



Exploring Financial Health in India: Evaluating Risks for Sustainable Practices

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Abstract

Stakeholder theory is the foundation for environmental, social, and governance (ESG) factors, which are crucial for sustainable corporate operations. This study looks at the effects that various ESG risk levels have on Indian financial companies' financial performance. The Prowess IQ database provided the data for this investigation. The study found, in keeping with stakeholder theory, a substantial negative association between ESG risk and a company's return on equity and return on assets through the use of correlation analysis and linear regression. These results emphasise how crucial it is for businesses to concentrate on lowering ESG risks in order to increase profitability. This study fills a knowledge gap about the relationship between ESG characteristics and financial performance, particularly in the context of the Indian financial sector, due to the paucity of research in this field.

Keywords: ESG Risk, Financial companies, Banking, Banks performance

1. Introduction

Numerous academic studies have examined the connection between non-financial performance and financial success. Conventional management theories and neoclassical economics frequently place a premium on shareholder happiness over profit maximisation as a company's top priority (Eccles et al., 2014). According to this viewpoint, giving resources to other stakeholders could have a negative impact on the bottom line (Brown and Caylor, 2006). Nonetheless, not all companies place the same value on shareholders; some are aware of how their actions affect larger stakeholder groups (Friedman and Miles, 2002). The number of companies integrating ESG factors into their plans has significantly increased in the last several decades (Eccles et al., 2014). Evidence suggests that, in contrast to conventional wisdom, businesses can prosper by making constructive contributions to society (Famiyeh, 2017; Zhu et al., 2014). Governance, social responsibility, and environmental initiatives benefit a range of stakeholders and ultimately increase shareholder value (Porter and Kramer, 2011).

Businesses are putting more and more effort into ESG projects in an effort to restore their standing in the marketplace by adopting ethical business practices. According to some, accounting fraud and corporate scandals have a major role in the world's financial instability (Dah and Jizi, 2018). According to Brown and Caylor (2009), a company's ability to continue operating and generating a profit depends on having strong corporate governance. Furthermore, a company's social performance protects its stock value by acting as a buffer against unfavourable market reactions (Godfrey, 2005; Lee, 2016). According to Lee (2016), social efforts improve a company's reputation and brand image, which in turn leads to steady profitability and less fluctuating stock prices. Higher ESG investments might be



beneficial, but because they come with a price tag, shareholders might not be so keen. Withdrawals by investors may have a detrimental effect on a company's earnings and share value. Thus, the purpose of this study is to investigate how ESG risk affects financial organisations' performance in the Indian economy.

Section 2 of the study's structure consists of a review of the literature, while Section 3 contains the study's goals. Section 5 gives the findings and analysis, whereas Section 4 describes the database and technique in depth. The study is finally concluded in section 6.

2. Review of Literature

Sustainability report proponents think that businesses and stakeholders gain from promoting ESG transparency. According to Eccles and Saltzman (2011) and Krzus (2011), there is a connection between expanded sustainability reporting and better decision-making, higher transparency, strengthened financial stability, and enhanced social sustainability. It presents both financial and non-financial results, providing a complete picture of a business's potential for success (Jensen and Berg, 2012). ESG disclosure is crucial, according to recent studies, which also claim that it improves transparency by showing the relationships between ESG elements and financial performance. Steyn (2014) discovered that greater profitability and improved corporate performance are two benefits of sustainability reporting. Additionally, a company's reputation is enhanced and it gains a substantial competitive advantage through ESG disclosure (Brown et al., 2009). Compared to other industries, the financial sector is subject to more institutional pressure and laws on labour, community, and environmental issues despite being extensively regulated (Darnall and Carmin, 2005). Insurance sector laws primarily address financial risks and risk-adjusted financial capital provision in order to preserve industry stability. As a result, financial institutions have not been under as much pressure as many other industries to give sustainability a higher priority in their primary business operations, such as lending and investing. Nonetheless, studies show that financial services are gradually incorporating sustainability and environmental factors more and more (Scholtens, 2009). The size and profitability of financial organisations are positively correlated with environmental and sustainability reporting (Alberici and Querci, 2016; Chih et al., 2010).

