

Relationship of ESG Score, Financial Performance, and Firm Value of Sustainable Stocks Group in Thai listed Companies

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Abstract

This study aims to 1) examine the relationship between ESG score and the firm value of sustainable stock groups; 2) investigate the relationship between ESG score and the financial performance of these sustainable stock groups; 3) explore the relationship between financial performance and the firm value of sustainable stock groups; and 4) analyze how financial performance serves as a mediating variable in the relationship between ESG score and the firm value of sustainable stock groups in Thai listed companies. A sample of 192 firms was analyzed in 2023. ESG scores were obtained from the setsustainability.com website, while financial data was sourced from the SETSMART database. Pearson correlation analysis and OLS regression analysis were employed to analyze the data. The findings indicated a positive correlation between financial performance and firm value. However, there was no identified relationship between the ESG score and the firm value of the sustainable stock group. Additionally, financial performance was not recognized as a mediator in the relationship between the ESG score and the firm value of the sustainable stock group of Thai listed companies. It also adds the literature regarding the determinants of firm value on non-financial factors.

Keywords: ESG Score, Financial Performance, Firm Value, Sustainability Stock Group

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1. Introduction

Sustainable development is a growth method that ensures the needs of the current generation are met without compromising the ability of future generations to meet their own. The primary goal of sustainable development is to improve the quality of life for the global population while maintaining a balance among environmental, social, and economic factors, all without exceeding nature's productive capacity. The concept of "Sustainable Business Operations," utilizing the ESG (Environmental, Social, and Governance) framework, is gaining traction among publicly listed companies and investors worldwide, emphasizing the importance of investing in businesses that prioritize sustainability for both the organization and society. Investors are increasingly influenced by a desire to invest responsibly and seek returns that take into account environmental, social, and governance considerations alongside traditional profits (Ren & Mohd-Isa, 2023).

In 2015, the United Nations (UN) established the 17 Sustainable Development Goals (SDGs), which serve as a framework for global development aimed at fostering social, economic, and environmental improvement. A total of 193 UN member states, including Thailand, have embraced these goals. Consequently, the Stock Exchange of Thailand (SET) has made it a priority to advance these objectives and has developed the Thailand Sustainability Investment (THSI) stock list. Since 2015, the Thailand Stock Exchange (SET) has compiled the Thailand Sustainability Investment (THSI) list as an option for investors seeking to invest in listed companies that demonstrate outstanding performance and a commitment to managing environmental, social, and governance (ESG) impacts through their business processes, good and transparent corporate governance, and the development of business partners to operate in accordance with sustainable development. This reduces negative societal and environmental repercussions while also promoting organizational sustainability (Sustainable Capital Market Development, 2025)

The SETTHSI Index tracks the price movements of securities from companies that operate sustainably, utilizing the Thailand Sustainability Investment (THSI) stock list that the Stock Exchange of Thailand (SET) first introduced in 2015. This index evaluates both the financial data of companies and their performance in environmental, social, and governance (ESG) factors when making investment decisions. In 2023, the Stock Exchange of Thailand (SET) rebranded its "THSI (Thailand Sustainability Investment) Sustainable Stocks" to "SET ESG Ratings Sustainable Stocks." For the first time, it disclosed the assessment outcomes as a "list of listed companies" alongside the SET ESG score ratings, differing from previous announcements that only provided the results as a list of companies (Sustainable Capital Market Development, 2024). As a result, whether or not ESG score rankings are useful when making investing decisions is still debatable. This study is seen as a groundbreaking attempt to test the ESG scores, which were initially released this year.

Stakeholders, such as current shareholders and investors, play a crucial role in making investment decisions. They allocate resources to the business with the expectation of achieving a return on their investment (Freeman, 1984). Businesses that perform well can draw in stakeholders and influence investment choices. Investors may be inclined to support companies with stronger sustainability practices because they seek assurance that their investment will be managed responsibly. When an executive establishes policies and manages operations according to sustainability principles, this approach is recognized as socially responsible management grounded in stakeholder theory (Freeman, Wicks & Parmar, 2004). They also believe that investing in sustainable businesses can enhance overall performance (Pu, 2023).

