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ESG Performance and Indonesia Stock Return

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A B S T R A C T

As the sustainability become imperative, investors started to pay attention on how ESG performance affect the market performance. This study aims to analyze the influence of ESG performance on stock returns and volatility, with Covid-19 stringency posits as moderating variable. This study include all companies listed on the Indonesia Stock Exchange spans from 2020 to 2022, resulting 150 observations. Employing panel regression, this study exhibit that the Social aspect significantly influence stock returns, while environment aspect has a significant effect on stock return. Further, it has also revealed that covid-19 stringency proved to moderating the relationship between Governance and ESG on stock volatility, implying the prominence of government intervention during the pandemic. This finding is expected to be useful for investors who are concerns on ethical and sustainability point of view. By understanding the ESG- market performance nexus, investors are expected to have clearer picture on sustainable stock selections.

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1. INTRODUCTION

The Sustainable economic development is conceptually constructed by the ESG concepts, which consist of Enviromental, Social, and Governance (Li et al., 2021; Torre et al., 2020; Xu et al., 2023). ESG issues are increasingly prevalent along with the increasing problems of environmental damage, including in Indonesia (Setiani, 2023). This issue has become an important topic in the global economy, partly due to the mismanagement of resources that are used to obtain large economic benefits. It also holds responsible and sustainable principles that have grown significantly in the last four decades as they relate to moral decisions.

Information on a company's ESG report is generally obtained through a company's financial statements, sustainability reports, listed company websites, external data providers, questionnaires, and other sources (Kehati, 2022). Initially, the Indonesian government did not require companies to present sustainability reports, so companies volunteered to present these reports. Some companies present sustainability reports in accordance with GRI or Global Reporting Initiative guidelines (Duan et al., 2023). The number of companies that prepare sustainability reports is increasing every year. This is a form of responsibility for companies to care about the surrounding environment, maintain social relations, and stakeholders in implementing good corporate governance data (Setiani, 2023). Companies are now always concerned about improving corporate performance. Several studies examine various factors to improve company performance (X); one example is regarding environmental, social, and governance (ESG) information to improve company performance (Alareeni & Hamdan, 2020; Bhaskaran dkk., 2021; Bodhanwala & Bodhanwala, 2021; Qoyum dkk., 2021; Yoo & Managi, 2022)

Generally, investors are facing several challenges when stock prices experience significant volatility in the short and long term. According to (Agustin, 2022) investors need to analyze company fundamentals so that the movement of a company's stock price can reflect better intrinsic value. In making stock investment decisions, investors will choose stocks that provide a high rate of return. This rate of return can assess the company's ability based on the company's performance report (Bermejo & De La, 2019; Suhadak et al., 2019). If the performance of a company's financial statements is good, the profits earned will increase and the rate of return on shares obtained by investors will also increase, otherwise if the performance of the company's financial statements is poor, investors prefer not to buy shares and tend to sell these shares (Bintara, 2020; Mudzakar & Wardanny, 2021). However, due to market efficiency, stock prices sometimes do not reflect the true intrinsic value of the company. As a result, stock prices will tend to fluctuate and are difficult to predict (Sunaryo, 2022).

With the increasing market attention to environmental issues, ESG scores are of concern to investors in conducting fundamental analysis. Investors assume that the better a company's ESG score, the better it will perform in the stock market (Agustin, 2022; Zhang et al., 2022). With the increasing market attention to environmental issues, ESG scores are of concern to investors in conducting fundamental analysis. Investors assume that the better a company's ESG score, the better it will perform in the stock market. (Xu et al., 2023) found that ESG scores had a significantly positive impact on stock returns during the COVID-19 crisis, with ESG scores affecting stock returns and providing a greater and higher positive impact on post-crisis stock return values. The researcher conducted a study that resulted in ESG scores with a significant positive impact during COVID-19, where ESG scores themselves affect stock returns and have a large impact on stock returns. (Torre et al., 2020) states that ESG has a significant correlation in companies with the stock returns provided, meaning that investment in ESG can provide higher profits for companies.

