

THE EFFECT OF ESG DISCLOSURE ON ABNORMAL RETURN MODERATED BY FINANCIAL HEALTH DURING COVID-19 PANDEMIC IN INDONESIA

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ABSTRACT

This study examines the effect of ESG disclosure on abnormal return moderated by financial health during Covid-19 pandemic in Indonesia. ESG disclosure are assessed through the GRI Standard 2016 meanwhile abnormal return is calculated using the market-adjusted model. The population comprises manufacturing and energy companies listed on the Indonesia Stock Exchange (IDX) during 2020-2022. The sampling technique used in this study was a purposive sampling method with specific criteria, resulting in 104 sample companies being examined. Data analysis was performed using multiple linear regression and moderated regression analysis. The analysis results show that ESG disclosure significantly positively affects abnormal returns. In addition, financial health is shown to moderate the relationship between ESG disclosure and abnormal return, with the effect of increasing rather than decreasing the relationship.

Keywords: ESG Disclosure, Abnormal Return, Financial Health, Covid-19 Pandemic

INTRODUCTION

The capital market has become a vital financial mechanism for businesses in the modern economy (Ashraf, 2020). Stock is the most traded product in the capital market due to its popularity and liquidity. A company's annual report can significantly impact stock prices and returns, as investors use economic data to assess the state of the economy. When the economy performs better than expected, it creates more stock demand. Investment managers can predict abnormal returns using stock return data. Investing in stocks is an attractive alternative investment option because investors can speculate and expect profits from the owned stocks.

Abnormal returns, which can be positive or negative, indicate when actual investment returns deviate from expectations. Negative abnormal returns, where returns fall short of expectations, can be caused by economic shifts, industry dynamics, or company performance fluctuations. These returns help investors identify underperforming investments and make informed decisions. For instance, unexpected election results or instability can cause negative sentiment and reduced price movements, leading to negative abnormal returns (Lesmana & Sumani, 2023). Likewise, in terms of firm performance, negative abnormal returns can occur when the actual return falls short of the expected return, signaling that the stock has underperformed compared to the market (Hermuningsih et al., 2021).

Abnormal returns can be employed to ascertain the investor response, given that investor responses vary in accordance with the information available. The ability to access such information enables investors to make logical decisions that lead to expected outcomes. According to Wai-Khuen et al. (2023), one type of information often requested by investors for company disclosure is Environmental, Social, and Governance (ESG) to evaluate sustainability and responsibility practices. ESG disclosure is an essential measure of a company's connection to its community and the environment and reflects its resilience.

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In the current era, ESG factors are increasingly influencing the assessment of a company's value and long-term viability. This shift is driven by global concerns about environmental degradation, social unrest, and regulatory scrutiny, which threaten economic stability and society's well-being. The energy sector contributes significantly to greenhouse gas emissions that contribute to climate change. ESG disclosure is becoming increasingly important in the energy sector as companies recognize the need to balance financial performance with environmental and social responsibility.

Article 74 of Law No. 40 of 2007 on Limited Liability Companies stipulates corporations' social and environmental responsibility in or associated with natural resources. In Indonesia, environmental problems caused by a company's production processes are often observed, mainly because manufacturing companies generate industrial waste or use materials harmful to the local environment. The problems caused by the manufacturing companies led to protests that disrupted the company's operations, carried out by various interested parties, both internal and external.

According to the Circular Letter of PJOK (Financial Services Authority Regulation) Year 2021, sustainability reports on corporate responsibility towards the environment and social conditions must follow standardized guidelines by the Global Sustainability Standards Board, recognized as the GRI standard. Disclosure of positive ESG information can help companies improve public image and reputation (Gillan et al., 2021). Companies may be incentivized to proactively disclose more information in annual reports to signal their initiatives and commitment to sustainable and ethical business practices. This transparency enhances investors' perception of the company's value, potentially leading to increased returns as investors are more likely to invest in such companies.

