
THE IMPACT OF ESG, PROFITABILITY, AND BUSINESS RISK ON STOCK RETURNS: EVIDENCE FROM THE INDONESIAN STOCK MARKET



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Abstract

This study aims to analyze the impact of Environmental, Social, and Governance (ESG), profitability, and business risk on stock returns in the Indonesian stock market. The research utilizes panel regression analysis to assess the relationship between ESG scores, profitability, business risk, and stock returns of all publicly listed companies in Indonesia between 2020-2022. The results indicate that ESG does not significantly affect stock returns, which could be attributed to the prevalence of greenwashing in Indonesia. Profitability, shows a positive significant impact on stock returns, suggesting that more profitable companies tend to provide higher stock returns. Business risk negatively impacts stock returns, with companies facing higher risks showing lower returns due to greater price volatility. This study contributes to the theoretical understanding of the relationship between ESG, profitability, business risk, and stock returns in Indonesia. Practically, it offers valuable insights for investors to consider profitability and risk management over ESG claims when making investment decisions. The study is limited by its focus on Indonesian firms and the use of Bloomberg ESG scores, which may not fully capture the actual sustainability practices of companies.

Keywords: ESG, Profitability, Business Risk, Stock Return

INTRODUCTION

Stock returns are one of the key indicators in stock market investments, significantly influencing investment decisions by both individuals and institutions. Stock returns provide an overview of the potential profits that can be earned from an investment. They are highly dependent on financial performance and external factors that affect the market as a whole. In Indonesia, the stock market plays a vital role in providing companies with access to capital while offering investors the opportunity to earn financial returns that contribute to the country's economic growth (Aziz & Chariri, 2023).

The significance of stock returns is substantial for both investors and companies. For investors, stock returns not only indicate the potential profits that can be earned but also provide insights into the risks that might be faced. For companies, positive stock returns reflect strong market performance, boosting investor confidence and improving the company's image in the public eye (Aziz & Chariri, 2023). Therefore, a deep understanding of the factors that influence stock returns, such as ESG (Environmental, Social, Governance), profitability, and business risk, is crucial in optimizing investment decisions.

Global investment trends have seen significant changes in recent years, with an increasing number of investors focusing on sustainability factors through ESG principles. ESG encompasses a company's efforts to manage environmental and social impacts while adhering to good governance standards. ESG-based investments have grown rapidly as a response to global challenges such as climate change and social inequality, encouraging companies to be accountable for their social and environmental impacts while creating long-term value for stakeholders (Aghion et al., 2023; Wang et al., 2024). ESG, as a sustainability-focused governance framework, is increasingly favored by investors looking to mitigate long-term risks and contribute to sustainable development.

In Indonesia, ESG is becoming increasingly important in attracting investors, given the growing awareness of social and environmental responsibility (Fithria & Darma, 2024). Companies that adopt ESG principles not only demonstrate their commitment to sustainability but also send positive signals about the quality of their management and future prospects, thereby boosting investor confidence and encouraging better stock returns (Xiao et al., 2025). With an increasing number of Indonesian companies adopting ESG principles, this practice will gradually become a necessity and influence market perceptions regarding the long-term returns associated with these practices.

However, the implementation of ESG practices, particularly in developing countries, remains limited and often leans toward exaggerated claims or greenwashing. Many companies in developing countries claim to adopt ESG principles, but their implementation has not been fully integrated into their business strategies and operations (Lee & Raschke, 2023). Rather than focusing on tangible changes in environmental sustainability, social welfare, and governance, some companies prioritize image-building without changing practices that harm the environment or society (Chan, 2025). This phenomenon is known as greenwashing, where companies only show surface-level sustainability efforts without significant positive impacts. This can reduce the effectiveness of ESG-based investments, which should yield long-term benefits for both companies and society. The lack of oversight and a deep understanding of ESG principles pose significant challenges in avoiding this greenwashing practice, potentially harming investors who rely on sustainability claims when making investment decisions (David et al., 2025).

