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The Impact of ESG Ratings on Stock Price and Volatility: Evidence from LQ45, FTSE KLCI, and FTSE STI

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Abstract: This study examines the impact of environmental, social, and governance (ESG) performance on stock returns and volatility in Southeast Asia, focusing on the LQ45 (Indonesia), FTSE KLCI (Malaysia), and FTSE STI (Singapore) indices from 2010 to 2022. Using composite ESG scores and individual E, S, and G scores, the research evaluates corporate sustainability performance and employs regression models to analyze their relationships with stock returns and volatility. The findings indicate that a higher combined ESG score is generally associated with lower stock returns and reduced volatility across the region. Among the individual ESG components, both environmental (E) and social (S) scores negatively impact stock returns, while the environmental (E) score also significantly reduces stock volatility. Governance (G) scores, however, show no significant effect on either returns or volatility. The study further explores how firm size and borrowing levels influence these relationships. For large firms, a higher ESG score boosts stock returns but lowers volatility. In contrast, smaller firms experience declines in both returns and volatility with increased ESG performance. When considering borrowing levels, firms with low debt benefit from higher ESG scores, which positively affect returns and modestly reduce volatility. Conversely, highly leveraged firms see decreased returns and increased volatility with higher ESG scores. These results underscore the nuanced relationship between ESG performance and financial outcomes in Southeast Asia, highlighting the importance of firm-specific characteristics. The study provides valuable insights for investors and corporate managers navigating the growing emphasis on sustainability in these emerging markets.

Keyword: Environmental, Social, and Governance (ESG) Score, Stock Returns, Stock Volatility, Panel Data Regression.

INTRODUCTION

Introduction to ESG Investing

The inclusion of Environmental, Social, and Governance (ESG) factors in investment decisions has gained considerable momentum in recent years, reflecting a broader trend towards sustainable and responsible investing. ESG ratings, which evaluate a company's performance

in these three areas, are increasingly seen as crucial indicators of long-term sustainability and effective risk management (Aydoğmuş, Gülay, and Ergun, 2022). These ratings assess how well companies handle environmental impacts, social responsibilities, and governance practices, thereby influencing investor behavior and financial market dynamics (Avramov et al., 2021). Investors are becoming more cognizant of the risks and opportunities associated with ESG issues. Companies excelling in ESG criteria are often viewed as better equipped to handle regulatory changes, reputational risks, and operational challenges (Deloitte, 2024). Consequently, ESG ratings can affect a company's stock price, as investors might favor firms with strong ESG performance, anticipating lower risks and more stable returns. In contrast, companies with poor ESG ratings may be perceived as higher risk, leading to reduced investor confidence and potentially increased stock price volatility (Engelhardt, Ekkenga, and Posch, 2021).

ESG in Southeast Asia: A Region of Growth

The increasing focus on ESG (Environmental, Social, and Governance) factors in Southeast Asia is driven by heightened regulatory pressures, evolving consumer preferences, and a greater emphasis on corporate transparency and accountability (Yin, Li, and Su, 2023). Investors increasingly seek to associate their portfolios with their principles and promote businesses that benefit society and the environment. This trend is particularly relevant in emerging markets like Indonesia, Malaysia, and Singapore, where sustainable development is crucial for long-term economic growth and stability. The significance of ESG ratings has grown beyond their role as mere measures of sustainability practices to become a crucial element of investment strategies. Henisz, Koller, and Nuttall (2019) argue that ESG ratings capture a company's dedication to environmental care, social responsibility, and strong governance. These factors, as highlighted by Gibson, Brandon, Krueger, and Schmidt (2021), play a crucial role in shaping investor sentiment and influencing their decision-making processes. Companies with high ESG ratings are often perceived as more resilient and better at managing long-term risks, potentially leading to higher stock returns and lower volatility. In contrast, companies with low ESG ratings may face increased scrutiny from investors, regulatory bodies, and the public, which could negatively affect their stock performance (La Torre et al., 2020).

