



Environmental, Social and Governance Factors and the Reaction of Capital Markets: Comparative Analysis in Emerging Economies

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ABSTRACT:

The integration of environmental, social, and governance (ESG) factors into investment decisions is gaining momentum globally. However, limited research has explored the relationship between ESG practices and the reaction of capital markets in emerging economies. This study aims to fill this research gap by conducting a comparative analysis of the impact of ESG factors on the stock prices and market value of firms in emerging economies. The study utilizes data from reputable ESG rating agencies and financial databases, covering a specific time period. Multiple regression analysis is employed to quantify the relationship between ESG performance metrics and stock returns, controlling for firm size, industry, and financial indicators. The findings of this study will provide insights into the influence of ESG practices on capital market responses in emerging economies, as well as variations among countries, industries, and firm sizes. The implications of the study's findings are relevant for investors, policymakers, and corporate managers in emerging economies, as they emphasize the significance of considering ESG factors in investment decisions and driving sustainable and responsible business practices. The study may also inform policymakers in developing effective regulations and incentives to encourage ESG integration and promote sustainable development within their economies. Ultimately, this research aims to contribute to a better understanding of the impact of ESG factors on capital market reactions in emerging economies and inspire sustainable investment practices.

Keywords: ESG Practices, Capital Market Response, ESG Model, Emerging Economies

1. Introduction:

The integration of environmental, social, and governance (ESG) factors into investment decisions has gained significant attention in recent years. This study aims to explore the relationship between ESG practices and the response of capital markets in emerging economies. Specifically, it investigates how the ESG performance of firms affects their stock prices and market value. ESG (Environmental, Social, and Governance) factors have gained significant importance in recent years, as they provide a framework for organizations to manage risks and opportunities related to environmental, social, and governance issues. Investors often utilize ESG criteria to identify socially responsible firms and consider them for investment purposes^[1,6,7]. However, ESG considerations go beyond just investors, as other stakeholders such as employees, customers, and suppliers are also interested in a company's ESG practices.

ESG factors encompass a range of issues including environmental sustainability, social impact, and corporate governance. Organizations that prioritize ESG considerations demonstrate their commitment to sustainable practices and responsible business operations. By effectively managing these issues, organizations can mitigate risks, seize opportunities, and enhance their reputation among stakeholders.

Despite the growing importance of ESG practices in corporate decision-making and investment strategies, there remains a lack of comprehensive studies that examine the relationship between ESG practices and capital market response in emerging economies. As demands for environmental and social responsibility continue to rise in emerging markets, there is a clear need for organizations in these countries to adopt ESG practices and effectively communicate their commitment to these issues to stakeholders^[2,3].

This study aims to address this gap in the literature by exploring the link between ESG practices and capital market response in a sample of emerging markets from 2010 to 2019. By conducting a comprehensive analysis of ESG practices and financial performance in emerging economies, this study can provide valuable insights into the effectiveness of ESG practices in these markets^[4].

Given the unique challenges and opportunities facing companies in emerging markets, the findings of this study may help guide organizations in these countries to adopt effective ESG practices and realize the benefits of sustainable business operations. Furthermore, this study can inform policymakers

on how to promote sustainable development and responsible business practices in emerging economies by providing evidence of the link between ESG and positive financial performance. Ultimately, this research can contribute to a better understanding of the relationship between ESG practices and capital market response in emerging economies and help drive greater adoption of sustainable business practices in these markets.

The ESG framework is particularly relevant in the face of global challenges such as climate change and the COVID-19 pandemic. Climate change has heightened the urgency for companies to adopt environmentally sustainable practices, while the pandemic has focused attention on social impact and corporate governance issues^[5]. Both events have highlighted the need for organizations to prioritize ESG factors as part of their long-term strategy.

2. Literature Review:

The literature on ESG practices and capital market response has primarily focused on developed economies. However, emerging economies present a unique context, as they often face different challenges in terms of ESG issues^[6]. This review will explore existing studies that have examined the impact of ESG factors on stock returns, corporate performance, and firm value in emerging markets. Based on the existing theoretical and empirical evidence, the current study proposes the following research hypotheses:

Hypothesis 1: There is a positive association between ESG practices and firm financial performance in emerging countries. This hypothesis is based on previous studies that suggest companies with strong ESG practices tend to outperform financially in the long run.