Companies with higher ESG ratings demonstrated better resilience during the Covid-19 pandemic, as ESG practices help manage risks and reduce exposure to crises (Albuquerque et al., 2020). Indonesian studies have shown mixed results on the impact of ESG disclosure on abnormal returns. Syafrullah & Muharam (2017) present evidence that social performance and corporate governance have a significant impact on abnormal returns. Other studies indicate no impact of ESG on return volatility during the pandemic (Hutama & Budhidharma, 2022). The disparities in research findings highlight gaps and motivate further investigation.

The Covid-19 pandemic affects social and economic aspects globally, as well as causing widespread disruption to financial markets. The financial health of companies in Indonesia was severely impacted due to the global outbreak, as evidenced by the decrease in revenue and return on assets. A company's financial health refers to its financial condition during a specific period, which affects its performance and overall financial status. This research assesses financial health during the Covid-19 pandemic by using financial ratios to indicate company performance. Damayanti & Hardiningsih (2021) reveal that return on assets (ROA) is a useful measure to evaluate profitability, as it indicates a company's assets and potential to generate profits based on the amount of assets in its financial statements. Moreover, assets can indicate a company's well-being and liquidity.

This study aims to examine the causal relationship between ESG disclosure and abnormal returns in Indonesia, considering financial health as a moderating variable. Prior research by Li et al. (2022) and Albuquerque et al. (2020) suggest that ESG performance can significantly impact stock prices, especially during crises. The instability of the capital market and the deteriorating financial health of companies triggered by Covid-19 pandemic motivate the author to re-examine the reaserch. This research will further discuss the causality between ESG disclosure, its impact on abnormal returns, and how financial health can strengthen or weaken this relationship during the COVID-19 pandemic.

THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

This study approach aims to clarify the logical relationships between variables. It examines whether the independent variable affects the dependent variable being evaluated. The relationships between these variables are illustrated in Figure 1.

Figure 1 Conceptual Framework



Hypothesis Formulation

The Causality Effect of ESG Disclosure on Abnormal Return During Covid-19 Pandemic

ESG disclosure has become a significant trend among investors, emphasizing sustainable development alongside profitability (Tan & Zhu, 2022). This shift assists investors and shareholders in making investment decisions based on a company's overall performance rather than just its financial metrics. Companies with strong ESG performance demonstrate effective management and commitment to sustainable business practices. Signaling theory explains how companies use ESG performance to communicate value and credibility to investors. Companies aim to signal the benefits of ESG and also communicate a commitment to business sustainability in the future. Investors will interpret it as a positive or negative signal leading to stock demand and stock price.

The Covid-19 pandemic has heightened the focus on ESG concerns, prompting companies to publish more on ESG to potentially enhance performance during crises. Research indicates that firms with high ESG scores showed better corporate performance during the pandemic (Tekin & Güçlü, 2023). Additionally, companies with strong ESG practices were likely less affected by the pandemic (Mousa et al., 2022). However, some studies, like Hoang et al. (2022), suggest the pandemic could lead to declining stock returns despite good ESG performance. Firms prioritizing robust ESG practices often experience higher abnormal returns. For instance, Albuquerque et al. (2020) found that companies with higher ESG ratings had more abnormal returns. Conversely, Hutama & Budhidharma (2022) noted that ESG disclosure might not always lead to positive abnormal returns.

H1: ESG disclosure positively influences abnormal returns during the Covid-19 pandemic



The Moderation of Financial Health on The Relationship Between ESG Disclosure and Abnormal Return During Covid-19 Pandemic

The Covid-19 pandemic led to global economic stagnation as governments enforced mobility and social restrictions to control the virus spread. The companies experienced a decline in performance and financial health during the Covid-19 pandemic. The global outbreak severely impacted the financial health of companies in Indonesia, as evidenced by a decrease in revenue and return on assets. The Covid-19 pandemic has significantly impacted various industries, such as manufacturing and energy.

Management uses signaling theory to communicate information about the company's condition to stakeholders. This transparency helps reduce uncertainty and build trust with stakeholders. Companies with higher Return on Assets (ROA) tend to disclose ESG practices more efficiently, leveraging greater financial resources to invest in ESG initiatives and reporting systems (Daffa et al., 2023). High ESG disclosure and a high ROA encourage investor investment, increasing stock prices and returns. If the return exceeds expectations, it will result in a positive abnormal return. Conversely, companies with lower ROA may reduce ESG practices as assets will likely be allocated to other priorities.