The share price is the price at which a share will be traded in the capital market with the level of profit expected by investors for their investment in a certain period of time, which will be obtained in the future (Endri et al., 2019). Stock price is one of the variables that encourage investors to contribute to the courage of investors to survive under existing risks. The reason for investors to contribute is to increase the value of shares, without ignoring other business opportunity factors that

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are maintained (Agustin, 2021; Fu, 2023). Stock returns make opportunities, which means that the greater the risk borne by investors, the greater the benefits obtained, and vice versa (Parapat et al., 2018; Rahim et al., 2023). In what follows, investors must be astute in finding effective ventures that offer the highest expected returns at a given level of risk or speculations that offer specific returns at the lowest level of risk (Tandelilin, 2017). On the other hand, volatility reflects increase or decrease in stock prices in a certain period (Sadiq et al., 2013). Hussainey et al., (2011) stated that volatility is a measure in determining the risk in an investment accompanied by the rate of change in stock price in a certain period of time. So it is concluded that stock price volatility is the risk borne by investors in each investment owned. Both the price and the volatility of stocks should be a concern for investors in implementing an investment strategy. Price becomes a reference to see potential returns, while volatility can be used to take into account risk factors.

Data Information on company ESG reports is generally obtained through a company's financial statements, sustainability reports, listed company websites, external data providers, questionnaires, and other sources (Kehati, 2022). Companies have a strong concerns mainly for at least two reasons. First, as the ESG issues are highly raised during recent decades, Indonesia governments is start to regulate the sustainability report to encourage the companies' s ESG performance. Second, since ESG has become global issues, good ESG performance will attract more investors to maintain sustainable investment. One of the corporates ESG practices was initially widely done through the Corporate Social Responsiblities (CSR) practices. Companies with high CSR tend to achieve higher stock returns, profitability, growth, and sales per employee than companies with low CSR (Liu et al., 2023). The ESG Score can also be an important reference for companies, financial markets, and academics as one of the sustainable assessment factors for companies (Gillan et al., 2021).

In addition, this concept also holds responsible and sustainable principles that are growing significantly. The ESG Score consists of each of the three pillar scores, namely, the environmental score covers resource use, emissions and innovation. Social score covers labor, human rights, community, and responsibility. While the governance score covers management, shareholders, and strategy in corporate social responsibility (CSR) (Kehati, 2022; Luo, 2022). Based on the ESG Score assessment under Thompson Reuters database, ESG performance score is ranging from 0-1. The higher the score, the better the companies in maintaining the ESG aspects.

Theoretical Framework

Stock price movements are generally predicted through fundamental analysis, one of which is by seeing whether the stock price is still reasonable or undervalue. Fundamental analysis is an analysis to calculate the intrinsic value of shares using data from the company's financial statements (Muhammad & Gohar, 2021; Parapat et al., 2018). In analyzing the company, investors will study the financial statements of the company with the aim of knowing the company's weak and strong points (Bintara & Tanjung, 2019). Therefore, a fundamental approach can be taken to look at research on a stock with information on financial ratio analysis techniques which are the result of further calculations of the company's financial statements. Financial ratios are one of the alternatives to find out that the financial information generated can be useful for predicting stock returns in the capital market.

Theory behind the relationship between fundamentals and stock performance is based on Signaling theory. According to Trisnowati et al., (2022), the reason why a company has the desire to publish information about financial reports to external parties is Because there is information asymmetry between the company and external parties since the company knows more about future work prospects than outsiders . Admiral & Raharja (2023) and Suhadak et al., (2019) explains that the first party sends information through signals that are beneficial to the second party. Signal senders will use a variety of media to convey signals to investors to provide clues to the company's

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performance so that it can be responded to in accordance with what is expected of the company (Hertina & Saudi, 2019) .

In general, signal theory relates to a company's understanding of how a signal is very useful and valuable to a company, while other signals are not useful(Puspitaningtyas, 2019). Signaling theory is a theory that focuses on price difficulties in the market that affect investors' decisions (Endri et al., 2019; Harimauwan & Lukman, 2023; Trisnowati et al., 2022). Signal theory in a company is to provide signals to the public on the company's performance. The information received as well as the condition of the stock always affects the investor's decision as the recipient of the signal (Harimauwan & Lukman, 2023).