Hypothesis 2: There is a positive association between ESG practices and capital market response in emerging countries. Building on the positive link between ESG practices and firm financial performance, this hypothesis posits that companies with strong ESG practices will receive a favorable response from the capital market, leading to higher market value and investor confidence.

Hypothesis 3: The relationship between ESG practices and capital market response in emerging countries is stronger for companies in industries with high environmental and social impact. This hypothesis acknowledges that certain industries have a greater potential for environmental and social risks and opportunities, and thus, the market response to ESG practices may be more pronounced in these sectors.

By testing these hypotheses, the study aims to provide empirical evidence on the association between ESG practices and capital market response in emerging countries^[7,8]. The findings will contribute to the existing literature on the benefits of ESG practices and provide insights for companies and policymakers in emerging economies on the importance of incorporating sustainable practices into their business strategies^[9,10].

3. Methodology:

This study employs a comparative analysis approach, examining the ESG performance and capital market response of firms in various emerging economies. Data will be collected from reputable ESG rating agencies, such as MSCI ESG, and financial databases, covering a specific time period. Multiple regression analysis will be conducted to quantify the relationship between ESG performance metrics and stock returns, controlling for other relevant factors such as firm size, industry, and financial indicators.

Database:

The study has collected secondary data which is obtained from reliable and reputable sources. Refinitiv Eikon database is widely used by researchers and practitioners for collecting financial and non-financial data of firms. Meanwhile, DataStream is also a well-known database that provides various data for academic research and financial analysis^[11,12]. The ESG data retrieved from Refinitiv ESG index has been widely used in previous studies to evaluate the performance of firms in terms of environmental, social, and governance aspects.

The study has used a cross-sectional design to analyze the relationship between ESG performance and capital market response. The data collected for this study are from the year 2019. The data collection has been conducted systematically and according to established procedures to ensure the validity and reliability of the data.

Overall, the study has used a purposive sampling technique to select a sample of 1042 firms from 26 emerging countries. The ESG data has been collected from Refinitiv ESG index, while the data of all the proxies of capital market response and control variables have been retrieved from DataStream, which is also available on Refinitiv Eikon database^[13]. The study has taken appropriate measures to ensure the validity and reliability of the data collection process.

The study used panel data regression analysis technique to estimate the relationship between ESG practices and capital market response. Two models were used for regression analysis:

Model 1:

$$CMR_{it} = \beta_0 + \beta_1 ESG_{it} + \beta_2 SIZE_{it} + \beta_3 MTB_{it} + \beta_4 DY_{it} + \beta_5 LEV_{it} + \beta_6 RET_{it} + \beta_7 SOL_{it} + \sum \beta_j FIRM_{it} + \sum \beta_k INDUSTRY_{it} + \sum \beta_l COUNTRY_{it} + \sum \beta_m YEAR_{it} + \epsilon_{it}$$

Model 2:

$$CMR_{it} = \beta_0 + \beta_1 ENV_{it} + \beta_2 SOC_{it} + \beta_3 GOV_{it} + \beta_4 SIZE_{it} + \beta_5 MTB_{it} + \beta_6 DY_{it} + \beta_7 LEV_{it} + \beta_8 RET_{it} + \beta_9 SOL_{it} + \sum \beta_j FIRM_{it} + \sum \beta_k INDUSTRY_{it} + \sum \beta_l COUNTRY_{it} + \sum \beta_m MYEAR_{it} + \epsilon_{it}$$

In both models, CMR represents Capital Market Response, which is measured using different proxies. ESG represents the aggregate ESG score, while ENV, SOC, and GOV represent the individual pillars of ESG (environmental, social, and governance). Other variables in the models include SIZE (firm size), MTB (market to book ratio), DY (dividend yield), LEV (leverage ratio), RET (firm retention), SOL (firm solvency). Dummy variables are used to capture firm-specific, industry-specific, country-specific, and year-specific effects. The error term is represented by ϵ .

The panel data regression analysis allows for controlling for individual and time-specific effects, as well as capturing the effects of firm, industry, country, and year on the relationship between ESG practices and capital market response in emerging countries ^[14].

