarily focuses on lowering carbon footprints and promoting sustainability, alongside adopting energy efficient systems and automated processes.

- **Electronic Annual Report**

The introduction of Electronic Annual Reports has played a significant role in reducing environmental impact. Earlier distributing printing annual statements lead to substantial paper wastage.

- **Green Bonds**

Green bonds represent a significant initiative undertaken by the bank to support environmentally sustainable projects. The bank issued green bonds mobilize funds for eco-friendly investments, raising approximately \$650 million, in September 2018. The issue received an overwhelming response, with subscriptions reaching nearly three times the offered amount. The funds are intended for projects related to renewable energy, low carbon buildings, energy efficient technologies, sustainable transportation and pollution and waste management. **LONG –TERM LOANS**

SBI extends concessional loans to project executors who prioritize environmental considerations, especially within manufacturing sectors.

- **Retail and Digital Banking**

SBI has taken steps to promote green banking by launching YONO, which serves as a platform to educate users about its channel and lifestyle banking initiatives.

- **Carbon Disclosure Project**

SBI joined the Carbon Disclosure Project (CDP), as a signatory along with more than 550 organizations, intending to actively work towards lowering carbon footprints and supporting environmentally sustainable banking.

Discussion on SBI Strategies of Green Banking

The analysis of the objectives reveals that SBI has adopted several crucial measures necessary for initiating and implementing green banking practices. These initiatives act as significant factors in bringing about change within the banking industry. Evidence suggests that although many companies have started acknowledging the need for environmental conservation and have taken a few initial steps, SBI is steadily advancing toward the effective execution of such practices. Unlike many institutions that focus only on internal processes, SBI has expanded its

green initiatives to include customers and other associated parties. Moreover, certain additional measures have been proposed to further strengthen green banking practices as discussed below:

- Large scale awareness initiatives should be undertaken to educate the people, which can be achieved through campaigns dissemination of information via public platforms.
- All branches should adopt Computer Based Systems along with Core Banking Solutions (CBS) for efficient operations.
- Employees should be provided with specialized training to develop competencies in green banking practices.
- Customers who practice sustainable banking may be encouraged through rewards and incentives.
- The bank can strengthen its social contribution by supporting institutions working toward environmental protection through donations.

Exclusive units can be set up within the bank to manage green initiatives and finance sustainable projects.

Conclusions and Suggestions

The present study finds that there is a significant impact of ESG parameters on the overall profitability of bank. This suggests that there is scope of integrating an ESG framework to overall productivity of banks.

- The SBI has emerged as a pioneer in understanding the importance of moving from traditional banking systems to modern, environmentally friendly, digital approaches. Its initiatives highlight a voluntary and dedicated effort towards promoting green banking.
- The findings of the study highlight that green banking is a vital aspect of sustainable finance, playing a crucial role in safeguarding the environment and ensuring economic resilience. Banks and financial institutions have the potential to promote sustainability through responsible operations, investments and credit policies. However, issues related to awareness compliance and risk management remain key challenges.
- A consistent policy framework is necessary to support the growth of green banking. Governments and Central Banks need to enhance and strictly implement sustainability regulations, while offering incentives to drive participation from financial institutions and the public.
- Advancements in technology specially within fintech, will enhance the operational, efficiency and transparency of green banking practices. Tools

like artificial intelligence, blockchain and digital finance solutions will be instrumental in maintaining the credibility and accessibility of green finance.

- Active participation from consumers is a key determinant in the success of green banking. Enhancing awareness through education, campaigns and providing financial incentives can encourage both individuals and organization to embrace sustainable finance.
- In the future, it is essential for banks to embrace innovation and partnerships to strengthen their impact on global sustainability targets. Active stakeholder engagement, the use of advanced technologies and alignment with global climate frameworks will enable financial institutions to promote a greener future.
- The Bank actively implementing both internal and external measures to create awareness and transform customer practices. However, stronger efforts from other banks and industries are crucial to control and mitigate the worsening environmental situation.

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