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REVISITING THE LINK BETWEEN CORPORATE ENVIRONMENTAL INITIATIVES AND FINANCIAL PERFORMANCE: AN EMPIRICAL STUDY OF BSE LISTED COMPANIES

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ABSTRACT

Today, business sustainability is a critical concern. Investors' interest in Socially Responsible Investment (SRI) has increased substantially during the previous decade. As a result, company performance may be influenced by sustainability. The goal of this study is to determine "whether sustainable businesses are more profitable." Various studies have been undertaken in the past to investigate this relationship. However, the results have proved conflicting and inconclusive. Furthermore, the majority of the research have been undertaken in developed nations. The study has been conducted on the top 20 BSE listed companies according to market capitalization. The statistical findings show that corporate environmental sustainability has no substantial impact on financial performance as a whole.

Keywords: *Environment Initiatives, Sustainability Reporting, Global Reporting, Financial Performance.*

Introduction

An ever-increasing number of companies are recognising the reputational risks and opportunities that corporate responsibility brings, and for these companies aligning corporate behaviour with stakeholder expectations is an ongoing business priority. Communication, however, often remains the missing link in the practice of corporate responsibility. The information requirements of a range of opinion leader and mass stakeholder audiences are not currently being satisfied by many companies, so they are not getting full credit for their responsible corporate behaviour. Of course, there are specific challenges in communicating corporate responsibility - including scepticism towards company messages and potentially hostile reactions from the media, campaign groups and others. The diverse information requirements of different stakeholder groups also present special communication challenges, and these requirements are examined in turn.

Environment provides everlasting support and benefits to the entire global community. It provides products and benefits which enables natural restoration and health management also. This system facilitates interdependency with other environments like political, legal, social and economic environments. It is the central nervous systems of human systems and sustenance in this universe. Research publications that are relevant to environmental initiatives taken by corporate companies would also be covered in detail and in-depth.

In recent years, corporate environmental sustainability and its impact on financial performance have become prominent research topics. Over the last decade, a number of research have been conducted to investigate this association. The outcomes, however, have been mixed and inconclusive. Furthermore, the majority of past research has been undertaken in industrialised countries (like US, UK etc.). As a result, the purpose of this research is to examine the influence of environmental initiatives on company financial performance in India.

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Objectives of the Study

The principal focus of this research is to evaluate "whether or not environment sustainable companies are more profitable." To fulfil this primary objective, the following specific objectives have been established:

- To conduct a review of the literature on the relationship between corporate environment initiatives and financial performance.
- To investigate the impact of a company's environmental initiatives on its financial performance, as well as whether or not companies with higher environmental initiatives undertaken are more profitable.

Background and Literature Review

(**Cohen, Fenn, & Naimon, 1995)** had done a study to evaluate the effects and impact of environment related factors on economic performances of organizations. The study was conducted with companies in Standard and poor 500 rating companies only. In this study two industry-balanced portfolios and compared both accounting and market returns of "high polluter" to the "low polluter" portfolio. In this study it was found that either it had no "penalty" for investing in the "green" portfolio, nor a positive return from green investing. In this study the environmental pollution variables were compared with ROE, ROA, risk market adjusted returns and beta gamma values. All these factors were compared in the study and it was found that environment had its impact and influence on financial performances of companies. The higher pollution and environmentally damaging activities the financial performances were comparatively very low and poor. This clearly validated that financial performances were dependent on environmental performances also. The study concludes that environmental criteria like toxic release, volume chemical, oil spill volume and total fine values had its relational impact on economic performances. All these economic pollutant factors tend to reduce economic performances which are clearly evident from the study.

(**Allouche & Laroche, 2005)** had examined 75 studies out of total 82 studies which were conducted on determination of relationship between corporate sustainability performance and corporate financial performances. Only in 50% of these studies, it was found that there exists a positive relationship between CSR and CFP. There is a need for such evaluative studies to be conducted in Indian context which is very important.

(Fisher-Vanden & Thorburn, 2011) Researchers debate whether environmental investments reduce firm value or actually improve financial performance. This study provide some compelling evidence on shareholder wealth effects of membership in voluntary environmental programs (VEPs). Companies announcing membership in EPA's Climate Leaders, a program targeting reductions in greenhouse gas emissions, experience significantly negative abnormal stock returns. The price decline is larger in firms with poor corporate governance structures, and for high market-to book (i.e., high growth) firms. However, firms joining Ceres, a program involving more general environmental commitments, have insignificant announcement returns, as do portfolios of industry rivals. Overall, corporate commitments to reduce greenhouse gas emissions appear to conflict with firm value maximization. This has important implications for policies that rely on voluntary initiatives to address climate change. Further, this study find that firms facing climate-related shareholder resolutions or firms with weak corporate governance standards – giving managers the discretion to make such voluntary environmentally responsible investment decisions – are more likely to join Climate Leaders; decisions that may result in lower firm value.