In addition to sustainability and social responsibility factors, such as ESG principles, a company's financial performance is also an important factor affecting stock returns. One of the primary indicators in assessing a company's financial performance is profitability, which reflects the company's ability to generate profits from its resources (Wulandari & Efendi, 2022). Companies with high profitability are often seen as more stable and having strong long-term prospects. Financial ratios such as Return on Assets (ROA) and Return on Equity (ROE) are used to measure how effectively a company utilizes its assets and equity to generate profits, signaling positive operational efficiency and growth prospects to the market. Therefore, profitability becomes an essential factor for investors to consider when making investment decisions, particularly in the growing Indonesian stock market (Damayanti & Pertiwi, 2022; Taufiqurrahman & Sudaryati, 2024).

Another factor influencing stock returns is the business risk faced by a company. Business risk reflects the uncertainty inherent in a company's operations and can stem from various factors, including market fluctuations, regulatory changes, and macroeconomic conditions (Salsabila et al., 2024). In the stock market, this risk often influences investor perceptions of the company's prospects, which in turn can affect its stock price. The higher the business risk faced by a company, the greater the uncertainty perceived by investors, which can reduce interest in the company's stock and lower its returns. Conversely, companies that can effectively manage risk and maintain operational stability are generally more attractive to investors (Fadila et al., 2022).

In Indonesia, the business risks faced by companies listed on the Indonesia Stock Exchange (IDX) vary greatly depending on the industry sector and market conditions. These risks can include operational risks, such as production disruptions or supply chain issues, as well as market risks related to stock price fluctuations and global market uncertainties. Furthermore, regulatory factors and changes in government policies can also impact the risks faced by companies (Nestiti et al., 2025). This study aims to analyze how business risk levels influence investment decisions and stock returns on the IDX. While some studies suggest that higher risks may lead to higher stock returns as compensation for investors (Handayani et al., 2019), other research indicates that high risks may actually decrease stock returns due to increased instability (Li & Sun, 2024). Therefore, it is crucial to understand how Indonesian companies manage their risks and how this impacts their stock returns.

Research on the factors influencing stock returns has been widely conducted, but the results are often inconsistent. Some studies show a positive relationship between factors such as ESG and stock returns, while others report more complex or even negative relationships (Bolton & Kacperczyk, 2021; Handayani et al., 2019; Ignatov & Rudolf, 2023; Wang et al., 2024). For instance, research by Handayani et al. (2019) indicates that companies with high ESG scores tend to have higher stock returns because these companies send positive signals about managerial quality and future prospects. This aligns with signaling theory, which suggests that companies that are socially and environmentally responsible are more attractive to investors seeking sustainable and stable investments. However, studies like those by Bolton & Kacperczyk (2021) present different findings, suggesting that companies with high ESG ratings tend to experience lower stock returns. They argue that a strong commitment to high ESG standards can burden companies with additional costs and limit short-term profit potential, thereby lowering stock performance.

Referring to signaling theory, companies that claim to implement ESG principles aim to send the message that they care about environmental and humanitarian issues and can manage long-term risks threatening the company's sustainability (Xiao et al., 2025). This signal is easily picked up by investors, whose focus has shifted toward sustainability, thus increasing the company's stock price. Companies implementing ESG principles are considered to have lower long-term risks because they are more responsive to environmental, social, and governance issues. In the long run, this can result in more stable and sustainable returns, even though there may be greater short-term volatility (Chan, 2025). Investors may also see companies with strong ESG practices as better able to handle regulatory and reputational risks, leading to higher returns.

Most research on profitability and business risks' effect on stock returns generally draws similar conclusions. Many studies show that profitability positively impacts stock returns because more profitable companies are seen as better able to manage resources and provide stable returns for investors (Damayanti & Pertiwi, 2022; Taufiqurrahman & Sudaryati, 2024). On the other hand, business risk tends to have a negative impact on stock returns because higher uncertainty can increase volatility and reduce the attractiveness of the investment (Handayani et al., 2019; Li & Sun, 2024). This suggests that high profitability often attracts investors, while high business risk tends to make investors hesitant, leading to a decline in stock value.

However, although the relationship between profitability and business risk with stock returns has been extensively studied, most previous research tends to separate these factors in their analysis or focus on only one factor. Research that combines ESG, profitability, and business risk in the context of the Indonesian capital market is still limited. Therefore, this study focuses on the combination of these three external (ESG and business risk) and internal (profitability) factors in influencing stock returns of companies listed on the Indonesia Stock Exchange during the 2020-2022 period. Through this holistic approach, the study aims to contribute new insights to financial literature by filling existing gaps and uncovering how these factors interact in determining stock returns in emerging markets like Indonesia.

