

# Chapter 13

## Profitability and Environmental Impact: A Study of Green Stock Portfolios in India

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### **ABSTRACT**

*The financial market innovates and diversifies with Green Project, indexes, bonds, and portfolios. We examine whether Green Stock portfolios outperform non-Green Stock portfolios in India. Data from April 2018 to January 2022 distinguishes portfolio performance during the COVID-19 pandemic. This study splits time into two periods: before COVID and during COVID. The performance will be assessed using the absolute rate of return risk-adjusted indices like Sharpe, Treynor, and Jensen's Alpha. Green portfolios (excluding green bluechip) outperformed the other portfolios in this study. Green assets outperformed non-green portfolios during the COVID-19 epidemic. Green portfolios (excluding green bluechip) have higher risk-adjusted performance. The report suggests investing in green portfolios for improved returns and security against unmitigated risk factors like the COVID-19 pandemic. Since Green is the future of our world, investors, companies, and regulators should promote Green Portfolio.*

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## INTRODUCTION

Covid-19, the pandemic that changed virtually everything. It reduced the GDP, slowed trading activities, and altered how humans worked. This, in return, temporarily drops the CO<sub>2</sub> emissions due to the considerable drop-in human activities, making sustainability a concern and, therefore, recording a significant rise in sustainable financing. Covid-19 risked the attainment of Sustainable Development Goals globally by the year 2030. At the global level, efforts missed track of the goal of the Paris Agreement, i.e., the reduction in global temperature rise to 1.5 degrees Celsius and carbon dioxide emission decrease by 2050. Even so, the financial sector still contributed immensely to this more sustainable development. In 2020, green bond issuance globally amounted to \$222.2 billion, a 26% hike from the previous year. And that is all from Bloomberg Intelligence, which turns next to fund popularity: the overall sustainable amount of loans in 2020 was \$762.7 billion, compared to last year's \$577 billion, while sustainable debt this year went over \$1.6 trillion, with ESG assets projected to hit \$35 trillion compared to \$30.6 trillion back in 2018 and \$22.8 trillion at the end of 2016. The ESG assets will grow to over \$50 trillion in 2025. The upsurge in sustainable funds is driven by the demands from projects classified as green and sustainable. In the world, two-thirds of greenhouse gas emissions are carbon dioxide and energy consumption producing the most substantial percentage. This has led to rising investment in clean, renewable energy and green projects.

The International Energy Agency (IEA) reported India as the world's third-largest carbon emitter. In contrast, the Renewable Energy Country Attractiveness Index (RECAI) of 2021 places India at number three globally, behind China and the United States, with a score of 70.2. That is how sweet the Indian market is for investment and renewable energy sources. It is in the developing country's interest, such as India's, that an efficient financial market framework develops for optimal allocation and utilization of sustainable money. The Indian financial market remains open to the innovations required for sustainable finance but also adapts sustainability indexes and policies. Indeed, India does introduce several green indices through the Bombay Stock Exchange and national stock exchanges. Given the consideration that green indices are essential in the sense that they serve as an efficient tool for providing performance assessment for investment-based companies doing business sustainably, many researchers make their empirical analyses to execute performance evaluations between green and conventional investments. For instance, Clement et al., (2011) and Goncalves et al., (2021) assessed the performance of US and European markets to draw comparisons and contrasts. Some research on the Indian market by considering conventional, green, and ESG indices in a comparative study has been conducted via Mukhopadhyay and Sarkar (2021); Surana, (2021); Tripathi and

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