Relationship between ESG Score and Stock Return

Torre et al., (2020) examined the effect of ESG Score on stock returns listed in the Eirostoxx50. The results show that ESG has a positive effect on stock returns. Yoon et al., (2018) supports this research and proves that ESG has a significant effect on stock returns. Setiani (2023) also analyzed and found that the coefficient value and significance on the ESG score showed a positive and significant relationship to the company's financial performance with a significance level of 5%. Gavrilakis & Floros (2023) has investigated how ESG scores affect the stock performance of companies included in the Eurostoxx50 index and concluded that performance is not affected by company actions in terms of ESG commitments.

In conducting investment analysis, stock return is one of the important aspects to consider. Basically, investors are more willing to hold companies with the highest ratings than those with low ESG scores (Xu et al., 2023). Low ESG scores tend to be overlooked stocks while the highest ESG scores will be in higher demand (Kim & Koo, 2023; Luo, 2022). Therefore, according to recent research by Pedersen et al., (2021) , showed that low ESG stocks generate higher expected returns than high ESG stocks. Based on the arguments that have been described, researchers can conclude that:

H_1: ESG Score has a significant positive effect on Stock Return.

Relationship between ESG Score and Stock Volatility

Research found by Zhou D dan Zhou R (2021) shows evidence that companies that implement ESG very well are able to increase the stability of the company which is thus able to reduce stock volatility and negative impacts during the crisis. Meanwhile, according to Klint & Norel (2023) shows that portfolios with higher ESG generate a stronger correlation between ESG and volatility. Albuquerque et al. (2020) shows that companies with high environmental and social levels can lower stock volatility. Liu et al., (2023) stated that the combined effect of ESG factors with the higher COVID-19 pandemic can be seen as a risk that causes increased sales and high volatility.

H_2: ESG Score has a significant positive effect on Stock Volatility.

Control Variables

According to Mudzakar & Wardanny (2021) Price Earning Ratio (PER) value shows a comparison of stock prices on the capital market with earnings per share presented in the company's financial statements. This ratio also shows how much investors will value the price of a stock against the amount of income of a company. Based on research according to Parapat et al., (2018), Price Earning Ratio (PER) variable has a significant value, thus it can be said that the PER variable partially has a significant effect on the rate of return on shares. When the PER value is higher, it indicates that the performance in a company is getting better, but if the PER value is too high it can also indicate that the stock price is irrational (Parapat et al., 2018; Sunaryo, 2022). Investors tend to be cautious

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when buying shares of companies with high PER values and investors prefer not to invest their shares in these companies, so the rate of return on shares will tend to decrease (Sunaryo, 2022).

The scale of the company can be grouped as large and small scale companies, which are measured based on total assets, total sales, and share value (Novari & Lestari, 2016). Based on research according to (Rudangga & Sudiarta, 2016) that firm size has a significant positive effect on the value of a company. The researcher also broadcasts that profitability also has a significant effect on firm value. The government directs that sustainable investments can be directed towards maintaining the climate and saving resources. This investment aims to restore the economy during COVID-19. According to research RA Albuquerque et al., (2021) and Wang et al., (2021), companies that gain more are those with higher ESG scores and less volatility, compared to those with lower ESG scores during COVID-19. Research suggests that companies with high ESG scores will be more resilient to the impact of Covid-19 than companies with lower ESG scores.