Green Economy Performance in Southeast Asia

Recent data indicates that sustainable funds in Southeast Asia have demonstrated strong performance and attracted increased capital inflows. In 2023, net inflows into ESG funds in Southeast Asia reached US$324.7 million, marking an 11.2% increase from US$291.9 million in 2022. This trend contrasts with the global pattern, where sustainable fund inflows declined by 60.9% from 2022 to 2023. Southeast Asian ESG funds averaged a full-year return of 4.8% in 2023, a significant reversal from a -20.4% return in 2022. In comparison, non-ESG funds in the region recorded a 3.1% return for 2023, up from -12.4% in 2022 (Morningstar, 2021). This trend underscores the growing appeal of sustainable investing in the region, driven by both enhanced financial performance and enhanced interest among investors in ESG principles. The data reflects a strong regional commitment to sustainable finance despite global challenges.

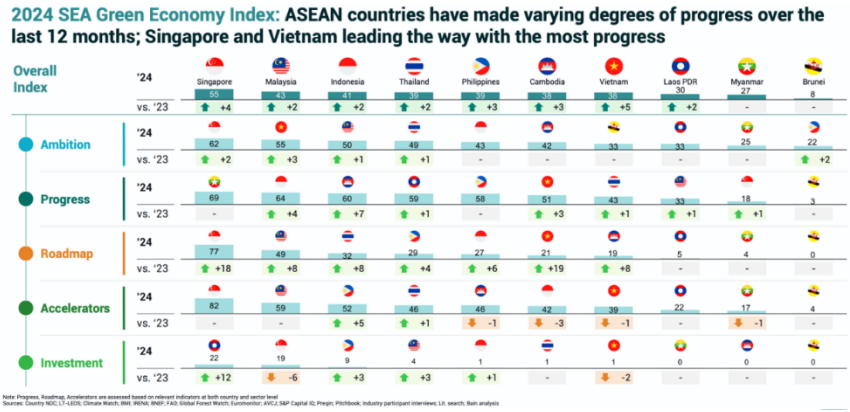

Figure 1.1 SEA Green Economy Index
Source: Bain & Company (2024)

The figure above shows the 2024 SEA Green Economy Index, highlighting the varying degrees of progress among ASEAN countries in their green economy efforts. This index is composed of several sub-indices, including Ambition, Progress, Roadmap, Accelerators, and Investment. Singapore followed by Malaysia and Indonesia are leading in terms of overall progress, with Singapore scoring the highest overall and significant improvements in multiple categories. The increasing focus on Environmental, Social, and Governance (ESG) factors in Southeast Asia aligns closely with the progress depicted in the SEA Green Economy Index (Bain & Company et al., 2024).

Singapore, which leads in overall progress, exemplifies strong ESG integration through its regulatory frameworks, such as the Singapore Green Plan 2030, which align with its high scores in the Roadmap and Accelerators sub-indices. Similarly, investor sentiment and ESG ratings are increasingly shaping investment strategies, as seen in the index's Investment sub-index. Laos PDR's improvement in investment scores reflects rising capital inflows into ESG-compliant initiatives, mirroring the growing investments in sustainable funds across the region. The strong performance of ESG funds in Southeast Asia, particularly in countries like Myanmar, correlates with high Progress scores in the Green Economy Index, further enhancing their overall index positions. Moreover, the impact of ESG ratings on key stock indices, such as Indonesia's LQ45, Malaysia's FTSE KLCI, and Singapore's FTSE STI, highlights the effectiveness of ESG practices in driving economic performance and investment strategies.

The stock indices LQ45, FTSE KLCI, and FTSE STI, which are specific to Indonesia, Malaysia, and Singapore, respectively, are crucial for understanding the economic landscape and investment strategies of these countries. The LQ45 Index in Indonesia includes companies based on liquidity and market capitalization, ensuring it reflects the most liquid and largest companies on the Indonesia Stock Exchange. The FTSE Bursa Malaysia KLCI consists of the 30 largest companies by full market capitalization, representing the most significant players in the Malaysian market. In Singapore, the FTSE Straits Times Index (STI) includes companies listed on the SGX Mainboard and SGX Catalist, with eligibility based on market capitalization, free float, and liquidity. These indices not only track the performance of the largest and most liquid companies in their respective markets but also serve as benchmarks for investors to gauge market trends and make informed investment decisions.