A number of nations, such as Nigeria, Bangladesh, and Brazil, have passed legislation addressing the effects of the banking industry on the environment and sustainability. These rules presuppose a relationship between financial stability, sustainability, and the relationship between sustainability and financial success. Khattak (2021) discovered a significant association between the financial success of banks in Islamic nations and sustainable performance. But according to a meta-analysis by Wang et al. (2016) based on 42 studies with 119 effect sizes, industrialised countries had a larger correlation between CSR and financial success than developing economies since they had better developed institutional frameworks and market processes. This is in opposition to the results of Ghoual et al. (2017). A noteworthy meta-analysis by Friede et al. (2015) merged data from more than 2,200 research, and around 90% of them demonstrated a positive correlation between ESG and performance—a favourable influence that persisted over time. The "Shift of Focus" theory proposed by Becchetti et al. (2012) states that there is a limited association between financial performance and sustainability activities, indicating that management may utilise sustainability projects as a way to divert focus away from financial issues. According to this point of view, managers put short-term profits ahead of long-term goals, maybe cutting back on social expenditures during successful times and stepping up their visible social programs during lean financial times. A small association was also discovered by Goel and Thakor (2008), suggesting that managers may overinvest in sustainability projects in an attempt to enhance



their brand and get a competitive advantage. There is conflicting data in the literature about the connection between financial results and business sustainable performance. Thus, the purpose of this research is to investigate how corporate sustainable risk and financial performance in Indian financial organisations are related.

3. Objectives

1. The study aims to assess how the ESG risk score influences the return on assets (ROE).
2. The study aims to determine how the return on equity (ROA) and the ESG risk score relate to one another.

4. Data and Research Methodology

A sample of 57 financial sector businesses was the subject of the investigation. The financial performance of these companies was assessed using return on equity (ROE) and return on assets (ROA), two important accounting performance criteria. With CRISIL incorporation's official database, the ESG risk score—which serves as a stand-in for ESG risk—was acquired. Renowned for publishing ESG scores, CRISIL is a company that academics and industry professionals mostly rely on. The Centre for Monitoring Indian Economy Pvt. Ltd.'s Prowess IQ database provided the information needed to calculate the financial performance measures (CMIE).

The formula used to calculate the dependent variables is as follows:

$$ROA = \frac{\text{Net Profits}}{\text{Total Assets}} \quad (1)$$

$$ROE = \frac{\text{Net Profits}}{\text{Total Equity}} \quad (2)$$

The study employs correlation analysis and regression modeling to explore the relationship between the variables. The primary objective is to test the following model:

$$ROA_t = \alpha + \beta ESG\ risk_t \quad (3)$$

$$ROE_t = \alpha + \beta ESG\ risk_t \quad (4)$$

In these equations, ROA_t and ROE_t represent the return on assets and return on equity of firm *t* respectively. The parameter α represents the intercept, while β_1 indicates the slope coefficient, showing the effect of ESG risk ESG_t on financial performance. ESG_t stands for the ESG risk of firm *t*, and ϵ_t accounts for unexplained variability in financial performance for each firm. The study utilizes correlation analysis and regression modeling to determine the significance and direction of the relationship between ESG risk and financial metrics in the sampled financial companies.

5. Results and Analysis

Sixty-two firms were taken into consideration in the study's initial phase. Nevertheless, because of incomplete data, two businesses had to be left out of the research. Prior to using linear regression, it is essential to confirm that the data are normal. Thus, we evaluated the return on assets (ROA) and return



on equity (ROE) measures' normalcy and presence of non-normal behaviour at the beginning of the investigation. After that, we found and eliminated outliers, which led to the elimination of three further observations. After going through this process, the study's final sample size consisted of 57 cross-sectional units. A descriptive summary of the factors of interest within these chosen cross-sectional units is given in Table 1 of the study report.