Financial difficulty reduces a company's ability to maintain business continuity (Daryanto et al., 2021). Over 80 percent of large and medium-sized enterprises experienced revenue drops due to falling demand during the pandemic (Widiar & Setyahuni, 2023). If the asset is not maximized in selling goods and generating profits, the company will eventually become weak in financing its business activities in the long run. This study will explore whether the decline in financial health during Covid-19 pandemic moderates ESG disclosure on abnormal returns.

H2: Financial health decreases the influence of ESG disclosure on abnormal returns during the Covid-19 pandemic

RESEARCH METHODOLOGY

Operational Variable

This research uses three variables: abnormal return as a dependent variable, ESG disclosure as an independent variable, and financial health as a moderating variable,

1. Abnormal return

According to Munthe (2017), abnormal returns signify the difference between actual and expected returns. The relative difference between current and previous prices determines the actual return. Abnormal return computation in this study utilizes a market-adjusted model, assuming the market index return is the best estimate for a security's return at that moment. Market Return refers to the rate of return earned from investing in all stocks listed on the stock exchange. In research, the market return is reflected by the return of the Stock Composite Price Index (IHSG). The abnormal return calculation process follows specific steps Muthaharia and Yunita (2021) outlined.

A (1)	$(\mathbf{D}) \subset [1, 1]$
a. Actual Re	turn (R) Calculation
R _{it}	$=\frac{P_{it}-P_{it-1}}{P_{it-1}}$
	P_{it-1}
R _{it}	= Actual return on year t
P _{it}	= Stock price on year t
Pi _{t-1}	= Stock price on year t-1
b. Market Re	eturn (Rm) Calculation
Rm	$IHSG_t - IHSG_{t-1}$
i (iii)	- IHSG _{t-1}
Rm	= Market return on year t
IHSGt	= Stock Composite Index on year t



 $\begin{array}{ll} HSG_{t-1} & = Stock \ Composite \ Index \ on \ year \ t-1 \\ c. \ Abnormal \ Return \ (AR) \ Calculation \\ AR_{it} & = R_{it} - E[R_{it}] \\ AR_{it} & = Abnormal \ return \ on \ year \ t \\ R_{it} & = Actual \ return \ on \ year \ t \\ Rm & = Market \ return \ on \ year \ t \end{array}$

2. ESG disclosure

The measurement of ESG disclosure using the GRI Index 2016. The indicator from GRI utilized for assessing the company's ESG disclosure in the research comprises:

- a. GRI 300 environmental aspect
- b. GRI 400 social aspect
- c. GRI 102 governance aspect

The ESG disclosure variable score is calculated through a dummy variable by assigning a value of 0 if the company has not disclosed one of the items according to the disclosure and a value of 1 if the company has disclosed according to the indicator (Ghozali, 2021). The ESG disclosure is formulated as follows.

 $ESG \ disclosure = \frac{ESG \ indicator \ disclosea}{Number \ of \ indicators \ in \ GRI \ (102,300,400)}$

3. According to Hery (2016), profitability ratios serve as a tool to assess how well a company can generate revenue through its regular operations. A widely used metric for assessing profitability ratios is the return on assets (ROA). ROA is a short-term financial performance that describes the effectiveness of the company using asset resources to generate current profits. The ROA is formulated as follows (Yoon & Chung, 2018).

 $ROA = \frac{Net \ income}{Total \ assets}$

Control Variables

This research uses three control variables: firm size, PBV, and current ratio. Company size is measured by the number of assets owned by the company and converted into a natural logarithm (LN) form (Yoon & Chung, 2018). The Price-to-Book Value (PBV) ratio is calculated by dividing the market price per share by the book value per share (Darmadji & Fakhruddin, 2012). The current ratio is calculated by dividing a company's current assets by its current liabilities (Hanafi, 2016).