(Dufwa & Hammarström, 2015) had done a study on finding out the nature and type of relationship which prevails with corporate sustainability and its financial implications in European basic material industry. In this study, negative relationship between sustainable performance, (using Thomson Reuters Asset4 ESG-index) and financial firm performance (return on assets and Tobin's q) for a panel data sample between 2003 and 2013 of 94 European basic materials firms is established. Inconclusive results were obtained when trying to find out whether linear or nonlinear relationship existed between the two variables.

(Eilola, 2017) had done an investigation to evaluate and find out the implications of corporate environmental performances and corporate financial performances. The study states that there have been numerous studies which have been conducted in the field which have identified the positive associations and relationships. This study is conducted as a qualitative study and however some quantitative analysis has also been included. The study is an evaluation of 5 major industries forest, paper and packaging industry, manufacturing of machinery and equipment industry. Data has been collected using CEP reports and corporate social responsibility reports which were used for analysis in this study. Data has been analyzed by using KLD framework and GRI reporting framework. The analysis has been done on 5 representative companies with content analysis method. Return on equity was taken as the financial indicator and performance analysis method. Pearson correlation coefficient was used for analyzing CEI & CEP. The study did not establish a positive link between CEI and CEP, and it was also found that these companies which did not follow environmental standards were not having huge impact on financial performances as well.

Hypothesis of the Study

Ho: Environment-related performance of company has no impact on its financial performance.

Ha: Environment-related performance of company has an impact on its financial performance.

Methodology

Secondary data is used in this research. To facilitate cross-sectional analysis, the average data for a two-year period from FY 2018-19 to FY 2019-20 was employed. To evaluate the data and study the impact of environment initiatives on financial performance, a number of statistical tools were utilized, including multiple regression, correlation, t-test, and F-test.

- **Sample:** The sample comprises of top 20 BSE listed companies according to market capitalization , non- financial enterprises; having easily available financial and sustainability data, and which issue business responsibility/ sustainability reports.

Sample companies

Reliance Industries Ltd.	Maruti Suzuki India Ltd.
Tata Consultancy Services Ltd.	Ultratech Cement Ltd.
Infosys Ltd.	Nestle India Ltd.
Hindustan Unilever Ltd.	Jsw Steel Ltd.
Wipro Ltd.	Sun Pharmaceutical Industries Ltd.
Bharti Airtel Ltd.	Adani Enterprises Ltd.
Asian Paints Ltd.	Tata Steel Ltd.
HCL TECHNOLOGIES LTD.	Adani Green Energy Ltd
ITC LTD.	Titan Company Limited
Larsen & Toubro Ltd.	Oil and Natural Gas Corporation Ltd

- **Variable Description:** Four proxies for financial performance, accounting-based indicators such as Return on Assets (ROA), Return on Equity (ROE), Profit before Tax (PBT), and a growth variable called Growth in Total Assets (GTA) have been utilised. Accounting-based measurements were chosen because, unlike market-based indicators such as stock returns and share prices, accounting data is not impacted by market views or speculation. Environmental Performance Ratings (ENV) have been utilised as indicators of a company's environmental performance.

The company's website, audited financial statements, yearly reports, and Moneycontrol.com were used to compile the financial data. The data for the environment ratings came from the "CSR Hub database," which claims to be the world's largest corporate sustainability ratings database and primarily follows GRI principles. We also took into account the size of the company because larger companies are more likely to be profitable because they have more resources to spend in productive businesses. As a proxy for firm size, we utilise the natural log of total assets.

Environment

Compliance with environmental regulations, leadership in addressing climate change, energy-efficient operations, renewable energy, natural resource conservation, pollution prevention programmes, and strategy toward sustainable development are all included in the Environment Component data.

Source: CSRHub (www.csrhub.com)

- **Research Model**

In order to study and assess the relationship between business sustainability and financial success, this study uses Multiple regression Analysis as a statistical method in IBM SPSS Statistics software to test one model.

Model

The first model aims to investigate the impact of a company's environment initiatives (independent variable - EI) on its financial performance (dependent variables – ROA, ROE, PBT, and GTA), while controlling for firm size (SIZE). The following four regression equations will be tested in this model:

$$ROA=c+b1.EI+b2.SIZE \quad (1)$$

$$ROE=c+b1.EI+b2.SIZE \quad (2)$$

$$PBT=c+b1.EI+b2.SIZE \quad (3)$$

$$GTA=c+b1.EI+b2.SIZE \quad (4)$$

Data Analysis and Results

Table 1 shows the descriptive statistics for the various variables employed in this investigation.