Table 1. Descriptive Statistics

| | ROA | ROE |
|--------------------|---------|---------|
| Mean | -.8943 | 0.2757 |
| Median | -.8535 | .2889 |
| Variance | 0.271 | 0.012 |
| Standard Deviation | .52024 | 0.10565 |
| Minimum | -2.0820 | 0.03 |
| Maximum | 0.405 | 0.52 |
| Skewness | -.152 | -.108 |
| Kurtosis | .262 | -.619 |
| Observations | 57 | 57 |

The findings of the normality tests performed on the study's subject variables are shown in Table 2. Even after eliminating outliers, the results of the Shapiro-Wilk and Kolmogorov-Smirnov tests initially showed that the data was not regularly distributed. We employed square root transformation or log transformation to smooth the series for the dependent and independent variables in the research in order to solve this problem. After a reexamination, Table 2 shows that both tests' significance values are higher than 5%. The variables now behave normally as a result of the transformations, as shown by the failure of the normality tests to reject the null hypothesis.

Table 2. Tests of Normality

| Variables | Kolmogorov-Smirnov test | | | Shapiro-Wilk test | | |
|-----------|-------------------------|-------------------|--------------|-------------------|-------------------|--------------|
| | Statistic | Degree of freedom | Significance | Statistic | Degree of freedom | Significance |
| ROE | .089 | 57 | .200 | .982 | 57 | .561 |
| ROA | .065 | 57 | .200 | .991 | 57 | .945 |

The correlation between the independent and dependent variables is shown in Table 3. Our examination of the data from Indian financial institutions shows that there is a negative link between ESG risk and business performance, which is consistent with previous research in this area. In particular, Table 3 shows that ESG risk has association coefficients of -0.323 and -0.184 with ROA and ROE, respectively. These numbers imply that company performance as shown by ROA and ROE tends to decline as ESG risk rises. Stated differently, a larger ESG risk might potentially impair a company's future performance.

It's crucial to remember that correlation does not quantify the strength of the association between two variables; rather, it just shows the relationship between them. Linear regression analysis is necessary to ascertain the degree of the negative correlation and statistical significance of the link between ESG



risk and firm performance indicators. The results of this study will shed light on the extent and importance of the detrimental correlation between business performance and ESG risk.

Table 3. Correlation Matrix

| | | ESG risk rate | ROE | ROA |
|---------------|---------------------------------|---------------|---------|---------|
| ESG risk rate | Pearson Correlation Coefficient | 1 | -0.185 | -0.323* |
| | Significance | | .169 | 0.011 |
| ROE | Pearson Correlation Coefficient | -0.184 | 1 | 0.732** |
| | Significance | 0.169 | | 0.000 |
| ROA | Pearson Correlation Coefficient | -0.333* | 0.732** | 1 |
| | Significance | .011 | .000 | |

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Table 4 presents the linear regression model's coefficients, which shed light on and support the association between ESG risk and business performance indicators. There is a negative correlation between the variables, as shown by the negative beta coefficients in the table. The table indicates that a one percent variation in ESG risk causes an opposing change in ROE of 6.7 percent, and a comparable one percent variation in ESG risk causes an opposite change in ROA of 5.54 percent. The strength of this link is further explained by the standardised beta coefficient, which is the product of the beta coefficient and the ratio of the standard deviation of the dependent and independent variables. It's also critical to look at the significance levels of the model's beta coefficients. Notably, a strong correlation is shown by the statistical significance of the negative association between ESG risk and ROA at the one percent level. Despite being negative, the correlation between ESG risk and ROE is not statistically significant. This shows that even while ESG risk and ROE are negatively correlated, the relationship may not be substantial in this particular setting.



