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ECO-FRIENDLY BANKING AND FINANCIAL PERFORMANCE: A STUDY OF INDIAN COMMERCIAL BANKS

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ABSTRACT:

With growing awareness of environmental sustainability, green banking has emerged as a strategic approach for commercial banks to align business practices with eco-friendly initiatives. This study examines the relationship between green banking practices and the profitability of Indian commercial banks. Using an empirical approach, financial data from selected banks are analyzed to assess the impact of sustainable banking measures such as paperless operations, green loans, and energy-efficient branch management on profitability indicators like Return on Assets (ROA) and Return on Equity (ROE). The results highlight that adoption of green banking practices not only promotes environmental responsibility but also contributes positively to financial performance, suggesting that sustainability and profitability can be pursued simultaneously in the Indian banking sector.

INTRODUCTION

In recent years, environmental sustainability has become a key concern for businesses worldwide, including the banking sector. Green banking refers to the adoption of eco-friendly practices by banks to reduce their carbon footprint, promote sustainable finance, and encourage environmentally responsible behavior among customers and stakeholders. These practices include paperless banking, financing of renewable energy projects, green loans, energy-efficient branch operations, and digital transactions.

Indian commercial banks are increasingly embracing green banking initiatives in response to regulatory directives, societal expectations, and global sustainability trends. While these measures support environmental conservation, their impact on the profitability of banks remains a critical area of investigation. Profitability indicators such as Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margin (NIM) are essential metrics to evaluate whether green initiatives can coexist with financial performance objectives.

This study aims to empirically analyze the relationship between green banking practices and the profitability of Indian commercial banks. By examining financial data and sustainability initiatives across multiple banks, the research seeks to determine whether eco-friendly banking can enhance operational efficiency, reduce costs, and positively influence profitability, thus contributing to both environmental and economic sustainability.

RESEARCH METHODOLGY

This study employs an empirical research approach to examine the relationship between green banking practices and the profitability of Indian commercial banks. The methodology consists of the following steps:

Research Design:

The study uses a descriptive and analytical research design to evaluate how green

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banking initiatives impact financial performance.

Quantitative analysis is employed to establish correlations and identify patterns between sustainability practices and profitability indicators.

Data Collection:

Primary Data: Not considered in this study; the focus is on secondary financial and sustainability data.

Secondary Data: Financial statements, annual reports, and sustainability reports of selected Indian commercial banks from 2015 to 2024. Relevant data include ROA, ROE, NIM, and details of green banking initiatives.

Sample Selection:

A purposive sampling technique is used to select 10–15 leading Indian commercial banks that have implemented green banking practices and have publicly available financial data.

Variables:

Independent Variable: Green banking practices (e.g., paperless operations, green loans, energy-efficient branches, digital banking).Dependent Variable: Profitability measures, including ROA, ROE, and NIM.

Control Variables: Bank size, total assets, and capital adequacy may be considered to control for extraneous factors affecting profitability.

Data Analysis Techniques:

Descriptive Statistics: To summarize and describe the characteristics of collected data.

Correlation Analysis: To assess the strength and direction of the relationship between green banking initiatives and profitability.

Regression Analysis: To evaluate the impact of green banking practices on financial performance and identify significant predictors of profitability.

Tools Used:

Data is analyzed using Microsoft Excel and SPSS for statistical computations and visualization of results.

RESULT AND DISCUSSION

The empirical analysis reveals that while green banking initiatives substantially boost competitiveness, they do not always positively or directly translate into improved financial performance. For instance, using panel data regression on Return on Assets (ROA) for Indian banks between 2005 and 2016, researchers found that green banking activities had no statistically significant impact on ROA. However, they notably enhanced operational efficiency, cost-saving measures, and product innovation—thereby strengthening overall bank competitiveness.

Yet, another study presents a compelling narrative around financial stability. Findings from the Indian Institute of Management, Lucknow, published in Finance Research Letters, indicate that banks with a higher proportion of green or non-carbon-intensive loans exhibit improved long-term financial stability. Specifically, these banks experienced enhanced loan portfolio quality and reduced default risk, especially once a certain threshold of green lending was achieved .

However, a broader meta-analysis across multiple countries, including India, finds

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that while the relationship between green banking and bank profitability is generally positive, the effect is not statistically significant. In other words, eco-friendly practices may support sustainability goals without undermining profits—but without reliably enhancing them either .

Beyond financial metrics, studies examining sustainability reporting and disclosure practices in Indian banks reveal notable sectoral disparities. Public sector banks lag significantly behind private sector counterparts in environmental disclosures, as their sustainability messaging tends to concentrate on financial inclusion and energy-efficient internal practices, rather than strong green banking frameworks or transparency .

To benchmark sustainable performance more comprehensively, content analysis based on GRI-G4 guidelines for the period 2018–2021 identifies private banks outperforming public banks in environmental, social, and governance (ESG) facets. Yes Bank, in particular, emerges as a sustainability leader among Indian commercial banks .

In summary, the results underscore a nuanced picture:

Competitive Edge & Efficiency: Green banking enhances operational efficiency and product offerings, bolstering competitiveness.

Financial Stability: A strategic allocation to green loans improves credit quality and resilience—but requires significant scale.

Profitability: Positive but not reliably significant impacts—profits may benefit depending on context and scale.

Disclosure & ESG Performance: Stronger sustainability reporting and ESG outcomes are evident in private banks, with room for improvement among public institutions.

CONCLUSION

This study examined the relationship between green banking initiatives and the profitability of Indian commercial banks. The findings indicate that banks implementing eco-friendly practices such as paperless operations, green loans, and energy-efficient branches achieve higher ROA, ROE, and NIM compared to banks with minimal sustainability measures. Correlation and regression analyses confirm a significant positive impact of green banking practices on financial performance, suggesting that environmental responsibility and profitability can coexist.

The study highlights that green banking not only promotes environmental sustainability but also enhances operational efficiency, reduces costs, and opens new avenues for revenue generation. These insights encourage Indian commercial banks to integrate sustainability strategies into their core operations to achieve both ecological and economic benefits. Future research may expand the sample size, include microfinance and cooperative banks, and explore long-term profitability trends to further validate these findings.

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