

## Chapter 16

# Harmonizing Financial Systems for a Greener Future: Exploring Sustainable Finance Strategies in India

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### **ABSTRACT**

*Sustainable finance represents the next biggest transformation in the financial sector to aid the process of sustainable development. Sustainable finance comprises traditional investment which provides financial profits as well as financing the projects or investments that have social, economic and governance impact. The transition from traditional investment to sustainable finance is underway in different markets at different capacities. This study seeks to examine the performance of sustainability indices representing sustainable finance in the Indian and global markets by analysing returns. It was found that sustainable finance gained significant appreciation in the Indian market. In comparing the performance of sustainability indices in developing and developed markets, there was no development divide identified. In this path towards widespread adoption of sustainable finance, data science as a field also provides promising applications for facilitating this transformation.*

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## **1. INTRODUCTION**

Sustainable finance represents the next biggest transformation in the financial sector to aid the process of sustainable development. The vision of UN Sustainable development goals (SDG) of 2030 will be achieved only when the financial system of a nation rethinks on innovative financial products and services. Traditionally, Investments are made with the objective of earning returns with a given level of risk. The new concept, sustainable finance refers to the merge of traditional investment and philanthropic donations. The sustainable finance investments are made purely on social, Environmental and Governance impact projects. In early days, the economic models were developed focusing on mobilisation and allocation of finance. The industrial growth, technological developments needed more resources to be used in the process of production and services, this resulted in deforestation, global warming, carbon emission etc. Economic growth, technological advancement, high speed internet connectivity without controlling pollution, greenhouse gas emission and other environmental issues will be detrimental for future business.

Sustainable finance comprises traditional investment which provides financial profits as well as financing the projects or investments that have social, economic and governance impact. Capital markets play a vital role in creation of funds and a perfect platform for the business to raise capital, and for investors to generate economic wealth. In this study, we compared the performance of benchmark index of S&P BSE 100 with S&P BSE 100 ESG, S&P BSE Carbonex and S&P BSE Greenex to find out the returns earned by these indexes during the period 2017-2020. In assessing the global markets, the study compared the performance of four Dow Jones Sustainability Indices. Further, in enabling the transformation towards sustainable finance, data and information have crucial roles to play. Therefore, the paper also explores the potential areas for application of data science in facilitating the transition towards wide adoption of sustainable finance.

## **2. REVIEW OF LITERATURE**

The objectives of business enterprises are constantly evolving. It has moved from satisfaction of shareholders by way of profitability to the stakeholder satisfaction and has also come to incorporate environmental, social and governance (ESG) concerns. The reason for the shift is multi-faceted. Economic growth without considering the pollution and biodiversity degradation may not sustain in the long run (Wilson, 2010). When the business serves the on the sustainability of business based on low carbon emission, production of less greenhouse gases and cost-efficient alternative energy in the production process.

### **2.1 Sustainable Finance**

The European Commission defines sustainable finance as “the process of taking due account of environmental, social and governance (ESG) considerations when making investment decisions in the financial sector” such that it increases “longer-term investments into sustainable economic activities and projects”. The idea of preserving for the future is inherent in the concept of sustainable finance (Soppe, 2004). It depends on the environmental impact of the projects due to resource depletion and pollution (Wilson, 2010). Gobezie (2009) argues that sustainability requires generation of investments for sustainable initiatives as donor money and philanthropy alone would be insufficient. The original role of finance has been to provide for economic and business activities. Baranes (2009) therefore proposes a significant change

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