Table 4. Linear Regression Model

| ROE as dependent variable | | | | | |
|---------------------------|--------|----------------|-------------------|---------|--------------|
| | Beta | Standard Error | Standardized beta | t-value | Significance |
| Constant | 0.514 | 0.164 | | 3.124 | 0.003 |
| ESG risk rate | -0.067 | 0.049 | -0.185 | -1.393 | 0.169 |
| ROA as dependent variable | | | | | |
| Constant | 0.984 | 0.724 | | 1.359 | 0.180 |
| ESG risk rate | -.0554 | 0.215 | -0.333 | -2.619 | 0.011* |

Note: * implies 1% significance level.

6. Concluding Remarks

Over recent years, corporations have increasingly focused on adhering to ESG (Environmental, Social, and Governance) norms, driven by various factors such as regulatory requirements, social acceptance, reputation, and shareholder activism. The literature has extensively studied the different aspects of ESG activities and their impacts. However, there has been limited research in the literature focusing on the financial sector of the Indian economy. This study takes advantage of this research gap to explore the relationship between ESG risk in financial firms and their performance. The study utilizes ROA and ROE, to gauge financial performance. Data from the CRISIL incorporation database, a reliable source for ESG risk metrics, was used to evaluate the businesses' ESG risk. The study's linear regression analysis, which looked at 57 financial businesses as a sample, showed a substantial inverse association between a firm's return on assets and environmental, social, and governance (ESG) risk. Even if it was negative, the correlation between ESG risk and return on equity was not statistically significant.

This study holds practical implications, indicating that financial firms are not immune to ESG risk and should not overlook its importance. ESG factors play a significant role in shaping the financial performance of firms. The findings of this study provide fresh evidence and suggest that policymakers in financial companies should reconsider their policies from a sustainable perspective. Incorporating ESG factors into the firm's policies can contribute to long-term sustainability and enhanced financial performance.

References

- Alberici, A. and Querci, F. (2016), "The quality of disclosures on environmental policy: The profile of financial intermediaries", *Corporate Social Responsibility and Environmental Management*, Wiley Online Library, Vol. 23 No. 5, pp. 283–296.
- Becchetti, L., Ciciretti, R., Hasan, I. and Kobeissi, N. (2012), "Corporate social responsibility and shareholder's value", *Journal of Business Research*, Elsevier, Vol. 65 No. 11, pp. 1628–1635.
- Brown, D.L., Guidry, R.P. and Patten, D.M. (2009), "Sustainability reporting and perceptions of corporate reputation: An analysis using fortune", *Sustainability, Environmental Performance and Disclosures*, Emerald Group Publishing Limited.
- Brown, L.D. and Caylor, M.L. (2006), "Corporate governance and firm valuation", *Journal of Accounting and Public Policy*, Elsevier, Vol. 25 No. 4, pp. 409–434.