Previous research indicates that the incorporation of sustainable strategies is associated with enhanced performance (Maji & Lohia, 2023). Additionally, Khoury, Nasrallah, and Alareeni (2021) support the connection between ESG information and bank performance in North Africa and Turkey. Beloskar and Nageswara Rao (2023) propose that ESG information acts as an indicator of future stock performance. However, do the SET ESG scores accurately reflect the performance of Thailand's sustainable stocks? This study aims to fill a gap in the evaluation of ESG scores by investigating their accuracy in reflecting the performance of sustainable stocks in Thailand.

Furthermore, past research has also found that financial performance variables can function as both independent and dependent variables (Malaka, Wutipphan, Bungkilo, & Wimonard, 2023; Zhou, Liu, & Luo, 2022). This study uses return on equity (ROE) to serve as a proxy for financial performance and represents a financial ratio that assesses how effectively a company generates profits from the capital invested by its shareholders. ROE is an accounting-based measure derived from figures in financial statements, without accounting for risk, the time value of money, or inflation. In contrast, Tobin's Q is a market-based measure calculated using figures related to market prices, which more accurately reflects the true value of a business. Tobin's Q ratio is a proxy for firm value, reflecting investor confidence as measured by the market value of common stock at the end of the year. Consequently, ROE serves as an antecedent, while Tobin's Q acts as a consequence. According to this study, a company's value is expected to rise if its financial performance improves due to its ESG score. Different from existing studies, this article considers financial performance as a mediator in the relationship between ESG score and the firm value of Thailand's sustainable stocks. The information obtained from this research helps to suggest crucial insights to investors, to aid in their decision-making processes when selecting firms assessed for sustainability on the Stock Exchange of Thailand.

2. Objective

This research aims to 1) examine the relationship between ESG score and the firm value of sustainable stock groups; 2) investigate the relationship between ESG score and the financial performance of these sustainable stock groups; 3) explore the relationship between financial performance and the firm value of sustainable stock groups; and 4) analyze how financial performance serves as a mediating variable in the relationship between ESG score and the firm value of sustainable stock groups in Thai listed companies.

3. Literature Review

3.1 Stakeholder Theory

This study employs stakeholder theory (Freeman, Wicks & Parmar, 2004) to illustrate how corporations should prioritize all stakeholders in their operations. Stakeholder-focused management provides firms with a competitive advantage, improves operational efficiency, and leads to long-term sustainability. As a result, the SET ESG score provides another avenue for businesses to demonstrate accountability, reflect ethical thinking, and respond to stakeholder demands. This demonstrates accountability, fosters trust, leads to higher performance, and informs decision-making, ultimately increasing firm value.

3.2 Agency theory

This paper utilizes agency theory (Jensen & Meckling, 1976), which focuses on the relationship between two parties, to demonstrate that an ESG score can function as a governance mechanism. It mitigates agency conflicts between managers and shareholders by increasing transparency and accountability, which leads to improved financial performance and, ultimately, an increase in firm value.

3.3 Hypothesis development

Huang and Ge (2024) conducted a study comparing developed and developing countries to evaluate differences in ESG disclosures by mining companies. The research findings indicated that: 1. Mining companies in developing countries provide less ESG content in their reports compared to those in developed countries. 2. The average scores and disclosure ratios of ESG indicators for mining companies in developed countries are higher than those for their counterparts in developing countries. Additionally, the market value of mining companies in developed countries had a significant correlation with the quality of their ESG disclosures. In these developed countries, market value was most strongly associated with social ESG disclosure, while in developing countries, it was primarily linked to environmental ESG disclosure. Wong, Batten, Ahmad, Mohamed-Arshad, Nordin, and Adzis (2021) found that ESG disclosure increases firm value. In Thailand, Jaiaasad (2022) indicates that participation in the Thailand Sustainable Index (THSI) correlates positively with Tobin's Q. This study suggests that improved results from ESG score will enhance firm value for sustainable investment stock groups among Thai listed companies. This finding leads to the following hypothesis:

H1: ESG scores are positively correlated with firm value of sustainable stock groups.