Population and Sample

The population in this research is business entities listed in the Indonesia Stock Exchange (IDX). The sample from the current population was chosen using purposive sampling. The criteria that must be met in this study are as follows.

- 1. The sample is a company listed on the IDX, mainly from the manufacturing and energy sectors.
- 2. The company publishes annual reports and sustainability reports containing the GRI standard during 2020-2022.
- 3. The company has complete data according to research needs during 2020-2022.
- 4. The company has conducted an Initial Public Offering (IPO) before or in 2020.

Data Analysis Method

The research employs multiple linear regression models to evaluate the independent variable to independent variable. Multiple linear regression is utilized to analyze the impact of ESG disclosure on abnormal returns. The structure of the multiple linear regression model in the study is as follows:

 $Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + e$



- Y = Abnormal Return
- = Constant a
- = Regression Coefficient b
- X_1 = ESG Disclosure
- X_2 = Firm Size
- X_3 = PBV
- X_4 = Current Ratio
- = error e

This study employs moderation regression analysis to evaluate the association between the independent and moderating variables on the dependent variable. The research examines how financial health is a moderating variable affecting the relationship between ESG disclosure and abnormal return. The linear regression equation incorporating moderation in this study is presented as follows:

 $Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5Z + b_6X_1Z + e$

Description:

- Y = Abnormal Return
- = Constant a
- b = regression Coefficient
- X_1 = ESG Disclosure
- X_2 = firm Size
- X_3 = PBV
- X_4 = Current Ratio
- Ζ = Financial Health
- e = error

RESULT AND DISCUSSION

Description and Research Object

The study population consists of manufacturing and energy companies listed on the Indonesia Stock Exchange (IDX). The sample consists of companies listed on the IDX that published GRI standards in 2020-2022. Following the purposive sample selection process, 45 companies that met the criteria were selected, resulting in a total of 135 samples. The details of the sample selection process are presented in Table 1.

	Table 1 Sample Selection 1 Toccutie				
No.	Criteria	Total			
1	Total manufacturing and energy companies listed on IDX	428			
	in 2020-2022				
2	Companies not publishing annual reports and GRI	(383)			
	standards in the sustainability report in 2020-2022				
3	Total manufacturing and energy companies surveyed in	45			
	2020-2022				
4	Number of manufacturing and energy companies in the	135			
	research sample (45 companies x 3 years)				
5	Data outlier	(31)			
6	Number of research samples in the observation year	104			
	Source: Secondary data processed in 2024				

Table 1 Sample Selection Procedure

Source: Secondary data, processed in 2024



Descriptive Studiete						
Table 2 Descriptive Statistic						
Variable	Ν	Min	Max	Mean	Std. Deviation	
ESG disclosure	104	0.035	0.86	0.435	0.193	
Abnormal return	104	-0.672	0.954	0.037	0.362	
Firm size	104	28.197	32.758	30.546	1.030	
PBV	104	0.176	4.654	1.092	0.697	
Current ratio	104	0.270	5.827	1.807	1.013	
Financial health	104	-0.899	0.454	0.032	0.126	

Descriptive Statistic

Source: SPSS 27 output

Based on Table 2, ESG disclosure is measured by summing the items disclosed by a company and dividing by the total number of disclosure items available from 2020-2022. The lowest ESG disclosure score is 0.035, and the highest is 0.860. The average ESG disclosure score is 0.435 (43.5%) with a standard deviation of 0.193 (19.3%), indicating the variation of ESG disclosure data is relatively small. This suggests that the companies disclosing ESG indicators have ESG scores that are relatively similar, clustering around the mean.

The average abnormal return is 0.037 (3.7%), with a standard deviation of 0.362 (36.2%). A standard deviation higher than the average indicates a high degree of dispersion, which means that the variation of the abnormal return variable is quite high. The lowest abnormal return of -0.672 is for PT Waskita Beton Precast Tbk in 2021, and the highest, 0.954, is for PT Petrosea Tbk in 2022. A negative abnormal return implies that investors received returns below what was anticipated.

