Exploration of missing factors determining ESG disclosure rating

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1. Introduction

There has been a few research on the evaluation of ESG performance of Indian corporate sector despite their high global competitiveness. In general, ESG is highly incorporated in developed countries that build economic growth; it is less of concern in the developing countries. Accordingly, investigating Indian top listed companies. There are two purposes of this study; first is to examine Indian companies if ESG disclosure is determined in terms of Financial Performance. A few of empirical studies have analyzed the positive link between ESG disclosure and financial performance (Moskowitz et al., 1972; Allouche et al., 2005; Beltrratti, 2005). Previously (last conference), we tried to carry out the similar analysis on the case study of Top 100 Indian companies with the negative conclusion.

The tentative results are considered with additional subsequent analysis. The second is to investigate the missing factors which could have affect on the above relationship. Factors such as industry type (Giannarakis et al. 2014), ownership structure (Owusu-Ansah 1998), government policy (Eccles et al. 2014), supply chain (Whitelock 2019;), competitive pressure (Milgrom 1986; Schramde 2016) have been examined. We investigate other two factors, emission reduction (ER) and renewable energy consumption (REC), which show outperformed ESG attitude.

2. Methodology and Data

The methodologies used is three step analysis, combining database analysis and additional document survey analysis and re-analyze the conjunct data analysis. First, (standard data base regression analysis), we regressed the ESG disclosure rating by return on equity (ROE), quick ratio (QR), debt-equity ratio (DER), growth rate (GR) and volatility for 47 top listed companies. The regression model is too naïve, as there are not so many samples compared to many factors. So, need to analyze the residuals of the first step analysis. So, the remaining part of the unexplained rating should be explained by the additional information from the corporate document survey analysis. The corporate document survey analysis means that constructing the propensity to adopt to ESG decisions of every company. So, we try to build up these data by ourself. In other words, only making the estimates and not the real propensity. The third step analysis is the quantitative analysis of unexplained factors, which is contingency table analysis.

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The paper examines the top 100 companies (Nifty 100 ESG Sector) listed on India's National Stock Exchange (NSE) for the period of (2017-2021). According to the standard criterion, 47 companies are chosen excluding financial service sector (as financial performance of the financial companies are different from other companies) similar to other empirical studies like Sharma et al. (2020). The financial data are extracted from companies' self-report and SPEEDA database. ESG scores are used from S&P Global.

Emission Reduction (ER) and energy control measures (REC) of the companies are extracted from companies' sustainability reports.

The examination of indicated factors is still open such as domestically or internationally active companies, advancement of country which were commented in the last conference by the chairperson, Dr. Mitani).

3. Results

As, we built two assumptions; first, the greater the profitability of the firm the greater will be the disclosure. Second, the efforts of the companies in regard to the climate policies (i.e., emission control and usage of renewable energy) will determine the disclosure attitude. The result shows the most probable factors and showed the improved performance. Some possible factors are analyzed as the missing factors, which are emission reduction (ER) and renewable energy consumption (REC).

4. Conclusion

The disclosure is irrelevant with financial performance but the one with ESG attitude shows apparent linkage. As, this decision of ER and REC is independent of financial performance. These are other kind of management or decisions of the companies related to these factors. Generally, these two factors are manageable through companies' own decision making. So, their rating is on their decision not on the performance. So, there is a room for further discussion of improving rating for these companies.

The ER and REC can be considered as the indicators of amplitude of ESG performance of a company. Therefore, these factors may have been chosen as missing factors, when the focus on particular factors of management resources spent for ESG activities other than financial activities. This is because ESG investment activities cannot be measured by the financial performance measures and they are independent with each other. Considering additional factors indifference of financial factors such as ER and REC can contribute to ESG rating.

Reference

Schramade, W. (2016), "Integrating ESG into valuation models and investment decisions: the value-driver adjustment approach." *Journal of Sustainable Finance & Investment*, 6(2), 95-111.