Given their significance in representing the economic and ESG landscapes of their respective countries, I have chosen the LQ45, FTSE KLCI, and FTSE STI indices as the focus of my research. These indices provide a comprehensive view of how leading companies in Indonesia, Malaysia, and Singapore are integrating ESG practices and contributing to the overall progress toward a green economy, as reflected in the SEA Green Economy Index.

METHOD

In this final project, started by identifying the business problems which examines the influence of ESG ratings on stock prices and stock price volatility in Southeast Asia. After defining the issue, research questions are developed to guide the study. A literature review is conducted to provide theoretical insights, and empirical evidence, and act as a basis to construct the conceptual framework.

Furthermore, this study adopts a quantitative research methodology and utilizes secondary data from reliable financial databases. To ensure the robustness of this study, control variables are also incorporated. Descriptive statistics are used to explore and summarize the characteristics of the dataset. Moreover, to analyze the relationship between variables, this study employs a panel data regression, a precisely fixed effect model that is suitable for panel data and accounts for unobservable, time-invariant characteristics that may affect the dependent variables.

The analysis is conducted using STATA 17 software, which provides advanced tools for fixed effects regression and panel data analysis. The results of the regression analysis are interpreted to determine the significance and magnitude of the impact of ESG ratings on stock prices and stock price volatility. These findings form the foundation for practical recommendations to policymakers, investors, and also corporate management while providing insights for future research.

The research design is shown in Figure.

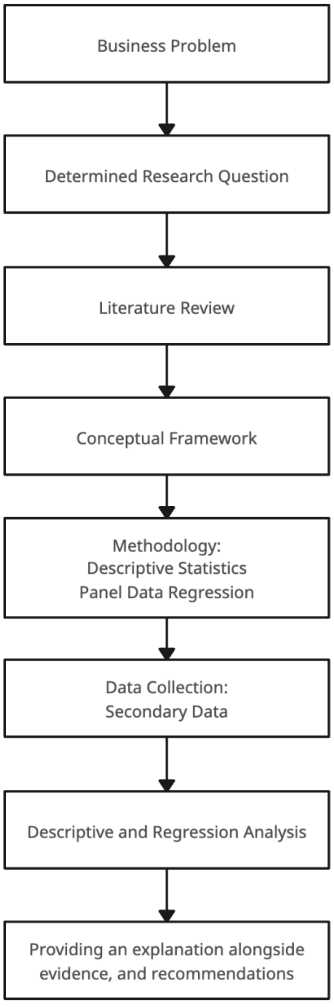

Figure Research Design

RESULTS AND DISCUSSION

Descriptive Analysis

Table Descriptive Statistics.

Variable	Mean	Std. Dev.	Min	Max	Observations
Return	0.10418	0.3477326	-0.0335385	3.758	N = 845
Volatility	0.263531	0.1811268	-0.1336923	0.997	N = 845
Lnesgccore	3.843589	0.5623786	1.406	4.496	N = 845
Lnesgecore	3.630399	0.5903949	0.8386	5.552	N = 845
Lnesgscore	3.853804	0.6075487	1.406	4.576	N = 845
Lnesggcore	3.86505	0.6223524	1.151	4.578	N = 845
Lntotalasset	16.26941	1.501956	12.266	22.753	N = 845
Lnrevenue	14.95795	0.9598433	12.309	23.399	N = 845
Lnmarketcap	15.79525	0.9438168	11.752	18.073	N = 845
ROE	0.1868	0.3307519	-0.339	3.699	N = 845
Leverage	0.163172	1.429815	0.001	5.17	N = 845
Market-to-Book	3.86915	10.52055	-0.52	157.39	N = 845
I/A	0.048302	0.0568285	-0.2321	0.1987	N = 845

Source: Processed by Author

The average stock return is 10.41% with a standard deviation of 34.77%, ranging from -79.3% to 375.8%. Returns show less variability between firms (std. dev. of 10.99%) compared to within firms over time (std. dev. of 33.02%). Volatility averages 26.35% with an overall standard deviation of 11.81%, ranging from 4.3% to 99.7%. Variability is lower between `firms (std. dev. of 9.16%) than within firms (std. dev. of 7.53%).