Financial health as a moderating variable, measured by ROA, averaged 0.032 (3.2%) with a standard deviation of 0.126 (12.6%). The lowest ROA of -0.899 is for PT Waskita Beton Precast Tbk in 2020, indicating that the company experienced a profit decline. The highest ROA of 0.454 is for PT Indo Tambangraya Megah Tbk in 2022, indicating that the company has good financial performance and survived and stabilized during this period. If the standard deviation exceeds the mean, it indicates that the distribution of the research data is uneven or there are large differences in financial health data.

The study uses the control variables: firm size, PBV, and current ratio. The average firm size is 30.546, with a standard deviation of 1.030, showing minimal variation. PT Tiga Pilar Sejahtera Food Tbk has the smallest firm size of 28.197 in 2021, and PT Adaro Energy Tbk has the largest firm size of 32.758 in 2022. The larger the firm size, the higher the level of ESG disclosure, as the company has more resources to convey such information. The average price to book value (PBV) is 1.092, with a standard deviation of 0.697, indicating low variation. PT Waskita Beton Precast Tbk has the lowest PBV of 0.176 in 2022, while PT Mahkota Group Tbk has the highest of 4.654 in 2022. The average current ratio of 1.087 is higher than the standard deviation of 1.013, indicating low variation. PT Bumi Resources Tbk has the lowest current ratio of 0.270 in 2021, while Bisi International Tbk has the highest of 5.827 in 2020.

Normality Test

The research uses the Kolmogorov-Smirnov method to assess the normality of the data. If the asymp. sig (2-tailed) value exceeds the significance level (5%), which implies that the population data conforms to a normal distribution. Table 3 indicates that the



Kolmogorov-Smirnov significance value is 0.200, which exceeds 0.05. It suggests that the data follows a normal distribution.

One-Sample Kolmogorov-Smirnov Test			
		Unstandardized Residual	
Ν		104	
Normal	Mean	0.0000000	
Parameters ^{a,b}	Std. Deviation	0.34401474	
Most Extreme	Absolute	0.072	
Differences	Positive	0.072	
	Negative	-0.057	
Test Statistic		0.072	
Asymp. Sig. (2-tailed)		.200 ^d	

Table 3

Source: SPSS 27 output

Multicollinearity test

A multicollinearity test is conducted to prevent the occurrence of correlations between variables in the study. According to the analysis in Table 4, all variables exhibit VIF values under 10 and tolerance values exceeding 0.10, signifying the absence of multicollinearity among the independent variables. These findings suggest no substantial correlation among the independent variables under examination.

Multicollinearity Test					
Variable	Tolerance	VIF			
ESG disclosure	2.371	0.931			
Firm Size	-1.034	0.903			
PBV	1.193	0.929			
Current Ratio	1.192	0.932			
Source: SPSS 27	output				

Table 4					
14.	11.	• /			

Source: SPSS 27 output

Heteroscedasticity test

The research uses the Glejser test to determine the heteroscedasticity. The Glejser test results in Table 5 indicate that all variables have significance values above 0.05, suggesting the absence of heteroscedasticity in the residual data of the research.

Table 5 Glejser Test					
Variable	Sig.				
ESG disclosure	0.062				
Firm Size	0.216				
PBV	0.986				
Current Ratio	0.572				

Source: SPSS 27 output



Hypothesis Test

Determination Coefficient Test (R^2)

It shows an adjusted R square value of 0.058 (5.8%), indicating that firm size, PBV, and current ratio account for only 5.8% of the variation in ESG disclosure, with 94.2% explained by other factors outside this study.

ModelRRAdjusted Squareof the Estimate1.307a0.0940.0580.3509a.Predictors: (Constant), ED, FS, PBV, CR	Model Summary							
a. Predictors: (Constant), ED, FS, PBV, CR	Model R Square R Square OI the							
	1 .307 ^a 0.094 0.058 0.3509							
	a. Predictors: (Constant), ED, FS, PBV, CR							
b. Dependent Variable: Abnormal Return								

Table 6 Determination Coefficient Before Moderating Variable

Source: SPSS 27 output

Table 7 shows the result of the coefficient of determination (\mathbb{R}^2) after moderating variable. It shows that the adjusted R square value is 0.107 (10.7%), indicating that ESG disclosure, company size, PBV, current ratio, and financial health affects abnormal return by 10.7%, with 89.3% explained by other factors outside this study.