This research offers a fresh perspective that the application of ESG principles may not necessarily result in profitable investment returns. This occurs because ESG is still viewed as a burden, and its implementation motivation is often only to appear as a company that cares about sustainability issues (David et al., 2025; Pratama et al., 2025). Practically, this research serves as a warning to investors in developing countries that sustainability practices currently do not yield profitable returns. Investors are better off focusing on profitability and business risk aspects if they seek adequate returns.

REVIEW OF LITERATURE

Signaling Theory

Signaling theory explains how companies convey information to external parties in situations where information asymmetry exists between managers and investors (Connelly et al., 2025). The theory was introduced by Michael Spence, who argued that parties possessing superior information can send signals to reduce uncertainty faced by other parties. In the context of capital markets, corporate managers generally have more complete information about the firm's financial condition, operational performance, and future prospects than investors (Fathi et al., 2025). Therefore, companies provide signals through publicly

available information such as financial performance, corporate governance practices, and sustainability disclosures. These signals help investors evaluate the quality and prospects of a firm, which ultimately influences their investment decisions and the movement of stock prices in the market.

Within this framework, several corporate indicators can function as signals for investors, including Environmental, Social, and Governance (ESG) practices, profitability, and business risk. ESG disclosures can signal a company's commitment to sustainability and responsible governance, which may enhance investor confidence and improve market perception of the firm (Xiao et al., 2025). Profitability indicators, such as Return on Assets (ROA) and Return on Equity (ROE), signal the firm's ability to efficiently generate profits and maintain financial stability. Meanwhile, business risk reflects the level of uncertainty associated with a company's operations and future performance (Liu et al., 2024). Investors often interpret higher levels of risk as signals of potential instability, which may influence their willingness to invest. Therefore, signaling theory provides an appropriate framework for explaining how ESG, profitability, and business risk convey information to investors and affect stock returns in the capital market.

Environmental, Social, and Governance (ESG)

Environmental, Social, and Governance (ESG) refers to a framework used to evaluate a company's commitment to sustainable and responsible business practices. ESG encompasses three main dimensions: environmental responsibility, social impact, and the quality of corporate governance (Pollman, 2024). The environmental aspect relates to how companies manage environmental issues such as carbon emissions, energy use, and resource management. The social dimension focuses on relationships with employees, customers, and communities, including labor practices and social responsibility. Meanwhile, the governance dimension emphasizes transparency, accountability, and effective management structures. In the context of capital markets, ESG practices are increasingly considered by investors as indicators of long-term sustainability and risk management capability, which may influence investment decisions and market perceptions of a company (Giese et al., 2019).

Profitability

Profitability represents a company's ability to generate profits from its operational activities and available resources (Chipimo et al., 2025). It is commonly used as a key indicator to evaluate financial performance and operational efficiency. Higher profitability generally indicates that a company is effectively utilizing its assets and equity to create value for shareholders. Financial ratios such as Return on Assets (ROA) and Return on Equity (ROE) are widely used to measure profitability because they reflect how efficiently management converts investments into earnings (Yu & Xiao, 2022). In the context of investment decisions, companies with strong profitability are often perceived as having better growth prospects and financial stability, making them more attractive to investors seeking sustainable returns in the stock market (Zheng et al., 2025).

Business Risk

Business risk refers to the level of uncertainty associated with a company's operational activities and its ability to generate stable earnings in the future (Bothroyd & Thompson, 2025). This risk arises from various internal and external factors, including operational inefficiencies, market competition, economic fluctuations, regulatory changes, and technological developments. In the context of the capital market, business risk is an

important consideration for investors because it reflects the stability and predictability of a company's financial performance. Companies with higher business risk are generally perceived as having greater uncertainty in their future cash flows, which can affect investor confidence and influence their willingness to invest in the company's shares (Li & Sun, 2024).

Stock Return

Stock returns represent the financial gains or losses earned by investors from holding a company's shares over a certain period (Handayani et al., 2019). Returns typically arise from two main sources: capital gains, which occur when the market price of a stock increases, and dividend income distributed by the company to its shareholders. Stock returns serve as one of the most important indicators for evaluating investment performance and are widely used by investors to assess the attractiveness of a particular stock. In capital markets, stock returns are influenced by various factors, including company performance, market conditions, and investor perceptions of risk and future prospects (Wang et al., 2024). Therefore, understanding the determinants of stock returns is essential for both investors and researchers seeking to explain stock market behavior.