During the COVID-19 pandemic, investors only thought about getting high income, without paying attention to the environmental factors that occurred. Therefore, the COVID-19 pandemic has become the turning point of the new economy in most countries. With the complication of government regulations in Indonesia limiting activities to reduce the spread of the COVID-19 virus that causes losses to the country's economy. This study aims to analyze the effect of ESG Score on Market performance in Indonesia. Despite many other studies that focuses on stock return on measuring the market, this study adding the volatility aspect for two reasons. First, volatility is a risk aspect that must be considered in making decisions. Second, our focus is on Covid-19 pandemic, which has caused stock market volatility to increase. Further, we added Covid-19 stringency as moderating variable between ESG-stock nexus as government has implemented many policies during the pandemic. This study is expected to be useful for investors who are not only focused on profits, but companies also need to pay attention to environmental sustainability, inter-social relations, and good corporate governance. ESG score is interesting to study because the level of concern of the company will provide information on sustainability, corporate risk profile, as well as corporate reputation, and help investors and stakeholders to make decisions based on companies in an industry or sector (Admiral & Raharja, 2023). Therefore, the researcher is interested in raising further research on the topic.

2. METHODOLOGY

2.1 Data

In this study using a quantitative approach, namely by testing the hypothesis first and then testing it using the data that has been collected. The research data is secondary data obtained through the company's financial statements in the annual report available on the Indonesia Stock Exchange (BEI, 2023). The population in this study are all companies in Indonesia listed on the Indonesia Stock Exchange (IDX), of which there are 50 company samples with 150 company data to be analyzed. The sample data used is based on a 3-year time span in the 2020-2022 period with an ESG score index consisting of Environmental Score, Social Score, and Governance Score as a benchmark for investors to make decisions in investing of course. The data analysis method used in this study is the panel regression method which is a mixture of time series and cross section data. Specifically, this paper estimates a panel regression model of 50 companies obtained through the Indonesia Stock Exchange (IDX) which can be used as a reference for investors in making investment decisions in Indonesia. Furthermore, the data can be analyzed using software, namely Eviews 12.

2.2 Definition of Variables

Table 2. Definition of Variables

Variables	Definition
Stock Return	The income received by the company will then be distributed to shareholders in the form of dividends paid by the company and capital gains

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	resulting from the difference between the selling price and the purchase price of the company's shares.
Stock Volatility	Fluctuations in the stock return of a company with a security or portfolio over a period.
ESG Score	Part of the non-financial corporate indicators that include sustainability, ethics, and corporate governance issues to evaluate companies on corporate sustainability aspects. The ESG Score is divided into three aspects, namely Environment (E) , Social (S), and Governance (G) which haes its own score on each aspect.
Price to Earning Ratio (PER)	Comparison of stock prices in the stock market with earnings per share presented in the company's financial statements.
ROE	Profitability is the ability to make a profit.
Firm Size	The scale is measured based on the size of the company in various ways, such as total assets, sales, log size, stock market value, market capitalization, and others that are correlated.
Covid-19	Data set from COVID-19 data managed by Our World in Data-Statistics and Research.

2.3 Measurement of Variables and Data

Tabel 3. Measurement of Variables and Data

Variable	Formula	Source
Dependent Stock Return	$\boldsymbol{Stock\ Return} = \frac{Price\ Per\ Share_{it} - Price\ Per\ Share_{\,it-1}}{Price\ Per\ Share_{\,it-1}}$	Erdem (2020); Schwert, (2002)
Volatility	$\boldsymbol{Vol} = STDReturn\, x\, \sqrt{252}$	
Independent ESG Score	This study is using scores provided by Thompson Reuters Database	Setiani (2023)
Control Variables Price Earning Ratio	$\boldsymbol{PER} = \frac{Price\ Per\ Share}{Earning\ Per\ Share}$	Mudzakar et al., (2021)
Firm Size	$\boldsymbol{Size} = Ln\ (Total\ Asset)$	Bintara, (2020)
ROE	$\boldsymbol{ROE} = ROA \times \frac{Asset}{Equity}$	Mudzakar et al., (2021)
Covid-19		

Based on the previous development of the hypothesis above, this research model can be described as follows in **Figure 1:**