The natural logarithm of ESG scores (lnesgc) averages 3.8436 (std. dev. 0.5024), corresponding to an average ESG score of 46.7, ranging from 4.1 to 90.1. Between-firm variation (std. dev. of 0.3922) is less than within-firm variability (std. dev. of 0.3174). The natural logarithm of total assets (lntotat) averages 16.2691 (std. dev. 1.5020), equating to an average asset value of $11.45 billion, with a range from $211 million to $88 billion. Between-firm variation (std. dev. of 1.4527) is slightly higher than within-firm variation (std. dev. of 0.4189).

Regression Model

In this research, two distinct regression models will be employed, each incorporating control variables such as total assets, revenue, market capitalization, return on equity (ROE), leverage ratio, market-to-book ratio, and investment-to-assets ratio (I/A). The first regression model explores the relationship between the ESG combined score (sourced from Refinitiv) and annual stock return. The formulas for these additional models are as follows:

$$Y_{Return} = a + \beta_1 LnESGC_{i,t} + \beta_{2-8} Control + \varepsilon_{i,t} \quad (1)$$
$$Y_{Return} = a + \beta_1 LnESGE_{i,t} + \beta_{2-8} Control + \varepsilon_{i,t} \quad (2)$$
$$Y_{Return} = a + \beta_1 LnESGS_{i,t} + \beta_{2-8} Control + \varepsilon_{i,t} \quad (3)$$
$$Y_{Return} = a + \beta_1 LnESGG_{i,t} + \beta_{2-8} Control + \varepsilon_{i,t} \quad (4)$$

Where i = 65 firms and t = 2010, 2011, 2012, …, 2022

The second regression model will examine the relationship between the ESG combined score and annualized stock volatility. This model will also utilize multiple linear regression for its analysis. The formula for the second regression model is as follows:

$$Y_{Voltility} = a + \beta_1 LnESGC_{i,t} + \beta_{2-8} Control + \varepsilon_{i,t} \quad (1)$$
$$Y_{Return} = a + \beta_1 LnESGE_{i,t} + \beta_{2-8} Control + \varepsilon_{i,t} \quad (2)$$

$$Y_{Return} = a + \beta_1 LnESGS_{i,t} + \beta_{2-8} Control + \varepsilon_{i,t} \quad (3)$$
$$Y_{Return} = a + \beta_1 LnESGG_{i,t} + \beta_{2-8} Control + \varepsilon_{i,t} \quad (4)$$

Where i = 65 firms and t = 2010, 2011, 2012, …, 2022

To ensure the robustness of the main model, additional regression analyses will be conducted by separately applying the individual ESG scores (Environmental, Social, and Governance) for each stock return and volatility. These robustness tests will help to determine if the relationships observed with the ESG combined score hold when considering each ESG component separately.

Data Analysis Regression Model for Return

Classic Assumption

Table Classic Assumption Test for ESG Combined Model

Variable	Normality test	Multicollinearity test
	Prob>chi2	VIF
Return	0.0000	-
ESG Combined Score	0.0000	1.07
Total Asset	0.0000	2.49
Revenue	0.0000	1.37
Market Cap	0.0000	1.89
ROE	0.0000	3.35
Leverage Ratio	0.0000	1.12
Market-to-Book	0.0000	3.40
I/A	0.0000	1.43
Breusch-Pagan / Cook-Weisberg test for heterokedasticity	Prob>chi2 = 0.0000	
Woolridge test for autocorrelation	0.0000	

The results of the classic assumption tests for the regression model with the ESG combined score as an independent variable and stock return indicate the following:

The regression model with the ESG combined score as an independent variable and stock return was evaluated for key assumptions. Normality tests revealed that none of the variables are normally distributed, as indicated by Prob>chi2 values below 0.05, a limitation attributed to data constraints. Multicollinearity was not a concern, as all Variance Inflation Factor (VIF) values were below 10. However, the heteroscedasticity test showed a Prob > chi2 value of 0.000, which is below the 0.05 threshold, indicating the presence of heteroscedasticity and necessitating the use of robust standard errors. Additionally, autocorrelation was detected, as evidenced by the significant p-value (Prob > F), suggesting that the regression model exhibits autocorrelation.