Hypothesis Development

The Influence of ESG on Stock Return

ESG is measured using ESG scores from Bloomberg, referring to research by D'Amato et al. (2021). The relationship between ESG and stock returns can be explained through signaling theory. This theory posits that companies with strong ESG practices provide positive signals to the market about managerial quality and future prospects. These positive signals suggest that the company has good risk management and the ability to adapt to environmental and social changes, which are critical for the company's sustainability in the future (Chan, 2025; Xiao et al., 2025).

Ignatov & Rudolf (2023) shows that companies with high ESG scores tend to have better stock returns because investors believe these companies have lower risks and higher growth potential. Additionally, studies by Jin (2023) also show that strong ESG performance is linked to lower stock volatility and higher stock returns. The logical reason behind this hypothesis is that companies with good ESG policies are better at maintaining good relationships with stakeholders and are more prepared to face stringent regulations and social and environmental challenges. Therefore, it can be expected that companies with robust ESG practices will have higher stock returns than those that do not prioritize these factors.

H1: ESG positively influences stock returns.

The Effect of Profitability on Stock Return

Profitability is measured using Return on Assets (ROA), which reflects the company's ability to generate profits from its assets (Kadarningsih et al., 2020). The relationship between profitability and stock returns can be explained through signaling theory. According to this theory, companies with high profitability send positive signals to the market about their ability to utilize resources efficiently. These positive signals indicate that the company can manage resources efficiently, generate stable profits, and has good future prospects (Liu et al., 2024a). Therefore, investors see companies with high profitability as more reliable and having lower risks, which ultimately increases demand for the company's stock and boosts its price.

Taufiqurrahman & Sudaryati (2024) shows that companies with high profitability tend to experience better stock returns because they have the capacity to generate stable profits, making investors feel safer about investing. Furthermore, Damayanti & Pertiwi (2022) also found that high profitability sends positive signals to investors regarding the company's healthy financial performance and better future prospects. The logical reason behind this hypothesis is that companies that can consistently generate profits are more trusted by investors, which drives up stock prices and results in higher returns. Therefore, it can be expected that good profitability will positively influence stock returns.

H2: Profitability positively influences stock returns.

The Effect of Business Risk on Stock Return

Business risk refers to the uncertainty surrounding potential profits or losses arising from operational activities in a particular industry (Li & Sun, 2024). The relationship between business risk and stock returns can be explained through signaling theory. According to this theory, companies facing high levels of risk send negative signals to the market regarding their stability and future prospects (Connelly et al., 2025). These negative signals suggest that the company may struggle to manage existing uncertainties, increasing investor risk perception about the company (Liu et al., 2024b). Investors tend to avoid companies with high business risks because they perceive these companies as less stable and more likely to face financial losses, which may lower stock demand and negatively impact the company's stock returns (Aziz & Chariri, 2023).

Previous research has shown that companies facing higher business risks often experience lower stock returns. According to Handayani et al. (2019), companies with high risks are often seen as riskier by investors, leading to uncertainties about the returns that will be received, thus reducing investment interest and negatively affecting stock prices. This is consistent with research by Li & Sun (2024), which found that companies with higher levels of risk tend to experience lower stock returns due to increased instability and volatility caused by the risk. Therefore, it can be expected that high business risks will send negative signals to the market and negatively impact stock returns.

H3: Business risk has a negative impact on stock returns.

RESEARCH METHOD

This study employs a quantitative approach to analyze the impact of a combination of external factors, such as ESG (Environmental, Social, Governance) and business risk, as well as the internal factor, profitability (measured by Return on Assets, ROA), on stock returns of companies listed on the Indonesia Stock Exchange (IDX) during the period from 2020 to 2022. The study includes all publicly listed companies on the IDX, excluding companies in the financial sector, which were excluded due to their distinct nature in risk management and financial performance. After excluding financial companies and those without ESG scores for the study period, the final sample consists of 34 companies, or 102 annual observations.