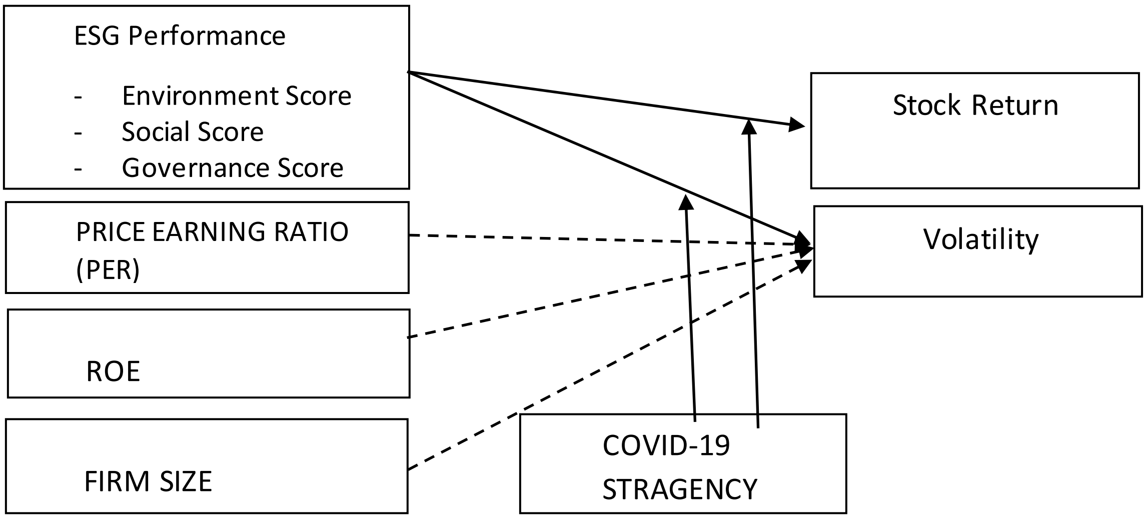

Figure 1. Research Framework

This research obtained variable data including, namely,*stock return, volatility, ESG Score (Environmental Score, Social Score,* dan *Governance Score), price earning ratio (PER), Firm Size,* ROE, *which is moderated by Covid-19 Strategy. The model equation is as follows:*

$$Stock\ Return_{i,t} = \propto_0 + \propto_1 Covid_{e,t} + \propto_2 FTSEESG_{i,t} + \propto_3 FTSEESG_{i,t} + \propto_4 X_{i,t} + \delta_i + \mu_{i,t}$$

$$Volatility_{i,t} = \propto_0 + \propto_1 Covid_{e,t} + \propto_2 FTSEESG_{i,t} + \propto_3 FTSEESG_{i,t} + \propto_4 X_{i,t} + \delta_i + \mu_{i,t}$$

The index refers to the year of observation based on panel regression data where in this data, the dependent variable is stock return and volatility which is modeled with Covid-19 agility, while the independent variable is ESG Score which consists of environmental score, social score, and governance score and volatility. While the control variables in this study are measured by price earning ratio, return of equity and firm size which is measured using the natural logarithm of the company's total assets. For companies, assets are seen as having power in several company activities, such as greater bargaining power for suppliers and buyers so that they can positively affect company value. Therefore, researchers expect a positive relationship between company size and stock returns and a negative relationship between company size and stock price volatility. Return on Equity (ROE) is used to reflect the profitability of the company (Cho & Tsang, 2020; Van Beurden & Gossling, 2008; Waddock & Graves, 1997). In carrying out sustainable corporate performance, we measure the ESG value of companies taken from Refinitiv Eikon Datastream, and Covid-19 tightness taken from Our World in Data Web.

The ESG Score consists of each of the three pillar scores, namely, the environmental score covers resource use, emissions and innovation. The social score covers labor, human rights, community, and responsibility. While the governance score covers management, shareholders, and strategy in corporate social responsibility (CSR) (Luo Di, 2022). This ESG risk level also measures the extent to which the company is in danger caused by ESG factors. In recent years, the increasingly popular ESG concept has begun to gain support and companies are increasingly concerned about the existence of this ESG concept. With the existence of companies that implement ESG, one of them is to screen investments in company policies and encourage companies to act responsibly. With the ESG concept being popular among our companies, the author assumes that the 3-year period 2020-2022 is the ideal sample to analyze.