Selection of Estimation Model for Stock Return

Chow Test

Table Chow Test for Return

	F-test	Prob > F
ESG Combined Score	2.11	0.0000
E Score	2.11	0.0000
S Score	2.09	0.0000
G Score	2.02	0.0000

For selecting between Ordinary Least Squares (OLS) and Fixed Effects Models (FEM) versus Pooled Least Squares (PLS) and Common Effects Models (CEM), the Chow Test is used. The key value to consider is the p-value (Prob > F). If this p-value is less than the significance level (alpha), the null hypothesis (H0) is rejected in favor of the alternative hypothesis (H1), indicating that FEM is preferred over CEM. In the current analysis, a Prob > F value of 0.0000, which is less than 5%, leads to rejecting H0 in favor of H1, meaning that FEM is more suitable than CEM.

Hausman Test

Table Hausman Test for Return

	Prob > chi2
ESG Combined Score	0.0000
E Score	0.0000
S Score	0.0000
G Score	0.0000

In the Hausman test for selecting between Random Effects Models (REM) and Fixed Effects Models (FEM), the crucial value to consider is the Prob > chi2. If this p-value is less than the significance level (alpha), it implies rejecting the null hypothesis (H0) in favor of the alternative hypothesis (H1), indicating that FEM is more suitable than REM. In the current analysis, a Prob > chi2 value of 0.0000, which is below the 5% threshold, leads to rejecting H0 in favor of H1, suggesting that FEM is preferred over REM.

Analysis and Interpretation

Table 4.6 ESG Score and Stock Return

Variable	(1)	(2)	(3)	(4)
ESG Combined Score	-0.1115**			
E Score		-0.0595*		
S Score			-0.0876**	
G Score				-0.0101
Total Asset	-0.084	-0.0829	-0.0797	-0.0823
Revenue	-0.0373	-0.0379	-0.0414	-0.0390
Market Cap	0.2156***	0.2187***	0.2148***	0.2118***
ROE	0.0684	0.0686	0.0714	0.0707
Leverage Ratio	0.0262	0.0435	0.0290	0.0526
Market-to-Book	0.0006	0.0005	0.0007	0.0007
I/A	-0.3633	-0.3949	-0.3690	-0.3696
Year F. E.	Yes	Yes	Yes	Yes
Observations	845	845	845	845
R-squared	0.1880	0.1871	0.1885	0.1818

Levels of statistical significance: *** p<0.01, ** p<0.05, * p<0.1

A robust regression approach was applied since the model did not pass the heteroscedasticity test. The results show that only two variables significantly affect stock returns: the ESG combined score (lnesgcscore) and market capitalization (lnmarketcap). All other variables—total assets, revenue, return on equity, leverage ratio, market-to-book ratio, and capital expenditure to assets—are not significant, with p-values above the 5% threshold.

The findings support H2a, indicating that higher ESG scores are linked to lower stock returns, as the ESG combined score has a statistically significant negative coefficient. In

contrast, larger firms tend to experience higher returns, as market capitalization has a positive coefficient. The regression equation is:

Return= -0.7275-0.1115LnESGC+0.215LnMarketcap+e

The constant coefficient is -0.7275607, indicating that the return would be -0.7275607 if the ESG combined score (lnesgcscore) and market capitalization (lnmarketcap) are held constant. Conversely, if these variables change, the return will vary accordingly based on their respective coefficients.

ESG combined score (lnesgcscore): A 1% increase in ESG score reduces returns by 0.1115, holding market capitalization constant. In standardized terms, a one standard deviation increase in ESG score decreases returns by approximately 0.0626%.

Market capitalization (lnmarketcap): A 1% increase in market cap raises returns by 0.2156, assuming the ESG score remains unchanged. A one standard deviation increase in market capitalization increases returns by about 0.203%.

