ASSESSING THE IMPACT OF ESG PRACTICES ON PROFITABILITY IN INDIAN D-SIBs

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Abstract
The study explores the existing of Environmental, Social and Governance (ESG) practice in Indian Domestic Systemically Important Banks (D-SIBs) to examine their impact on profitability. The study focuses on key D-SIBs including State Bank of India, ICICI Bank and HDFC Bank and maps existing ESG practices such as green house gas emissions, corporate social responsibility (CSR) spending and board meeting frequency from the Annual Sustainability Report on 2019-2024. Hypotheses are formulated to adopt the significance of ESG factors on bank profitability, highlighting the potential benefits of integrating an ESG framework into banking operations. The findings underscore the importance of ESG considerations in enhancing profitability within the Indian Banking Sector. It contributes valuable insights to the discourse on sustainable banking practices and emphasizes the need for D-SIBs to embrace an ESG-sensitive framework for long-term growth and resilience in the evolving financial landscape.
***Keywords**: ESG practices, indian D-SIBs, profitability, RBI, corporate social responsibility, governance and sustainability.*

Introduction

India's commitment to sustainable development has been steadily evolving, with a strong emphasis on promoting environmentally and socially responsible growth. Early steps in this journey was the Ministry of Corporate Affairs (MCA) issuing voluntary guidelines on Corporate Social Responsibility (CSR) in 2009, encouraging businesses to take on socially responsible practices. This culminated in the Companies Act, 2013, which mandated firms to disclose their CSR spending from April 2014 onward. Similarly, in 2020, the Securities Exchange Board of India (SEBI) introduced new Environmental, Social, and Governance (ESG) norms for top-listed companies by market capitalization. By 2021, with the implementation of Business Responsibility and Sustainability Reporting is become mandatory for all listed companies.

Domestic Systemically Important Banks (D-SIBs), which play a vital role in the Indian Financial System due to their size and influence, are at the forefront of this ESG transition. For D-SIBs, embedding ESG principles into their daily operations and long term strategies is critical for ensuring responsible financial management and sustainability. This aligns with the Indian Government's pledge to reach "Net Zero by 2070"[37] and is further propelled by the Reserve Bank of India (RBI). In its report on *Climate Risk and Sustainable Finance*[38], the RBI has provided guidelines for banks to assess and manage ESG risks, encouraging them to align their strategies with ESG principles. Followed by, RBI published *Report on Currency and Finance (RCF) for the year 2022-23*, focuses on the theme "Towards a Greener Cleaner India", addressing various principles and aspects of climate change and financial implications. Incorporating these principles will foster the long-term sustainability of individual banks, the environment and society as a whole, ensuring enduring resilience and responsible growth across all dimensions. Therefore, this paper related to the existing ESG practices,

[37] Net Zero Emission-2070, India's target was announced by Prime Minister Modi at COP26 (Ministry of External Affairs, 2021), followed by submission of India's first LT-LEDS at COP27 and the introduction of a Net Zero Emissions bill in Rajya Shaba in 2022 (Rajya Sabha,2022)
[38] RBI published a discussion paper on Climate Risk and Sustainable Finance in July, 2022.

aiming to map them against key ESG factors. Additionally, this study examines specific ESG parameters and their influence on the profitability of D-SIBs.

Literature Review

Witnessing from literature, suggests that some researchers have used various methods and terms that could be associated with or determinate ESG is an important factor for financial stability and sustainability. Some of these include, **Mahmut Aydogmus, Guzhan Gulay, Korkmaz Ergun-2022**, Examining the impact of ESG performance on firm value and profitability and they finding highlights investing in high ESG performance giving stable financial return for the firm in terms of both value and profitability. **Paolo Agnese, Rosella Care, Massimiliano Cerciello, Simone Taddeo-2024**, reconsidering the ESG practices on firm profitability through investigates the relationship between ESG practices and firm performance using a synthetic index based on ESG reporting disclosure and ESG scores. **Edgar Loew, Lindsav Endres, and Yajie Xu-2024**, used ROA and Tobin's Q as indicators to examine the impact of ESG performance as well as ESF pillars on profitability and financial performance for Western European listed public companies. **Antara Viswanath, Sudha Hari Narayana, Vimala Shruti Bellamkonda, and Sunil.M.P-2024**, this study exploring the relationship between ESG performance and profitability in Indian Power Companies, used CRISIL Ratings Ltd. Report and respective Annual Reports for collecting final ESG scores and Net Profit. **Harish Takrar, Sara Malwiya, Noopur Naik, Deksah Jain and Tanya Parkhis-2024**, Examining the impact of Environmental, Social, and Governance factors on Corporate profitability for 500 companies using a logistic regression approach on pooled panel dataset. **Megha Jaiwani, Santosh Gopalkrishnan-2023**, Evaluating impact of ESG on the performance of Indian Banks varies between Private and Public sector banks. **Dr.Anzilni Fathia Amasya, S.Si., M.Si.-2024**, aimed to evaluate ESG investments deliver tangible financial benefits in banks, for that used ESG scores and Financial performance data collected from Thomson Reuters and Refinitive Eikon across six regions. **Nur Shahita Bte Shahrun, Suganthi Ramasamy, Yuen Yee Yen- 2022**, used panel data analysis for found ESG scores have a significant positive influence on firm profitability. **Amar Rao, Vishal Dagar, Kazi Sohag, Leila Dagher, Tauidul Islam Tanin-2023**, assessed the impact of ESG practices on financial performance among Nifty 50 companies in India for the motive of finding implications and helps to investors, corporate executives and policymakers.