Table 7 Determination Coefficient After Moderating Variable

	Model Summary								
ModelRR SquareAdjusted R SquareStd. Error of the Estimate									
1	1 .398 ^a 0.159 0.107 0.34167								
a. Predictors: (Constant), ED, FS, PBV, CR, FH, ED*FS									
b. Dependent Variable: Abnormal Return									
<u> </u>	DCC 07 auto	4							

Source: SPSS 27 output

F Test

Table 8 shows a significance value below 0.042 < 0.05, indicating that the ESG disclosure and control variables, namely firm size, PBV, and current ratio, collectively influence abnormal return.

	ANOVA ^a						
	Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	1.269	4	0.317	2.577	.042 ^b	
	Residual	12.19	99	0.123			
	Total	13.459	103				

Source: SPSS 27 output

Table 9 shows the result of the F test after moderating the variable. The table shows a significance value of 0.009 < 0.05 and an F-value of 3.049. It indicates that the ESG



disclosure, financial health as a moderating variable, and control variables, namely firm size, PBV, and current ratio, simultaneously affect abnormal returns.

	Tuble 71	-I CSt Mite		ting vari	able		
	ANOVA ^a						
	Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	2.136	6	0.356	3.049	.009 ^b	
	Residual	11.323	97	0.117			
	Total	13.459	103				

Table 9 F-Test After Moderating Variable

Source: SPSS 27 output

T Test

This test is the basis form for accepting or rejecting hypotheses. Table 10 shows a significance value of 0.020 < 0.05, indicating a significant partial impact of an independent variable on the dependent variable. The coefficient value for ESG disclosure is positive 0.441, indicating that ESG disclosure significantly and positively affects abnormal returns. The first hypothesis in this study states that ESG disclosure positively affects the abnormal return during the Covid-19 pandemic, leading to **H1 is accepted**. Therefore, the equation of linear regression analysis is:

 $Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + e$

 $Y = 0.818 + 0.441b_1 - 0.037b_2 + 0.061b_3 + 0.042b_4 + e$

Coefficients ^a							
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		В	Std. Error	Beta			
1	(Constant)	0.818	1.051		0.778	0.438	
	ESG Disclosure	0.441	0.186	0.235	2.371	0.020	
	Firm Size	-0.037	0.035	-0.104	-1.034	0.303	
	PBV	0.061	0.051	0.118	1.193	0.236	
	Current Ratio	0.042	0.035	0.118	1.192	0.236	
a.	a. Dependent variable: Abnormal Return						

Table 10 T-Test Before Moderating Variable

Source: SPSS 27 output

Table 11 shows the result of the T test after moderating the variable. Table 11 shows a significance value of 0.041< 0.05. It indicates that the interaction between ESG disclosure and financial health (ED*FH) can moderate the relationship between ESG disclosure and abnormal return. The coefficient value of the interaction variable (ED*FH) is positive at 3.093, indicating that financial health, proxied by ROA, strengthens the relationship between ESG disclosure and abnormal return. The second hypothesis in this study states that financial health decreases the influence of ESG disclosure on abnormal returns during the Covid-19 pandemic, leading to **H2 is rejected**. Therefore, the equation of regression regression analysis is:

 $\begin{array}{l} Y=a+b_1X_1+b_2X_2+b_3X_3+b_4X_4+b_5Z+b_6X_1Z+e\\ Y=1.451+0.166b_1-0.054b_2+0.056b_3+0.020b_4+-0.441b_5+3.093b_6+e \end{array}$