To further explore the ESG-return relationship, a robustness check was conducted by analyzing the individual Environmental (E), Social (S), and Governance (G) scores separately. The results reveal:

E score: Negative and significant (coefficient: -0.0595, p = 0.081)

S score: Negative and significant (coefficient: -0.0876, p = 0.023)

G score: Not significant (coefficient: -0.0101, p = 0.837)

These findings suggest that while Environmental and Social factors negatively impact stock returns, Governance does not have a significant effect. This challenges the assumption of a uniform ESG-return relationship and underscores the importance of analyzing ESG components separately.

Data Analysis Regression Model for Volatility

Classic Assumption Test

Table Classic Assumption Test for ESG combined model

Variable	Normality test	Multicollinearity test
	Prob>chi2	VIF
Volatility	0.0000	-
ESG Combined Score	0.0000	1.36
Total Asset	0.0000	2.51
Revenue	0.0000	1.41
Market Cap	0.0000	1.95
ROE	0.0000	3.42
Leverage Ratio	0.0000	1.19
Market-to-Book	0.0000	3.47
I/A	0.0000	1.51
Breusch-Pagan / Cook-Weisberg test for heterokedasticity	Prob>chi2 = 0.0000	
Woolridge test for autocorrelation	Prob>F = 0.2168	

The results of the classic assumption tests for the regression model with the ESG combined score as an independent variable and stock volatility as the dependent variable revealed several key findings. First, the normality test indicated that none of the variables are normally distributed, which is a limitation inherent to the nature of the data, such as scores, financial figures, and ratios. The multicollinearity test showed no issues, with all Variance Inflation Factors (VIFs) being below the threshold of 10. However, the model did not pass the heteroscedasticity test, as the Prob > chi2 value was 0.000, below the alpha level of 0.05, indicating the presence of heteroscedasticity. To address this, the model will require the use of

robust standard errors. Lastly, the autocorrelation test showed no signs of autocorrelation, as the p-value (Prob > F) was above the significance level. These results suggest that while the model has some limitations, particularly regarding heteroscedasticity and normality, appropriate adjustments can be made to ensure its reliability.

Analysis and Interpretation

Table Fixed Effect Model for Volatility

Variable	(1)	(2)	(3)	(4)
ESG Combined Score	-0.0285**			
E Score		-0.0081		
S Score			-0.0155*	
G Score				-0.0133
Total Asset	0.0051	0.0056	0.0061	0.0047
Revenue	-0.0112	-0.0115	-0.0120	-0.0112
Market Cap	-0.0318***	-0.0317***	-0.0321***	-0.0328***
ROE	-0.0115	-0.0111	-0.0107	-0.0122
Leverage Ratio	0.0093	0.0148	0.0119	0.0157
Market-to-Book	-0.0002	-0.0002	-0.0002	-0.0002
I/A	-0.0063	-0.0120	-0.0082	-0.0026
Year F. E.	Yes	Yes	Yes	Yes
Observations	845	845	845	845
R-squared	0.4146	0.4086	0.4108	0.4094

Levels of statistical significance: *** p<0.01, ** p<0.05, * p<0.1

A robust regression approach was applied as the model did not pass the heteroscedasticity test. The results indicate that only two variables significantly impact stock volatility: the ESG combined score (lnesgcscore) and market capitalization (lnmarketcap). Other variables, including total assets, revenue, return on equity, leverage ratio, market-to-book ratio, and capital expenditure to assets, are not significant, with p-values exceeding 5%.

Discussion

The costs associated with climate disclosure activities might be significant. Companies frequently devote large sums for operations such as greenhouse gas (GHG) analysis, climate scenario analysis, and the adoption of internal climate risk management measures. These financial demands can be especially challenging for firms with limited financial resources, as they may find it difficult to allocate funds effectively (Environmental Resource Management, 2022). The survey also found that corporate issuers spend an average of $677,000 per year on climate disclosure efforts. This expense can be a considerable financial burden, especially for smaller businesses or those experiencing financial difficulties. The high costs associated with these activities underscore the need for financial support and resource allocation strategies to ensure that all firms, regardless of size or financial health, can meet climate disclosure requirements without compromising their operational viability.