Objectives of the Study

1. To assess existing ESG practices of Indian D-SIBs and identify key parameters.
2. To analyze the impact of ESG parameters on their profitability of Indian D-SIBs.

Hypothesis (H0)

1. There is no significant impact of GHG Emissions on the profitability of D-SIBs.
2. There is no significant impact of Amount spent on CSR on the profitability of D-SIBs.
3. There is no significant impact of No. of Board Meetings on the profitability of D-SIBs.

Research Methodology

Exploratory research design used to examine the impact of ESG practices on their profitability of Indian D-SIBs. To address the objective of the study, assessing one parameter for each area of ESG (as follows) and its impact on the profitability of D-SIBs were studied.

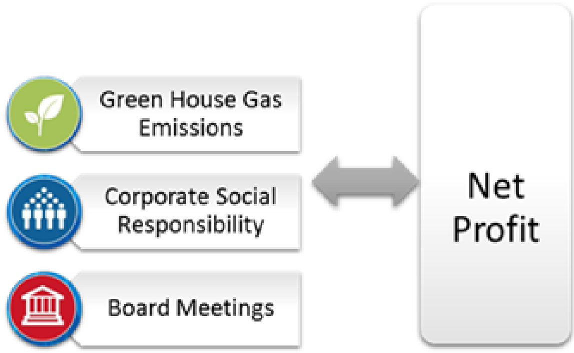

Figure 1: Conceptual Model
(Source: Generated by the Author)

Variables

Independent Variables – Figure1 mentioned three E,S,G parameters of Indian D-SIBs has been taken as the independent variable of the study.

Dependent Variables – Net Profit have been used as dependent variables.

Sources of Data Collection and Analysis

Secondary Data have been used to achieve the objectives of this study. Data has been collected from published Annual Reports, Sustainability Reports, Financial Statements, Journals and Official Websites of D-SIBs for six consecutive years of 2019-2024. Mean values and T-Test (Two Sample) calculations performed on selected three ESG parameters for analyzing the impact on the profitability of Indian D-SIBs.

Sample Selection

The Reserve Bank of India recognized the following banks were the Domestic Systemically Important Banks (D-SIBs) in their latest annual report on 2024.

1. State Bank of India
2. ICICI Bank
3. HDFC Bank

Assessing Current ESG Practices of D-SIBs

SBI, ICICI Bank and HDFC Bank are prime examples of the current state of ESG integration in Indian Banking, which aims to increase profitability by incorporating Environmental, Social, and Governance factors into financial decision-making. Particularly, the following three parameters provide in a better understanding of how responsive D-SIBs towards ESG factors.

Factor 1: Environmental Area: GHG Emissions

This area includes the methods used by banks to evaluate and reduce carbon emissions. The GHG Protocol corporate standard divides Green House Gas (GHG) Emissions into three categories.

Scope 1 includes GHG emissions from direct sources which are owned or controlled by organization.

Scope 2 covers indirect GHG emissions brought on by using electricity that has been purchased.

Scope 3 includes all additional indirect emissions resulting from the company's operations that come from sources that are not under its ownership or control fall under this optional reporting category.

Factor 2: Social: Corporate Social Responsibility

It incorporates the D-SIBs approach for allocating funds for corporate social responsibility. Companies that meet any of the following requirements must allocate 2% of their average net profit over the previous three years to corporate social responsibility[39], according to guidelines established by the Ministry of Corporate Affairs, Government of India.

- A net worth of Rs. 5 crores or more
- A turnover of Rs. 1,000 crores or more
- A Net Profit of Rs. 5 crores

Aligning social projects with the bank's business objectives is necessary to incorporate CSR spending into financial management. Currently, D-SIBs are engaged in a range of CSR initiatives that align with their business principles, including healthcare, education, rural development, women's empowerment, PwD welfare, national heritage protection, and sport promotion activities that resonate with their corporate values and stakeholders engagement.