Friede, Busch, and Bassen (2015) conducted a study on the relationship between environmental, social, and governance (ESG) factors and financial performance. The empirical evidence indicates that nearly 90% of the studies reviewed identified a non-negative correlation between ESG performance and financial outcomes. Most research pointed to favorable results, highlighting the positive impact of ESG on financial success. In Germany, Velte (2017) examined ESG performance and found it positively influenced return on assets (ROA), although it did not affect Tobin's Q. Additionally, Velte noted that the governance dimension of ESG had a more substantial impact on financial performance compared to the environmental and social dimensions. Consistent with prior studies, this research revealed a correlation between ESG performance and financial metrics, including ROA and return on equity (ROE), for European companies. Similarly, Koundouri, Pittis, and Plataniotis (2022) identified a correlation between ESG performance and the financial performance of European enterprises. Furthermore, Dmuchowski, Dmuchowski, Baczewska-Dabrowska, and Gworek (2022) also found a correlation between ESG factors and financial performance, with implications for Polish stock prices over the long term. The investigation carried out by Garrouch, Hamdi, Mejri, and Sbai (2025) examined the ways in which corporate social responsibility influences financial performance and the manner in which the political affiliations of companies impact this relationship. The findings of this research suggest that companies that do not have any political affiliations perform better when they demonstrate a strong dedication to social responsibility. This serves as evidence that a firm's performance can be enhanced by increasing its commitment to corporate social responsibility. In Thailand, the research conducted by Phakdee (2024) demonstrated that Thailand Sustainability Investment (THIS) has a good correlation with the performance of companies. This study suggests

that more favorable outcomes from sustainability assessment reports will lead to improved financial performance for sustainable investment groups among Thai listed companies. This leads to the following hypothesis:

H2: ESG scores are positively correlated with financial performance of sustainable stock groups.

As state previously, ROE serves as a proxy for financial performance and represents a financial ratio that assesses how effectively a company generates profits from the capital invested by its shareholders. ROE is an accounting-based measure derived from figures in financial statements, without accounting for risk, the time value of money, or inflation. In contrast, Tobin's Q is a market-based measure calculated using figures related to market prices, which more accurately reflects the true value of a business. Tobin's Q ratio is a positive proxy for firm value, reflecting investor confidence as measured by the market value of common stock at the end of the year. Consequently, ROE serves as an antecedent, while Tobin's Q acts as a consequence.

Choomnirat and Ritthidach (2023) investigated the correlation between a firm value and its operational efficacy within the sustainable stock list. They found that the return on assets ratio (ROA) had a negative correlation with firm value, while the return on equity ratio (ROE) exhibited a substantial positive correlation with firm value. Listiadi (2023) asserts that financial performance, corporate social responsibility, and good corporate governance influence firm value. The study's findings indicate that financial performance significantly impacts firm value. This finding aligns with the results from Rungruang and Narkchai (2023), which indicate that operational efficiency affects the firm value of listed companies on the Stock Exchange of Thailand. The study suggests that improved financial performance is likely to enhance the firm value of sustainable investment stock groups among Thai listed companies. This leads to the following hypothesis:

H3: Financial performance correlates positively with the firm value of the sustainable stock groups.

Previous research suggests that financial performance variables can function as both independent and dependent variables. For example, Chingchuang's study (2020) explored the effect of social responsibility factors on the share prices of companies listed on the Stock Exchange of Thailand, specifically within the SET100 Index, using return on equity (ROE) as the independent variable for measuring financial performance. In a separate study, Malaka, Wutipphan, Bungkilo, and Wimonard (2023) examined the relationships among corporate governance, social responsibility, environmental responsibility, and performance. They considered firm value (Tobin's Q) and return on equity (ROE) as dependent variables to evaluate financial performance. Using financial performance as a mediating variable, Zhou, Liu, and Luo (2022) developed a linear regression and mediation effect model to explore the relationship between ESG performance, financial performance, and firm market value, along with their influencing mechanisms. The findings suggest that enhancing ESG performance among Chinese listed companies can lead to increases in both market value and financial performance, demonstrating a significant mediating effect. Additionally, operational capacity serves as a mediator in the relationship between ESG performance and the company's market value.