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3. RESULT AND DISCUSSION

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
STOCK RETURN	150	-0.69715	4.60284	0.06738	0.53188
VOLATILITY	150	0.00724	0.30080	0.03353	0.03853
E- SCORE	150	0.12097	87.17503	45.06904	23.20412
S- SCORE	150	5.60622	96.01648	58.27692	21.55240
G- SCORE	150	2.97733	94.01335	54.04406	23.82556
ESG SCORE	150	10.29313	88.10769	54.19255	19.52716
COVID-19	150	14.93000	68.06000	49.8933	24.81198
PER	150	-38.28748	2425.31320	39.30974	202.80585
FIRM SIZE	150	19.03258	33.65519	26.15929	4.97378
ROE	150	-1.50300	3.30200	0.19771	0.44378
Valid N (listwise)	150				

Source : Authors, 2024

In this study there are 50 samples of companies in Indonesia and listed on the Indonesia Stock Exchange (IDX) that can be used in this study. Table 2 contains the results of descriptive statistical data processing of all variables tested. Based on the data above, the average value of the ESG score is 54.19, which means it shows that ESG performance has a satisfactory level and is transparent about important data to the public.

When viewed based on the three aspects of the ESG score, the highest average value is in the S score of 96.01, with a minimum score of 5.60. This shows that the objects studied have good performance in social aspects. However, E and G still need to improve their performance, especially in aspect E, which shows that the company has not been able to disclose information about the company's environment. In the three variables moderated by COVID-19, the minimum value is found in E*COVID, which is 8.23, while the highest maximum value is shown in the maximum value of S*COVID of 6534.88. This shows that during COVID-19, the value of the E score has decreased compared to the other three aspects, such as S and G. The maximum value owned by S*COVID is the highest, indicating that COVID-19 affects the social value of stock value. . ESG*COVID has an average value of 2667.70 with a maximum value of 5935.99731 and a standard deviation of 1690.89657269.

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Regression Results

Table 3. Regression Results

Variable	1	2	3	4	5	6	7	8
	Stock Return				Stock Volatility			
ENVIRONMENT	0.011172				-0.000203*			
	(0.008842)				(0.000105)			
SOCIAL		0.017877*				-0.0000932		
		(0.010306)				(0.000129)		
GOVERNANCE			0.002584				-0.0000817	
			(0.007789)				(0.0000927)	
ESG SCORE				0.006979				-0.000233
				(0.009708)				(0.000113)
E*COVID	-0.0000047				-0.00000192**			
	(0.0000818)				(-0.000000967)			
S*COVID		-0.000117				-0.00000136		
		(0.0000931)				(0.00000116)		
G*COVID			-0.0000226				-0.00000207**	
			(0.0000838)				(0.000000998)	
ESG*COVID				-0.0000278				-0.00000234**
				(-0.0000979)				(0.00000114
FIRM SIZE	-0.73064**	-0.712669**	-0.593193*	-0.596669*	0.001815	-0.0000431	0.0000431	-0.000712
	(0.343675)	(0.338964)	(0.3347160)	(0.330999)	(0.004064)	(0.0004237)	(0.004237)	0.003847
ROE	0.13198	0.153538	0.125469	0.130847	-0.00275*	-0.003378*	-0.004001**	-0.003443*
	(0.165257)	(0.165537)	(0.169405)	(0.166923)	0.001954	(0.002069)	(0.002016)	(0.001940)
PER	0.0000652	0.000101	0.0000676	0.0000660	0.00000422	0.00000386	0.00000404	0.00000394
	(0.000287)	(0.000287)	(0.000292)	(0.000290)	(0.00000340)	(0.00000358)	(0.00000348)	(0.00000337)
CONSTANT	18.80818***	17.78126***	15.61249*	15.4534*	-0.010693	0.033807	0.043852	0.058909
	(8.917267)	(8.775105)	(8.747831)	(8.685025)	(-0.105436)	(0.109677)	0.104105	0.100936
R-SQUARED	0.311788	0.318885	0.297698	0.300748	0.981668	0.979727	0.981049	0.982005