Company ESG data is obtained from Bloomberg, while data on profitability and business risk, such as ROA, as well as stock returns, are sourced from the annual financial statements published by each company. To analyze the data, panel data regression methods are used, allowing for the examination of the relationships between the variables while accounting for differences between companies and changes over time. Before conducting the

regression analysis, model tests are performed to determine the most suitable model for the data, using the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). The selection of these models aims to ensure that the research results accurately reflect the true impact of ESG, profitability, and business risk on stock returns, taking into account the heterogeneity between companies and the temporal variations within the study period (Anwar & Muhammad Nursan, 2025).

The following is the regression model for this study:

$$Return_{i,t} = \alpha + \beta_1 ESG + \beta_2 ROA_{i,t} + \beta_3 Risk_{i,t} + \varepsilon$$

In this model, return refers to the stock return of the company, which serves as the dependent variable. Meanwhile, ESG, ROA, and Risk are the independent variables. ESG represents the ESG score, reflecting the company's performance in the environmental, social, and governance aspects. Company profitability is measured using Return on Assets (ROA), which indicates the company's efficiency in generating profits from its assets. Business risk, on the other hand, is calculated using the ratio of EBIT (Earnings Before Interest and Taxes) to total assets, which reflects the company's ability to manage operational risks. The coefficients in this model represent the magnitude of the effect of each variable on stock return, while the error term accounts for factors not explained by the existing variables. This regression model is used to explore the relationship between these factors and stock returns, aiming to identify the impact of these factors on the stock performance of companies in the Indonesian market.

Table 1.
Variables Measures and Research Sample

Variable Name	Source	Measures	Sample Total
Stock Return	IDX	Capital Gain (Loss) + Yield	102
ESG	Bloomberg	ESG Total Score	
Profitability	Financial Report	Net Profit / Total Asset	
Business Risk	Financial Report	EBIT / Total Asset	

Source: Data processed by researcher

RESULTS AND DISCUSSION

Table 2 provides an overview of the descriptive statistics for the four variables analyzed in this study. The ESG score has an average of 52.40 with a standard deviation of 18.73, indicating a significant variation in companies' sustainability performance, with a minimum value of 16.07 and a maximum of 85.25. Profitability, measured by Return on Assets (ROA), has an average of 0.076 and a standard deviation of 0.100, suggesting that most companies experience positive profitability, although there are companies with negative values, such as -0.17, and the highest reaching 0.56. Business risk, calculated using the ratio of EBIT to total assets, has an average of 0.080 and a standard deviation of 0.099, indicating relatively small variation in the level of risk faced by companies, with a minimum value of -0.18 and a maximum of 0.45. Stock return has an average of -0.005 and a standard deviation of 0.398, showing that most companies experience negative returns, with a minimum value of -0.58 and a maximum of 2.25, reflecting high fluctuations in stock returns in the market.

Overall, these descriptive statistics show significant variation in each variable, reflecting considerable differences between companies in terms of ESG scores, profitability, business risk, and stock returns in the Indonesian market.

Tabel 2.

Summary Descriptive Statistic					
Nama Variable	Obs	Mean	Std. dev.	Min	Max
ESG	102	52.40	18.73	16.07	85.25
Profitability	102	0.076	0.100	-0.17	0.56
Business Risk	102	0.080	0.099	-0.18	0.45
Stock Return	102	-0.005	0.398	-0.58	2.25

Source: Data processing result with Stata 17

Table 3 presents the results of the fixed effects regression, which examines the impact of ESG scores, profitability, and business risk on the stock returns of companies listed on the Indonesia Stock Exchange during the period from 2020 to 2022. In this analysis, we use fixed effects regression to account for the differences between companies that may affect the dependent variable. The fixed effects model was selected after performing model selection tests, specifically the Chow test and the Hausman test. The results of the fixed effects regression indicate that the ESG, profitability, and business risk variables have varying effects on stock returns, with each having significant and insignificant coefficients.

Tabel 3.