This research asserts that a firm's value is likely to increase with enhanced financial performance driven by ESG score. Different from existing studies, the paper takes financial performance as a mediator in the relationship between ESG

score and the value of firms within the sustainable stock group on the Stock Exchange of Thailand. Consequently, this leads to the following hypothesis:

H4: Financial performance serves as a mediating variable in the relationship between ESG Score and the firm value of sustainable stock groups.

Previous research has demonstrated a positive correlation between firm value and financial risk (Choomnirat & Ritthidach, 2023). Consequently, investors are more inclined to invest in companies that exhibit a high level of financial risk from a growth perspective. Consequently, in order to facilitate the company's expansion, debt financing from external sources is required (Tanjung & Wahyudi, 2019). Fu, Yu, Guo, and Zhang (2024) conducted a study examining the relationship between the financial risk of mining companies and their ESG ratings. They found that ESG credit ratings have a significant effect on the financial risk faced by these companies. The findings suggest that mining companies can reduce their financial risk by improving their ESG performance. Using financial risk as a control variable, Zhou, Liu, and Luo (2022) investigate the connection between environmental, social, and governance (ESG) performance, financial performance, and market value of a firm. They also look at how financial performance acts as a mediator between ESG performance and market value. There is a weak but statistically significant negative correlation between financial risk and ESG performance and market value, according to their findings. Financial risk has been found to have varied effects on ESG performance, financial performance, and business value, according to previous studies. Thus, this paper set financial risk as a control variable for this research.

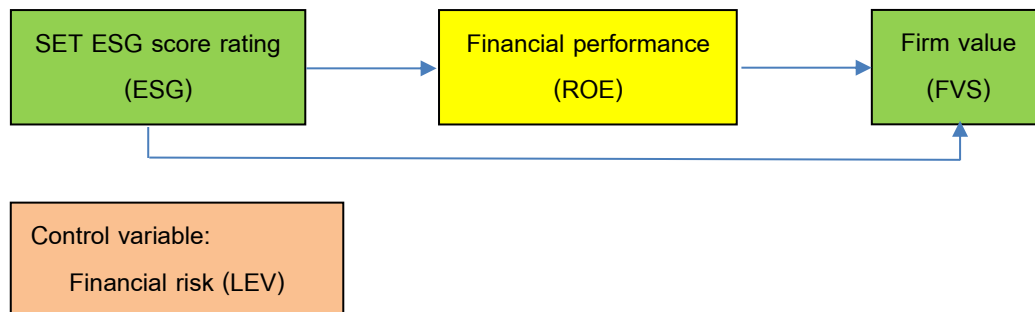


Figure 1. Conceptual model

4. Methodology

The SET ESG score ratings were first announced by the Stock Exchange of Thailand (SET) in 2023, and as a result, the population for this research is limited to 192 sustainable stocks group (Sustainable Capital Market Development, 2024). The setsustainability.com website provided the SET ESG rating data, while the SETSMART database provided the financial data. Statistics used in the research include: minimum, maximum, mean, standard deviation, Pearson correlation analysis and ordinary least squares (OLS) regression analysis. The variable name and measurement scale are shown in Table 1. Here are the equations that were utilized to test the hypothesis:

$$\text{Model 1 for H1 testing; } FVS = \beta_{00} + \beta_{01}ESG + \beta_{02}LEV + \epsilon_i$$

$$\text{Model 2 for H2 testing; } ROE = \beta_{03} + \beta_{04}ESG + \beta_{05}LEV + \epsilon_i$$

$$\text{Model 3 for H3 testing; } FVS = \beta_{06} + \beta_{07}ROE + \beta_{08}LEV + \epsilon_i$$

Model for H4 mediation testing;

$$\text{Step 1} = Y = \beta + cX + \epsilon_i \quad \dots(\text{Model 1})$$

$$\text{Step 2} = M = \beta + aX + \epsilon_i \quad \dots(\text{Model 2})$$

$$\text{Step 3} = Y = \beta + c'X + bM + \epsilon_i \quad \dots(\text{Model 4})$$

$$\text{Model 4; FVS} = \beta_{09} + \beta_{10}\text{ESG} + \beta_{11}\text{ROE} + \beta_{12}\text{LEV} + \epsilon_i$$