Factor 3: Governance: Board Meetings

In order to create policies that support sustainable development, the board must concentrate on coordinating organizational goals with the outside world. In order to address market concerns about proper governance many nations have implemented stewardship rules. The Securities and Exchange Board of India (SEBI) has implemented stewardship codes with ESG monitoring since 2020. These codes regulate the investments made by institutional investors as well as their interactions with investee businesses regarding governance-related issues. Investors should vote and attend shareholder meetings with an unbiased viewpoint, according to the guidelines. The board should actively seek out opportunities and hazards and evaluate how they affect the performance of

[39] As per RBI guidelines, SBI requires to spend up to 1% of its previous years towards its CSR efforts because it was not set up under companies act.

the company as a whole. According to the Committee on Corporate Governance, the board of directors should meet at least once a year to specifically discuss ESG strategies, budgets, risk management, board evaluation, and succession planning. Collectively, on the basis of this study, the following figure 2 is highlighting the framework of ESG integration of Indian D-SIBs and it exposing the key factors that must be studied in under each parameter of ESG.

Data Analysis & Interpretation

Data gathered and collated from the aforementioned secondary sources of D-SIBs, with an emphasis on the chosen parameters- GHG Emissions used, amount spent on CSR and no. of board meetings conducted from 2019 to 2024 were used to evaluate the study's hypothesis. After calculating the mean values of the three parameters (table 1), a t-test performed at a significance level of 0.05.

Table 1 Mean Values of ESG Parameters of D-SIBs

Year/ Parameters	GHG Emissions (in tCO2e)	Amount Spent On CSR (in cr.)	No. of Board Meetings	Net Profit After Tax (in Rs.)
2023-24	485048.33	655.54	13	49826.16
2022-23	193722.97	533.44	13	42079.00
2021-22	570961.04	402.24	12	30658.66
2020-21	536556.3	326.76	14	22573.17
2019-20	536535.3	231.94	11	16225.48
2018-19	587761.7	184.15	14	8434.49

Table 2, 3, 4 present the results of the test conducted to examine hypothesis.

Table 2: t-Test: Two-Sample Assuming Unequal Variances		
	GHG Emissions (in tCO2e)	Net Profit After Tax (in Rs.)
Mean	464837.9387	28299.49278
Variance	20120414502	246405809.1
Observations	6	6
Hypothesized Mean Difference	0	
df	5	
t Stat	7.492668308	
P(T<=t) one-tail	0.000334645	
t Critical one-tail	2.015048372	
P(T<=t) two-tail	0.000669289	
t Critical two-tail	2.570581835	

The association between GHG Emissions and net profit is statistically significant since the p-value (0.00067) is below the significance level of 0.05, leading to the rejection of null hypothesis. The significant difference in means between GHG Emissions and net profit is further supported by the t-statistic of 7.49, which is significantly higher than the crucial value of 2.57. This implies that during the study period there was a significant relationship between changes in GHG emissions and net profit for the D-SIBs.

Table 3: t-Test: Two-Sample Assuming Unequal Variances		
	Amount Spent On CSR (in cr.)	Net Profit After Tax (in Rs.)
Mean	389.0133278	28299.49278
Variance	32517.22016	246405809.1
Observations	6	6
Hypothesized Mean Difference	0	
df	5	
t Stat	-4.355006392	
P(T<=t) one-tail	0.003662297	
t Critical one-tail	2.015048372	
P(T<=t) two-tail	0.007324593	
t Critical two-tail	2.570581835	

There is a statistically significant impact between the amount spent on CSR and net profit, as indicated by the p-value of 0.0073, which is likewise below 0.05, leading to rejecting the null hypothesis.

Table:4 t-Test: Two-Sample Assuming Unequal Variances		
	No. of Board Meetings	Net Profit After Tax (in Rs.)
Mean	12.83333333	28299.49278
Variance	1.366666667	246405809.1
Observations	6	6
Hypothesized Mean Difference	0	
df	5	
t Stat	-4.413994774	
P(T<=t) one-tail	0.003465343	
t Critical one-tail	2.015048372	
P(T<=t) two-tail	0.006930686	
t Critical two-tail	2.570581835	

There is a statistically significant impact between the no. of board meetings conducted and net profit, as indicated by the p-value of 0.0069, which is likewise below 0.05, leading to rejecting the null hypothesis.

Findings

The investigation shows a strong relationship between D-SIBs' financial success and important ESG factors. Because net profit and GHG Emissions are positively correlated, it is possible that larger banks with higher emissions make more money because of their scale. CSR expenditure, on the other hand, significantly reduces profitability, suggesting that although banks make investments in social responsibility, they might not see quick financial returns. Furthermore, there is a negative correlation between the no. of board meetings and net profit, suggesting that more frequent meetings can be a sign of governance issues or inefficiency. All things considered, there results show how ESG practices have a wide range of complex effects on financial performance, highlighting the necessity of striking a strategic balance between sustainability initiatives and profitability.

Conclusion

Incorporating Environmental, Social and Governance practices into D-SIBs has become a crucial component of their long-term sustainability and profitability. This study, which examined data from 2019 t0 2024, shows strong relationship between the financial performance of these banks and certain ESG practices. The study recommends a strategic shift towards incorporating ESG considerations into D-SIBs' core operations, highlighting that doing so is not just a way to comply with regulations but also a means of gaining a competitive edge in the banking industry.

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