Moreover, the rising demand for transparency in environmental practices puts additional pressure on firms to invest in advanced reporting and compliance technologies. This investment is crucial not only for regulatory adherence but also for maintaining investor confidence and public trust. Smaller firms may need to seek innovative solutions, such as collaborative initiatives or industry partnerships, to share the financial load and achieve compliance more efficiently. The overall economic impact of these disclosure activities highlights the importance of developing scalable and cost-effective strategies to support all businesses in their sustainability efforts.

In the ASEAN region, where the importance of ESG is just emerging and expected to develop significantly in the coming years, these financial challenges are particularly relevant. As ASEAN countries increasingly recognize the importance of ESG factors, businesses in the region will likely face similar financial pressures to adopt comprehensive climate-related

disclosure practices. Given the economic diversity within ASEAN, with many smaller and financially constrained firms, there is a pressing need for tailored financial support and strategic resource allocation to help these businesses integrate ESG practices effectively. By addressing these challenges early on, ASEAN countries can ensure that their firms are well-positioned to meet global ESG standards without compromising their growth and sustainability.

Research indicates that while strong ESG performance can boost firm value, merely disclosing ESG efforts without actual performance improvements can negatively affect valuations, as investors may perceive the costs of ESG activities as outweighing the benefits if they do not lead to measurable improvements. This negative impact is more pronounced for financially constrained firms, which often lack the financial flexibility to absorb the costs associated with ESG initiatives, resulting in a negative perception among investors. For these firms, the expense of ESG activities can outweigh the potential benefits, highlighting the need for ESG disclosures to be matched with genuine performance improvements to positively influence investor perceptions and firm value (Grewal, Hauptmann, and Serafeim, 2021).

Regarding stock volatility, the findings support the notion that higher ESG ratings are associated with lower volatility. This is consistent with the studies of La Torre et al. (2020) and Hu, Shen, and Li (2023), who argue that companies with high ESG ratings are perceived as less risky and better at managing environmental, social, and governance challenges. Such companies tend to experience fewer regulatory and legal challenges, enhancing investor confidence and leading to more stable stock performance. This aligns with the broader literature, such as the meta-analysis by Friede, Busch, and Bassen (2015), which found that there is a positive correlation between ESG performance and financial performance, implying that businesses with higher ESG ratings not only embrace reduced stock volatility but also achieve better financial outcomes. Additionally, the study's findings on stock volatility resonate with the research by Andreas et al. (2023), which suggests that successful ESG engagements reduce stock return volatility. This indicates that effective ESG practices contribute to a firm's stability and predictability in the market. As highlighted by Zhou and Zhou (2021), while market sentiment and economic factors can cause temporary fluctuations, companies with strong ESG performance generally exhibit more stable stock behavior over time.

Companies with strong ESG performance have shown better resilience during periods of high market volatility. For example, during the COVID-19 pandemic, firms with higher ESG scores demonstrated lower implied volatility and better performance compared to their lower-rated counterparts (State Street Global Advisors, 2022). Another study found that the negative relationship between ESG ratings and stock volatility became even stronger when market volatility was higher, indicating that ESG factors play a crucial role in stabilizing stock performance during turbulent times (UN PRI, 2024).

This evidence suggests that integrating ESG criteria into business strategies can be a valuable tool for risk management. Firms with robust ESG practices are often better equipped to handle crises, as they typically have more resilient supply chains, better stakeholder relationships, and more forward-thinking governance structures. These attributes help mitigate risks and ensure more stable performance even in uncertain market conditions. Additionally, investors increasingly recognize the importance of ESG factors, leading to greater capital inflows into high-ESG-performing companies, which further enhances their stability and growth prospects.

In the context of emerging markets, including the ASEAN region, the incorporation of ESG principles could be particularly beneficial. As these markets are often more volatile and face unique socio-economic and environmental challenges, strong ESG performance can help local companies attract foreign investment, enhance their reputations, and ensure long-term sustainability. By prioritizing ESG factors, firms in ASEAN can not only improve their resilience to market shocks but also contribute to the broader goal of sustainable development in the region.