Table 1: Variables and measurement scale

Variable name	Abbreviation	Measurement scale		
ESG Score	ESG	Score	SET ESG rating	Scale
		90-100	AAA	4
		80-89	AA	3
		65-79	A	2
		50-65	BBB	1
Financial performance	ROE	The ratio of net income to shareholders' equity		
Firm value	FVS	The sum of the market value of securities and the book value of total liabilities, divided by the book value of total assets (Tobin's Q)		
Financial risk	LEV	The ratio of total liabilities to total assets		

5. Results

Table 2: Descriptive statistics

Variables	Minimum	Maximum	Mean	Std. dev.
ESC score (ESG)	1	4	2.58	0.920
Financial performance (ROE)	-84.79	56.63	8.49	12.910
Firm Value (FVS)	0.611	27.653	1.51	2.088
Leverage (LEV)	0.002	0.896	0.50	0.207

Table 2 presents the initial data for the descriptive statistics used to analyze the fundamental properties of the variables. The ESG score has a mean score of 2.58, indicating a moderate average within the scoring range of 1 to 4. Financial performance, as measured by return on equity (ROE), has a mean of 8.49. The firm value (FVS) has a mean of 1.51, and the company's financial risk, represented by leverage (LEV), has a mean of 0.50.

Table 3: Pearson correlation analysis

Variables	ESG	ROE	LEV	FVS	Tolerance	VIF
ESG	1	0.151**	0.191***	-0.137	0.940	1.063
ROE		1	-0.006	0.138	0.976	1.025
LEV			1	-0.011	0.962	1.039
FVS				1		

Note: *** p value < 0.01, ** p value < 0.05

Table 3 displays the findings of the Pearson correlation analysis, which investigates the correlations between independent variables. The ESG score reveals statistically significant positive relationships with financial performance (ROE) ($r = +0.151$) and financial risk (LEV) ($r = +0.191$). The ESG score is negatively correlated with company value ($r = -0.137$); however, neither link is statistically significant.

Traditional assumption tests use the Kolmogorov-Smirnov test to determine if data is regularly distributed. The heteroscedasticity test demonstrates that no factors significantly influence the residual value, thereby indicating that the regression model is free from heteroscedasticity. To avoid autocorrelation, the Durbin-Watson value for data lies in the acceptability range. The correlation coefficient is below +0.80 (Hair, Black, Babin, & Anderson, 2010), and the Variance Inflation Factors (VIFs) are under 10 (Neter, Wasserman, & Kutner, 1985). This indicates that there is no multicollinearity among the independent variables.

Table 4: OLS regression analysis

Independent Variables	Dependent Variable							
	ROE				FVS			
	Model 2 (H2)		Model 1 (H1)		Model 3 (H3)		Model 4 (H4)	
	b	Std. Err.	b	Std. Err.	b	Std. Err.	b	Std. Err.
(constant)	3.932	3.697	2.246	0.461	1.371	0.310	2.142	0.450
ESG	2.197	1.371	-0.315	0.306			-0.373	0.300
ROE					0.022**	0.010	0.026***	0.007
LEV	-2.233	5.302	0.154	1.187	-0.106	0.944	0.213	1.173
R^2	0.024		0.019		0.019		0.044	
Adj. R^2	0.014		0.009		0.009		0.030	
P -value	0.253		0.069		0.016		0.000	

Note: *** p value < 0.01, ** p value < 0.05, * p value < 0.10

Table 4 illustrates the multiple regression analysis of the ESG score and firm value. The study found that Model 2 ESG score (ESG) had a positive, insignificant relationship with financial performance (ROE) ($b_{04} = 2.197$, $P > 0.10$); therefore, hypothesis 2 is rejected. Model 3 and 4 showed that financial performance (ROE) has positively significant relationships with firm value (FVS) ($b_{07} = 0.022$, $P < 0.05$; $b_{11} = 0.026$, $P < 0.01$); supporting hypothesis 3. Additionally, the Model 1 ESG scores showed that a negative, insignificant relationship with firm value ($b_{01} = -0.315$, $P < 0.305$); therefore, hypothesis 1 is rejected.