Source: Authors, 2024

Based on table 3, equation (1), (2), (3) and (4) show the panel regression results of ESG scores on stock return. In the table, the assessment is processed separately and combined as a whole. The results of this study indicate that the S score has an effect on the value of stock returns. The results of this study are not in line with the research proposed by Torre dkk. (2020) and Chininga dkk. (2023). But other research from Behl dkk. (2022) found that ESG also does not affect stock returns and firm value. While pillars E, and G do not show significance to stock returns which means investors are willing to accept lower stock returns for more responsible stocks. In line with the research proposed by (Fu, 2023) found similar results to this study and showed that if a company gets a greater ESG score, then its shares will become unstable. If we look at the effect during COVID-19 on the value of stock returns, there is no significant value found among the three pillars of E*COVID-19, S*COVID-19, G*COVID-19, and ESG*COVID, which means that COVID-19 does not affect stock returns. However, the results of other studies show that there are other factors that can trigger an increase in stock returns provided by a company.

The results of other regression models contained in table 5 also explain that equations (5), (6), (7) and (8) show the effect of ESG score on volatility, which is the level of risk accepted by the company based on the ESG value owned by the company. E value has a significant effect on stock volatility. Meanwhile, S and G values do not have a significant effect on stock volatility. The results of this study contradict the results of (Klint & Norell, 2023; Liu dkk., 2023; Zhou & Zhou, 2022) which states that ESG scores can impact the volatility of stocks with lower risk. However, the analysis above shows that high ESG scores result in high volatility.

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With the passage of the stock period, a positive influence on stock volatility will provide more varied stock returns for these companies by generating high volatility in the returns generated by the company's shares. Furthermore, if we look at the effect during COVID-19 on the value of volatility, there is a significant influence between E*COVID, G*COVID, and ESG*COVID. This means that companies that have ESG performance can cause a decrease in stock return volatility during the COVID-19 crisis. Companies that have a high ESG score have a smaller risk of being vulnerable to adverse events, ultimately if things get worse, the company will become smaller. However, in normal times, overall ESG and E performance worsen stock return volatility.

To sum up the explanation above, the data analysis results shows three main findings. First, ESG Scores has no significant effect on stock return. This happens because of the instability of the influence of COVID-19 which causes the share value of each stock to decrease. In line with the results of research conducted by Breitz & Partapuoli J (2020), this study shows that portfolios with low ESG scores show significant positive results on stock returns that occur during the COVID-19 period, where stock returns become lower during the COVID-19 crisis. Second, the environment aspect negatively impact the stock volatility, implies that companies with better environment performance tend to be less volatile than the companies with lack of environment performance. This occurred mainly because companies which concern on environment are typically have financial stability thus they have spacious capability on green finance allocation. Third, the interaction between environment, social and governance aspect with covid-19 stringency are negatively impact the stock volatility. This finding posits the importance of governance control and intervention during the pandemic or financial turbulence in order to maintaining the market stability.

4. CONCLUSION

ESG issues are increasingly prevalent along with the increasing problems of environmental damage, including in Indonesia. Basically, sustainable economic development is guided by the ESG concept, namely Enviromental, Social, and Governance. This study aims to analyze the performance of company shares that focus on ESG Score which can affect stock return and stock volatility where COVID-19 makes a benchmark for investors in investing in their company. The main results show that social aspect moderately influence the Stock return, while the environment aspect moderately reduce the stock volatility. Therefore, while companies may consider strengthening socially responsible practices to improve long-term financial performance, investors need to pay attention on changes in the market dynamics during times of crisis such as Covid-19. In this sense, environment and social aspect are important to depicting companies's risk profile. Further, It is important to note that government intervention during covid-19 pandemic is imperative to control market stabilizations. When recent literatures found that high ESG performance are mostly favorably to investors, this perspective might be different during the Covid-19 pandemic. In the period with high uncertainty, it is more important for investor to managing risk rather than obtaining abnormal returns.

However, this study only includes 50 Indonesia companies which has ESG scores as those are the only available in Thompson reuters database. Further research might consider to use other database which provides more ESG data. Future studies might consider the comparative performance of ESG stocks in normal and crisis period.

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