

# Chapter 3

## A Study to Analyse the Impact of Green Bonds on Bank Profitability

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### ABSTRACT

*In India, the issuance of green bonds has become a significant financial innovation that provides a dual solution for financing infrastructure and environmental sustainability. Green bonds are being used more frequently by Indian banks to fund renewable energy, sustainable transportation, and climate-resilient infrastructure. This study examines how green bonds have affected important financial metrics like Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), Capital Adequacy Ratio (CAR), and ESG scores, with a focus on five major banks: Yes Bank, Axis Bank, State Bank of India, ICICI Bank, and IDBI Bank. The adoption of green bonds is positively correlated with increases in ESG performance and long-term profitability, according to the study's comparative financial analysis of before and after green bonds issuance performance.*

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## 1. INTRODUCTION

Innovative financial instruments known as “green bonds” are used to raise money for environmentally beneficial projects like clean transportation, energy efficiency, renewable energy, and climate-resilient infrastructure. Since 2015, the green bond market in India has expanded gradually due to government programs, legal frameworks, and growing investor interest in the statement (Agrawal et al., 2024). The Reserve Bank of India and SEBI's supportive regulatory frameworks, as well as growing investor interest in sustainable finance, have all contributed to the green bond market's steady growth in India. India's fiscal and financial environment is changing quickly. India has committed to achieving net zero emissions by 2070 and reducing emissions intensity by 45% below 2005 levels by 2030, demonstrating its awareness of climate change and its resolve to seek “green growth” in its economy (Government of India, 2022). To achieve such lofty objectives, substantial financial support and mobilization through investments in clean technology, fuels, and sustainable infrastructure would be required. Crucially, in order to achieve net zero by 2050, India will need to spend an estimated USD 12.7 trillion, or around USD 470 billion year. To lower the nation's fiscal imbalance, the government has taken various actions. One significant change in this environment has been focused towards green bonds, which offer a creative means of funding green projects. Green bonds are a type of financing instrument that is issued to the fund environmental projects. Despite of the growing demand for sustainable finance solutions and the global shift towards environmental responsibility, the market for green bonds has expanded quickly. Banks are now major players in this market, issuing a significant amount of green bonds to funding environmentally friendly initiatives. The green bonds are used to motivate the private sector to invest in green projects, government initiatives can be catalysed. It may help balancing the borrowing and reduce the need for government subsidies. Green project have the potential to create a significant amount of jobs and promote innovation in the sector. Therefore funding through a green bonds has to reduce income inequality. Encourages innovation and technology transfer in green sectors. Additionally, green bonds promote innovation and the transfer of innovative green technology, bolstering India industrial base in emerging sectors like energy storage, smart grids and electric mobility. By lowering pollution levels, they can also helps to improve public health outcomes and air quality. By focusing investment on climate resilient infrastructure, green bonds enhance readiness for disasters and lessen financial losses from climate related calamities.

Issuers must include important disclosures in their offer documents, whether for a private placement or a public offering, in order to improve the efficiency of the process. Climate change is creating increasing financial challenges to both developed and developing nations. Green bonds are ideal for financing energy and

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