Baron and Kenny (1986) defined a mediator as a variable that conveys the influence of an independent variable to a dependent variable. There are two types of variable transmission: 1) Complete Mediation, or Full Mediation, occurs when the independent variable transmits its influence exclusively through the mediating variable to the dependent variable. In this scenario, the introduction of a mediator diminishes the direct influence of the independent variable on the dependent variable to the point where it becomes statistically insignificant. 2) Partial mediation occurs when the independent variable affects the dependent variable indirectly through the mediating variable while still maintaining a direct effect. After the mediator is introduced, the direct influence from the independent variable to the dependent variable is reduced but remains statistically significant.

Table 4 presents the four-step regression equation analysis of Baron and Kenny (1986) to examine the mediator: Step 1, regression analysis of independent variables' effects on the dependent variable (Model 1), Step 2, on the mediator variable (Model 2), Step 3, on the dependent variable and mediator variables (Model 4), and Step 4, using the estimated coefficient from each equation to determine the transmission of influence. The study revealed that financial performance does not mediate the association between ESG score and the firm value of sustainable stocks; therefore, hypothesis 4 is rejected.

Additionally, the analysis demonstrated that there is a negative and insignificant correlation between financial risk (LEV) ($b_{05} = -2.233$, $P > 0.10$) and financial performance (ROE). Similarly, there is a negative, insignificant correlation between financial risk (LEV) ($b_{08} = -0.106$, $P > 0.10$) and firm value (FVS), as well as a positive, insignificant correlation between financial risk (LEV) ($b_{02} = 0.154$, $P > 0.10$; $b_{12} = 0.213$, $P > 0.10$) and firm value (FVS).

6. Robustness Check

This research examined whether the main analysis results were consistent by conducting SEM analysis and bootstrapping tests. Figure 2 illustrates that the ESG score has a positive correlation with firm value ($b = 0.158$, $p < 0.05$). However, the ESG score does not serve as a mediating variable in the relationship between the ESG score and firm value.

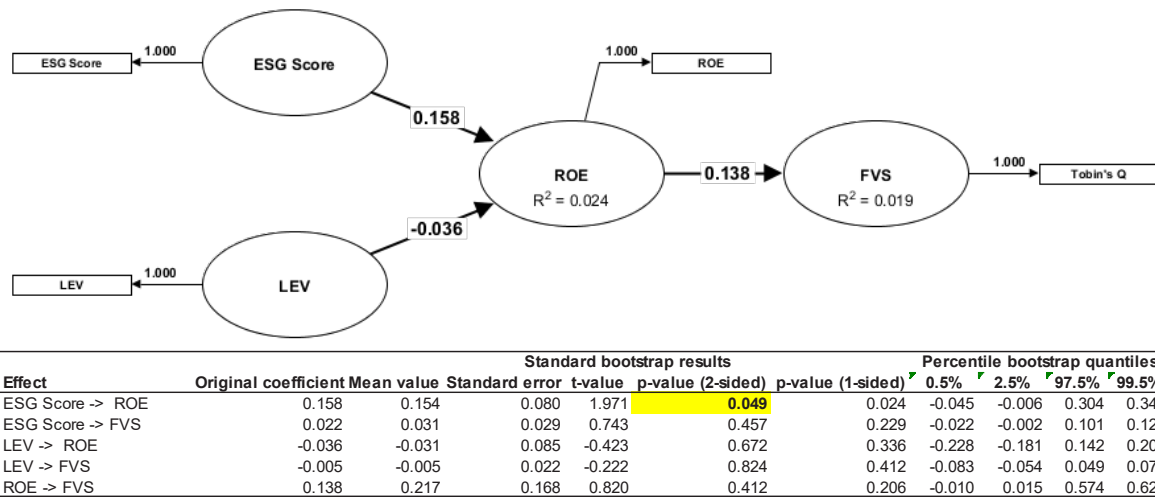


Figure 2. SEM Analysis and Bootstrap Results

7. Discussion

The study's findings reveal that the company value of the sustainable stock group is insignificantly related with their ESG score. This is consistent with the research by Junius, Adisurjo, Rijanto, and Adelina (2020), which found no correlation between ESG score and market value. This issue arises because, for the first time in the 2023 sustainable stock assessment model, the score level is determined using a ranking format rather than merely listing sustainable stocks. In the short term, the financial burden and costs associated with ESG investment may increase, potentially leading to a decline in the firm's value. Yildiz, Dayi, Yucel and Cilesiz (2024) suggested that ESG performance plays a crucial role in long-term value creation, its short-term impact on firm value can fluctuate.