Panel Data Regression Result				
Variable Name	Coefficient	t	p >	
ESG	-0.003	-0.59	0.559	
Profitability	1.652	2.10	0.039***	
Business Risk	-2.238	-2.13	0.037***	
R Square			0.291	
F Statistik			0.000***	
Chow Test			0.000***	
Hausman Test			0.000***	

Source: Data processing result with Stata 17

Based on the regression results, the ESG variable shows a negative coefficient of -0.0038 with a p-value of 0.559, indicating that ESG does not have a significant impact on stock returns. This suggests that sustainability performance, as measured by the ESG score, is not strong enough to influence stock returns in the Indonesian market. This finding is consistent with previous studies, such as those by Bolton & Kacperczyk (2021), which show that the implementation of high ESG standards does not always correlate with better financial performance. In Indonesia, the prevalent phenomenon of greenwashing can also explain these results, where companies often claim to have adopted ESG principles without actual implementation, causing investors to not respond by increasing their interest in the company's stock (Pratama et al., 2025). From a signaling theory perspective, if the public or investors find that a company is involved in greenwashing, the market's reaction can be highly negative, especially in situations where transparency and accountability are highly valued (David et al., 2025; Xiao et al., 2025). A decrease in stock prices and investor

avoidance of companies proven to engage in greenwashing can occur, leading to a significant decline in stock returns. Therefore, while ESG scores may send a positive signal, their impact on stock returns is not significant enough in emerging markets like Indonesia.

The regression result between profitability and stock return shows that profitability, measured by Return on Assets (ROA), has a positive coefficient of 1.652 with a p-value of 0.039. This means that profitability has a significant positive impact on stock returns. This finding supports the hypothesis that more profitable companies tend to have higher stock returns. This is in line with signaling theory, which states that companies with high profitability send positive signals to the market regarding operational efficiency and stable financial prospects. Research by Damayanti & Pertiwi (2022) dan Taufiqurrahman & Sudaryati, (2024) also shows that high profitability drives stock price increases because investors perceive these companies as more capable of generating consistent profits. Thus, this result confirms that profitability is an important factor for investors when making investment decisions in the Indonesian stock market. The higher a company's ability to generate profits from its assets, the higher the stock return it will achieve.

Business risk, calculated using the ratio of EBIT to total assets, has a negative coefficient of -2.238 with a p-value of 0.037, indicating that business risk has a negative impact on stock returns. This result shows that the higher the risk faced by a company, the lower the stock returns received by investors. This is consistent with signaling theory, which suggests that companies with high risk levels tend to show greater stock price volatility, which can reduce investor interest in investing. This finding is supported by Handayani et al. (2019) and Li & Sun (2024) who found that companies with high risk often experience lower stock returns due to greater uncertainty about the company's future performance. Therefore, companies that are able to manage risk effectively, maintain operational stability, and mitigate potential losses tend to be more attractive to investors, which, in turn, can increase their stock returns.

The R-squared value of 0.291 indicates that this model can explain about 29.1% of the variation in stock returns. While this value shows that the model can explain a portion of the variation in stock returns, there are other factors outside the model that also influence this dependent variable. Nonetheless, the highly significant F-statistic value (0.000) suggests that this model is highly relevant in explaining the relationship between the independent variables and stock returns.

CONCLUSION

This study aims to examine the impact of ESG, profitability, and business risk on stock returns. Simultaneously, the ESG, profitability, and business risk variables significantly affect stock returns in the Indonesian market. Partially, ESG does not show a significant effect on stock returns, which may be caused by the phenomenon of greenwashing, which is common in Indonesia. Greenwashing creates negative signals for investors, influencing their investment decisions. On the other hand, profitability is found to have a positive effect on stock returns, in line with signaling theory, where more profitable companies send positive signals to the market and increase investor interest. Conversely, business risk has a negative impact on stock returns, indicating that companies with higher risks tend to experience greater stock price volatility, reducing investor appeal and leading to lower stock returns. These findings provide recommendations for market regulators to improve ESG disclosures

to create a more transparent investment climate in Indonesia. The theoretical implication of this study enriches the understanding of the relationship between ESG, profitability, business risk, and stock returns, particularly in emerging markets like Indonesia. This study shows that, although ESG sends a positive signal, other factors such as profitability and risk management play a more significant role in influencing investment decisions. Practically, these findings can serve as a consideration for investors to pay closer attention to factors such as operational efficiency and risk management when making investment decisions.

This study has several limitations that should be considered for future research. One limitation is the sample size, which only includes companies listed on the Indonesian stock exchange, limiting the generalization of the findings to other markets. Additionally, the use of ESG Scores as a measure of sustainability may not fully reflect the actual implementation of ESG principles, considering the phenomenon of greenwashing. Further research is recommended to expand the company sample, explore more tangible ESG implementation, and consider external variables such as government policies and global economic conditions that may affect stock returns.

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