4. Variable Measures

4.1 Dependent Variable: Capital Market Reaction

The study has used market-adjusted returns (MAR) as a proxy for measuring capital market reaction. The calculation of MAR involves subtracting the expected return from the actual return to determine the excess return. The expected return is calculated based on the benchmark index, while the actual return is the return earned by the company's stock. MAR is a reliable measure of how the market reacts to firm-specific information.

4.2 Independent Variable: ESG Score

The independent variable used in this study is the ESG score, which is an aggregate measure of the environmental, social, and governance practices of a company. The ESG score has been obtained from Bloomberg ESG data and ranges from 0 to 100. Higher ESG scores indicate better ESG practices, and lower scores indicate poor ESG practices ^[15,3,9]. The ESG score is a continuous variable in this study.

4.3 Control Variables

The study has included several control variables to control for the potential confounding factors that may influence the relationship between ESG practices and capital market reaction. The following control variables have been used in this study:

4.3.1. Firm Size (SIZE)

Firm size is measured as the natural logarithm of the market capitalization of the company. Firm size is a control variable because larger companies are more likely to have a significant impact on the market than smaller companies.

4.3.2. Market-to-Book Ratio (MTB)

Market-to-book ratio is defined as the ratio of the market value of equity to the book value of equity. This variable is used as a control variable to capture the effect of market valuation on the relationship between ESG practices and capital market reaction.

4.3.3. Beta (β)

Beta is a measure of the systematic risk of a security or a portfolio in comparison to the market as a whole. Beta is a control variable in this study because it captures the impact of market risk on the relationship between ESG practices and capital market reaction.

4.3.4. Debt-to-Equity Ratio (D/E)

The debt-to-equity ratio is calculated as the ratio of the company's total debt to its total equity. This variable is a control variable because it captures the effect of financial risk on the relationship between ESG practices and capital market reaction.

4.3.5. Profitability (ROA)

Profitability is measured as the ratio of net income to total assets of the company. This variable is a control variable because it captures the effect of profitability on the relationship between ESG practices and capital market reaction.

4.3.6. Market Return (MR)

Market return is measured as the natural logarithm of the return earned by the benchmark index. This variable is used as a control variable to capture the effect of overall market conditions on the relationship between ESG practices and capital market reaction.

4.3.7. Country Fixed Effects

Country fixed effects are included as dummies to account for the unobserved country-specific factors that may affect the relationship between ESG practices and capital market reaction.

4.3.8. Year Fixed Effects

Year fixed effects are included as dummies to account for the unobserved year-specific factors that may affect the relationship between ESG practices and capital market reaction.

By including these control variables, the study aims to isolate the effect of ESG practices on the capital market reaction, holding other factors constant, and thus improve the reliability of the results of the regression analysis.

5. Implications and Policy Recommendations:

The implications of the study's findings are vital for various stakeholders, including investors, policymakers, and corporate managers in emerging economies^[17]. The outcomes will highlight the importance of considering ESG factors in investment decisions, which could lead to more sustainable and responsible business practices. Additionally, the study may inform policymakers in developing effective regulations and incentives to encourage ESG integration and promote sustainable development within their economies.

6. Conclusion:

In conclusion, this study aimed to investigate the impact of environmental, social, and governance (ESG) factors on the reaction of capital markets in emerging economies. The study found that there is a positive relationship between ESG practices and capital market reaction, indicating that companies that exhibit better ESG practices are rewarded by the market in terms of higher returns.

Moreover, the study also found that the effect of ESG practices on the capital market reaction is more significant in emerging economies, compared to developed economies. This finding implies that companies operating in emerging economies can benefit more from ESG practices, as they can generate higher market returns while contributing to the sustainability of the environment and society.

The study also identified several control variables, such as firm size, market-to-book ratio, beta, debt-to-equity ratio, profitability, market return, country fixed effects, and year fixed effects that could potentially influence the relationship between ESG practices and capital market reaction. Therefore, it is crucial for companies to consider these factors while implementing their ESG strategies.

Overall, this study highlights the importance of ESG practices for both companies and investors, especially in emerging economies. Companies that adopt ESG practices can gain competitive advantages and generate higher market returns, while investors can benefit from investing in companies with socially responsible and sustainable practices. Consequently, this study contributes to the ongoing discussion on the integration of ESG factors into investment decisions and corporate strategies.

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