The research reveals a direct relationship between the firm value of the sustainable stock group of Thai listed companies and their financial performance. This agrees with the findings of Choomnirat and Ritthidach (2023), who investigated the connection between the firm value and performance of sustainable stock list firms. The firm's value was positively and significantly correlated with the return on equity ratio. Finding that performance affects the value of Thai listed companies is in line with the findings of Rungruang and Narkchai (2023). This study is consistent with the agency theory, which posits that the value of the company is positively correlated with the return on equity. It is satisfactory for both the principal and the agent. The value of the company increases as a result of the executives' ability to manage, which is a beneficial agent. Consequently, investors are more assured in their investment decisions, which may be attributed to the fact that companies in the sustainable stock group are already well-managed. This confidence in investing is a factor in the pursuit of the highest returns for investors, who are the principals (Choomnirat & Ritthidach, 2023).

ESG score is not statistically significant in relation to financial performance. This is consistent with the research by Junius, Adisurjo, Rijanto, and Adelina (2020), which found no correlation between ESG score and financial performance. The absence of a meaningful relationship between ESG scores and ROE can be explained through agency theory. This theory suggests that ESG investments may not always align with the objective of maximizing shareholder value. While ESG initiatives frequently involve short-term costs, their advantages are usually realized in the long term or in indirect ways. This research

contradicts the findings of Koundouri, Pittis, and Plataniotis (2022), who identified a correlation between ESG performance and the financial performance of companies in Europe. Similarly, Dmuchowski et al. (2022) found a correlation between ESG factors and the financial performance of companies in Poland.

This study finds that financial performance (ROE) does not mediate the relationship between ESG score and firm value. This result corresponds with Negara, Ishak, and Primbodo, (2024) that companies with high ESG disclosure already have good information transparency regarding their financial and non-financial aspects. Different standardization with ESG score criteria within independent organizations also influences the non-significant result, as varying methodologies can lead to discrepancies in how companies are evaluated and reported on their ESG performance. On the other hand, this result suggests that the mechanism through which ESG influences firm value may not operate through traditional accounting profitability measures. First, ESG score may directly affect firm value through non-financial channels. Consistent with stakeholder theory, firms with higher ESG scores are likely to gain greater trust from stakeholders, including investors, customers, and regulators. This enhanced trust can improve firm reputation and reduce perceived risk, thereby increasing firm value independently of financial performance indicators such as ROE. Second, the absence of a mediating effect may be explained by a temporal mismatch between ESG initiatives and financial outcomes. ESG practices often represent long-term strategic investments, while financial performance (ROE) captures short-term accounting returns. As a result, the benefits of ESG activities may not be immediately reflected in profitability, limiting the ability of ROE to serve as an effective mediator. Finally, ESG investments may initially impose additional costs, such as expenditures on environmental compliance, social responsibility programs, and governance improvements. These costs can suppress short-term earnings and, consequently, financial performance (ROE). However, capital markets may interpret such investments positively, anticipating long-term benefits, which leads to a direct positive impact on firm value despite weak or insignificant changes in ROE (PricewaterhouseCoopers, 2022)

The analysis indicated that there was no correlation between financial risk and financial performance or firm value when considering the control variables. This lack of correlation may stem from the differences in ESG management strategies across organizations, which can lead to varying levels of financial risk influenced by their business strategies and risk tolerance. This observation is consistent with the findings of Zhou, Liu, and Luo (2022), which also reported no correlation between financial risk and ESG performance, financial performance, or company market value.