Table 1: Descriptive Statistics

Variables	N	Mean	Median	Std. Deviation
ROA (%)	20	16.876	11.12	10.45
ROE(%)	20	17.675	15.67	17.67
PBT (%)	20	7898.889	5678.66	7568.77
GTA(%)	20	14.565	15.776	10.56
EI(%)	20	57.7	58.77	7.67
Size (Natural Log of Total Assets)	20	13.232	13.345	0.765

Table 2: Results of the Model

Particulars	R	R^2	Adjusted R^2	F	Significance of F	Beta Coefficient for OSR (b_1)	p-value
ROA	.318	.167	.089	1.674	.193	-.416	.481
ROE	.368	.235	.265	3.421	.036	-.307	.320
PBT	.471	.441	.451	6.323	.006	20.584	.771
GTA	.216	.290	.082	1.657	.167	.656	.615

Table 2 shows that all p-values are greater than.05, and the majority of beta values (b1) are positive. Thus, Environment initiative Rating (EI) has favourable but negligible impact on financial performance of company. As a result, we accept H0 as the null hypothesis and reject Ha as the alternate hypothesis. Many previous studies have found that environment sustainability has no significant association with firm performance (Buys et al., 2011; Manescu, 2011), no significant impact in the short term (Adams et al., 2012), and that the varying effects of different dimensions of sustainability may negate and offset each other, resulting in no significant impact on financial performance (Galema et al., 2008; Statman & Glushkov, 2009; Brammer et al., 2006).The present study reveals insignificant positive association between environmental initiatives and growth of firm. This result is in conformity with Kapoor and Sandhu's findings (2010). This could be owing to the fact that, aside from the firm's environmental initiatives, its growth is influenced by other factors such as marketing strategy, price, and so on. For financial performance, the control variable (firm size) proves to be crucial. This outcome is in consonance with our anticipation and with those observed by Guindry and Patten (2010).

Discussion and Conclusion

A plausible explanation for environmental initiative may be that, most organizations now seem to show less focus of their corporate environmental initiatives. This is based on the argument that current market mechanisms do not seems to stimulate firms to engage in environmental initiatives that go beyond those mandated by law or that have a longer and more uncertain payoff. In other words, companies have difficulty seeing the financial benefits associated with attempting to realize competitive advantage through environmental innovations. The statistical findings show that corporate environmental sustainability has no substantial impact on financial performance as a whole. Furthermore, corporate sustainability has a positive impact on some financial performance measures (PBT and GTA), but has a negative impact on others (ROA and ROE).Companies must recognise that enhancing environmental sustainable performance is just as vital as enhancing financial performance. In order to secure its long-term viability, a corporation must consider the demands of future generations when conducting business.

References

1. Adams, M., Thornton, B., & Sepehri, M. (2012, April). The impact of the pursuit of sustainability on the financial performance of the firm. Journal of Sustainability and Green Business, 1. Retrieved from http://www.aabri.com/manuscripts/10706.pdf
2. Aggarwal, P. (2013). Impact of sustainability performance of company on its financial performance: A study of listed Indian companies. *Global Journal of Management and Business Research (C: Finance) Volume*, *13*.
3. Allouche, J., & Laroche, P. (2005). A meta-analytical investigation of the relationship between corporate social and financial performance.
4. Buys, P., Oberholzer, M., & Andrikopoulos, P. (2011). An investigation of the economic performance of sustainability reporting companies versus non-reporting companies: A South African perspective.JournalofSocialSciences,29(2),151- 158.
5. Cohen, M. A., Fenn, S., & Naimon, J. S. (1995). Environmental and financial performance: are they related? : Citeseer.
6. Dufwa, L., & Hammarström, M. (2015). Corporate Sustainability and the Financial Implications for the European Basic Materials Industry.
7. Eilola, M. (2017). The link between corporate environmental performance and corporate financial performance.
8. Fisher-Vanden, K., & Thorburn, K. S. (2011). Voluntary corporate environmental initiatives and shareholder wealth. *Journal of Environmental Economics and management, 62*(3), 430-445.
9. Galema, R., Plantinga, A., & Scholtens, B. (2008). The stocks at stake: Return and risk in socially responsible investment. Journal of Banking & Finance, 32(12), 2646-2654.
10. Guidry, R. P., & Patten, D. M. (2010). Market reactions to the first-time issuance of corporate sustainability reports: Evidence that quality matters. Sustainability Accounting, Management and Policy Journal, 1(1), 33-50.
11. Kapoor, S., & Sandhu, H. S. (2010). Does it pay to be socially responsible? An empirical examination of impact of corporate social responsibility on financial performance. Global Business Review, 11(2), 185-208.
12. Manescu, C. (2011). Stock returns in relation to environmental, social and governance performance: Mispricing or compensation for risk?. Sustainable development, 19(2),95-118.
13. Statman, M. D., & Glushkov. (2009). The wages of social responsibility. Financial Analysts Journal, 65, 33-46.