CONCLUSION

This dissertation aimed to explore the relationship between Environmental, Social, and Governance (ESG) ratings and their impact on stock returns and volatility within the LQ45, FTSE KLCI, and FTSE STI indices in Southeast Asia. The analysis covered historical data from 2010 to 2022, using ESG ratings from Refinitiv with a specific methodology. The research examined historical data from 2010 to 2022, utilizing Refinitiv's ESG ratings and a specific methodology. The findings have important consequences for investors, governments, and the entire financial industry. The findings show that companies with better ESG ratings likely to have lower stock returns. This implies that, while some investors respect good ESG standards, they do not always translate into larger immediate financial gains. This could be attributed to the increased expenditures and investments required to implement ESG principles, which may have an impact on short-term profitability. However, the study discovered that higher ESG ratings correlate with decreased stock volatility.

This indicates that companies with robust ESG practices tend to be more stable and less risky, offering a more secure investment over the long term. This lower volatility could be attributed to the better risk management and operational efficiencies often found in companies with strong ESG practices.

Furthermore, the study highlights the growing importance of ESG factors in investment decisions. Despite the lower returns, the stability and lower risk associated with high ESG-rated companies make them attractive to risk-averse investors and those with a long-term investment horizon. This trend reflects a broader shift in the investment community towards valuing sustainability and long-term resilience over short-term gains (Clark, Feiner and Viehs, 2015).

Recommendations

Based on the findings of this dissertation, the following recommendations are proposed for investors, policymakers, and companies:

Investors:

1) Consider Risk-Adjusted Returns: Investors should factor in the lower volatility associated with high ESG ratings, even if these companies show lower stock returns. The stability provided by strong ESG practices can be beneficial for risk-averse investors. Investment strategies should balance immediate financial returns with long-term stability and risk management.
2) Balanced Portfolio: Diversify investments to include companies with high ESG ratings to achieve a balanced portfolio that mitigates risks associated with market volatility. This approach can enhance portfolio resilience and provide steady returns over time.
3) Engage with Companies: Investors should engage with companies on ESG issues, advocating for improved practices and greater transparency. Active engagement can drive positive change and potentially strengthen companies' long-term financial performance.

Policymakers:

1) Standardize ESG Rating Methodologies: There is a need for standardized ESG rating methodologies to ensure consistency and comparability across different raters. Standardization would provide a clearer picture of ESG performance and its financial implications, aiding investors in making informed decisions.
2) Mandate ESG Disclosures: Encourage or mandate comprehensive ESG disclosures to ensure transparency and help investors make informed decisions..

Enhanced disclosure standards would help promote accountability and stimulate corporations to improve their ESG initiatives.

3) Incentivize ESG Integration: Policymakers should consider providing incentives for companies to adopt and enhance their ESG practices. This could include tax benefits, grants, or subsidies for businesses that demonstrate strong ESG performance and contribute to sustainable development goals.

Companies:

1) Strengthen ESG Practices: Companies should continue to strengthen their ESG practices, understanding that while this may not immediately boost stock returns, it contributes to lower volatility and long-term stability. Strong ESG practices can enhance a company's reputation, attract long-term investors, and improve operational efficiencies.

2) Transparent Reporting: Maintain transparent and consistent ESG reporting in line with global standards to build investor trust and enhance market perception. Transparent reporting can also help companies identify areas for improvement and benchmark their performance against industry peers.

3) Long-Term Strategy: Companies should integrate ESG considerations into their long-term strategic planning. By prioritizing sustainability and responsible practices, companies can ensure their long-term viability and success in an increasingly ESG-focused investment landscape.

By implementing these recommendations, stakeholders can better leverage ESG factors to drive sustainable financial performance and contribute to the broader goal of sustainable development in Southeast Asia. The findings of this study provide a robust foundation for further research and practical applications in the field of ESG investing. Future research could explore the impact of different ESG rating methodologies, extend the analysis to other regions and industries, and examine the long-term financial performance of high ESG-rated companies beyond the study period. This would provide deeper insights into the evolving relationship between ESG practices and financial performance in the global market.

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