8. Conclusion

This research aims to 1) examine the relationship between ESG score and the firm value of sustainable stock groups; 2) investigate the relationship between ESG score and the financial performance of these sustainable stock groups; 3) explore the relationship between financial performance and the firm value of sustainable stock groups; and 4) analyze how financial performance serves as a mediating variable in the relationship between ESG score and the firm value of sustainable stock groups in Thai listed companies. A sample of 192 firms was analyzed in 2023. ESG scores were obtained from the setsustainability.com website, while financial data was sourced from the SETSMART database. Pearson correlation coefficient and OLS regression analysis were employed to analyze the data. The findings indicated a positive correlation between financial performance and firm value. However, there was no identified relationship between the ESG score and the

firm value of the sustainable stock group. Additionally, financial performance was not recognized as a mediator in the relationship between the ESG score and the firm value of the sustainable stock group of Thai listed companies.

The SET ESG ratings are based on the number of firms listed on the Stock Exchange of Thailand that have participated in the evaluation of the Sustainable Stock Project and have met the criteria for sustainable stocks, which currently includes 192 companies. Selection and ranking eligibility is limited to those companies that have taken part in the sustainable stock assessment. Companies that are not selected may still demonstrate sustainable management and operations in line with ESG standards; however, they might not have met the initial selection criteria established by the Stock Exchange of Thailand or may lack interest in participating in the sustainable stock assessment. As a result, these companies will be excluded from the sustainable stock group, even though they could potentially offer returns that exceed investor expectations for stocks within the sustainable stock assessment group. Therefore, the Stock Exchange of Thailand should enhance efforts to promote and incentivize listed companies to engage in the sustainable stock assessment (Pattarasen & Wongsaravit, 2021).

9. Contribution

9.1 Managerial contribution

9.1.1 This research builds on prior literature by highlighting the importance of businesses that have received the SET ESG Rating assessment results concerning their performance and overall firm value. The aim is to motivate publicly listed companies in the stock market to prioritize sustainable business practices, commonly referred to as ESG (Environmental, Social, and Governance) initiatives. Such practices can improve their reputation, build public trust, and satisfy regulatory expectations. While these initiatives may require an initial investment, we anticipate improved financial performance in the long term.

9.1.2 This research provides investors with information to aid their decision-making on investments in firms with sustainable stock assessment outcomes in the Stock Exchange of Thailand.

9.2 Theoretical contribution

This research can examine stakeholder theory, which serves as an essential basis for establishing the concept and describing the factors that influence ESG. It illustrates that executives have a responsibility to act ethically, consider others, and account for their interests along with their own. This role is vital because numerous individuals have vested interests in how a company operates. The company's success or failure relies on these stakeholders. But the company can't meet all stakeholder demands, and its actions may affect these groups. Stakeholders expect to learn about sustainability policies and practices through the empirical data presented in sustainability assessment reports. As a result, the evaluation outcomes from the SET ESG Rating offer an additional avenue for the organization to demonstrate its accountability, embody ethical principles, and meet stakeholder needs. This approach aims to exemplify responsibility, build trust, enhance performance, and inform decision-making, ultimately contributing to the company's value, which is essential to business operations.

10. Limitation and future research

10.1 Limitation

This research has limitations, including a one-year timeframe for impact assessment and a limited number of companies with an ESG score.

10.2 Future research

10.1 Only quantitative data was employed in this investigation, as no other dimensions were examined. Consequently, to increase the scope of this research's findings, future research may employ qualitative data, including questionnaires and in-depth interview techniques. The research concentrated solely on sustainable stocks listed on the Stock Exchange of Thailand, omitting sustainability awards from international assessments or other organizations, as well as the extent of sustainability-related activities undertaken by the companies in their operations. Future studies may address these limitations to evaluate the effectiveness of sustainability information in research design.

10.2 The database that reported the sustainability assessment results on the website setsustainability.com was chosen for this research. Other databases that have reported sustainability assessment results, such as Bloomberg ESG, should be considered for future research.

10.3 The data analyzed in this study was exclusively from 2023. To enhance statistical precision, future research should extend the analysis to a lengthier time frame.

10.4 This study utilized solely the control variable, specifically the financial risk of the company. Factors including company size, age, growth, and industry group may influence business sustainability. Consequently, subsequent research should incorporate these control variables into the model.

11. Acknowledgements

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