- Brown, L.D. and Caylor, M.L. (2009), “Corporate governance and firm operating performance”, *Review of Quantitative Finance and Accounting*, Springer, Vol. 32 No. 2, pp. 129–144.
- Chih, H.-L., Chih, H.-H. and Chen, T.-Y. (2010), “On the determinants of corporate social responsibility: International evidence on the financial industry”, *Journal of Business Ethics*, Springer, Vol. 93 No. 1, pp. 115–135.
- Dah, M.A. and Jizi, M.I. (2018), “Board independence and the efficacy of social reporting”, *Journal of International Accounting Research*, American Accounting Association, Vol. 17 No. 1, pp. 25–45.
- Darnall, N. and Carmin, J. (2005), “Greener and cleaner? The signaling accuracy of US voluntary environmental programs”, *Policy Sciences*, Springer, Vol. 38 No. 2, pp. 71–90.
- Eccles, R.G., Ioannou, I. and Serafeim, G. (2014), “The impact of corporate sustainability on organizational processes and performance”, *Management Science*, Informs, Vol. 60 No. 11, pp. 2835–2857.
- Eccles, R.G. and Saltzman, D. (2011), “Achieving sustainability through integrated reporting”, *Stanford Social Innovation Review*, Leland Stanford Jr. University Stanford, CA, USA, Vol. 9 No. 3, pp. 56–61.
- Famiyeh, S. (2017), “Corporate social responsibility and firm’s performance: empirical evidence”, *Social Responsibility Journal*, Emerald Publishing Limited.
- Friede, G., Busch, T. and Bassen, A. (2015), “ESG and financial performance: aggregated evidence from more than 2000 empirical studies”, *Journal of Sustainable Finance and Investment*, Vol. 5 No. 4, pp. 210–233.
- Friedman, A.L. and Miles, S. (2002), “Developing stakeholder theory”, *Journal of Management Studies*, Wiley Online Library, Vol. 39 No. 1, pp. 1–21.
- Ghoul, S. El, Guedhami, O. and Kim, Y. (2017), “Country-level institutions, firm value, and the role of corporate social responsibility initiatives”, *Journal of International Business Studies*, Springer, Vol. 48 No. 3, pp. 360–385.
- Godfrey, P.C. (2005), “The relationship between corporate philanthropy and shareholder wealth: A risk management perspective”, *Academy of Management Review*, Academy of Management Briarcliff Manor, NY 10510, Vol. 30 No. 4, pp. 777–798.
- Goel, A.M. and Thakor, A. V. (2008), “Overconfidence, CEO selection, and corporate governance”, *The Journal of Finance*, Wiley Online Library, Vol. 63 No. 6, pp. 2737–2784.
- Jensen, J.C. and Berg, N. (2012), “Determinants of traditional sustainability reporting versus integrated reporting. An institutionalist approach”, *Business Strategy and the Environment*, Wiley Online Library, Vol. 21 No. 5, pp. 299–316.
- Khattak, M.A. (2021), “Corporate Sustainability and Financial Performance of Banks in Muslim Economies: The Role of Institutions”, *Journal of Public Affairs*, Vol. 21 No. 1, available at:<https://doi.org/10.1002/pa.2156>.
- Krzus, M.P. (2011), “Integrated reporting: if not now, when”, *Zeitschrift Für Internationale Rechnungslegung*, Vol. 6 No. 6, pp. 271–276.



- Lee, M.-T. (2016), “Corporate social responsibility and stock price crash risk: Evidence from an Asian emerging market”, *Managerial Finance*, Emerald Group Publishing Limited.
- Porter, M.E. and Kramer, M.R. (2011), “The Big Idea: Creating Shared Value. How to reinvent capitalism—and unleash a wave of innovation and growth”, *Harvard Business Review*, Cambridge, Vol. 89 No. 1–2.
- Scholtens, B. (2009), “Corporate social responsibility in the international banking industry”, *Journal of Business Ethics*, Springer, Vol. 86 No. 2, pp. 159–175.
- Steyn, M. (2014), “Organisational benefits and implementation challenges of mandatory integrated reporting: Perspectives of senior executives at South African listed companies”, *Sustainability Accounting, Management and Policy Journal*, Emerald Group Publishing Limited.
- Wang, Q., Dou, J. and Jia, S. (2016), “A meta-analytic review of corporate social responsibility and corporate financial performance: The moderating effect of contextual factors”, *Business & Society*, SAGE Publications Sage CA: Los Angeles, CA, Vol. 55 No. 8, pp. 1083–1121.
- Zhu, Y., Sun, L.-Y. and Leung, A.S.M. (2014), “Corporate social responsibility, firm reputation, and firm performance: The role of ethical leadership”, *Asia Pacific Journal of Management*, Springer, Vol. 31 No. 4, pp. 925–947.
- Prakash, M., & Pabitha, P. (2020). A hybrid node classification mechanism for influential node prediction in Social Networks. *Intelligent Data Analysis*, 24(4), 847-871