Coefficients ^a								
Madal		Unstandardized Coefficients		Standardized Coefficients	t	Sig.		
	Model	В	Std. Error	Beta				
1	(Constant)	1.451	1.05		1.382	0.17		
	ESG Disclosure	0.166	0.208	0.088	0.796	0.428		
	Firm Size	-0.054	0.035	-0.153	-1.533	0.128		
	PBV	0.056	0.05	0.108	1.114	0.268		
	Current Ratio	0.02	0.036	0.056	0.555	0.58		
	Financial Health	-0.441	0.562	-0.154	-0.785	0.435		
	ED*FH	3.093	1.496	0.441	2.068	0.041		
a.	a. Dependent variable: Abnormal Return							

Table 11 T-Test After Moderating Variable

Source: SPSS 27 output

Result Interpretation

From the analysis and interpretation of the information provided, it can be inferred that the researcher has successfully attempted to address and provide answers to the theories outlined in the research problem as follows:

	Hypothesis	Adjusted R ²	Regression Coefficient (B)	Sig.	Conclusion
H1	ESG disclosure positively influences the abnormal return during the Covid-19 pandemic	5.8%	0.441	0.020	H1 is Accepted
H2	Financial health decreases the influence of ESG disclosure and abnormal returns during the Covid- 19 pandemic	10.7%	3.093	0.041	H2 is Rejected

Table 12 Summary of Hypothesis Results

ESG disclosure positively influences the abnormal return during the Covid-19 pandemic

This study's first hypothesis examines the connection between ESG disclosure and abnormal return. It is clear from the test findings that H1 is accepted. ESG disclosure calculated using a dummy variable based on GRI standard positively and significantly affects abnormal return. This means that investors consider ESG disclosure in investment decisions. The evidence supports the notion that ESG practices lead to better returns and greater resilience to stock market downturns, particularly in times of crisis. This suggests that prioritizing environmental, social, and governance factors tends to outperform and demonstrate greater stability in turbulent market conditions.

This research aligns with the findings of Albuquerque et al. (2020) and Carvalhal & Nakahodo (2023). The results show that ESG disclosure receives a positive response from investors even during the Covid-19 pandemic. This research improves the understanding of the influence of ESG disclosure on abnormal returns, considering firm size, PBV, and current ratio as control variables.



Corporate activities related to ESG can provide positive signals to stakeholders about the company's future sustainability prospects. ESG reporting indicates a firm's dedication to sustainability and ethical corporate behavior. This transparency enhances investor's perceptions of a company's value. The incorporation of ESG information in annual reports is expected to serve as a strategy for companies to attract investor interest in the company's stock, potentially leading to an increase in the company's profits.

The implication of this study is that ESG disclosure in annual reports reflects the company's current condition and future prospects, which leads investors to use ESG disclosure in investment decisions. It may encourage companies to disclose ESG activities actively. In addition, investors are increasingly aware of the importance of ESG issues in the future, leading to a heightened awareness among companies about implementing ESG initiatives to enhance positive impacts while mitigating negative ones.

Financial health decreases the influence of ESG disclosure and abnormal return during the Covid-19 pandemic

The hypothesis that financial health decreases the influence of ESG disclosure and abnormal returns during the Covid-19 pandemic is rejected. In this study, financial health can moderate the relationship between ESG disclosure and abnormal return, as indicated by the significance value of less than 0.05. Furthermore, the positive coefficient value of 3.093 for the interaction (ED*FH) suggests that financial health, represented by ROA, enhances the association between ESG disclosure and abnormal return. The rejected hypothesis is consistent with the finding of Daffa et al. (2023), which states that companies with higher ROA tend to be better able to disclose ESG information, particularly in the environmental and social areas. Additionally, a study by Triyani et al. (2020) found that profitability can affect ESG disclosure, where companies that can generate high profits will disclose more information. It makes investors and creditors believe that the company is in a safe position and operates efficiently.

The study assumes that manufacturing and energy companies experience a financial decline due to the Covid-19 pandemic proxied by ROA. In reality, many companies in the manufacturing and energy sectors still have good financial performance, such as PT Indo Tambangraya Megah Tbk in 2022, which has ROA of 45.43% and has increased ROA from 2020. Future research can use other financial ratios or combine multiple financial ratios to measure financial health. Future research can also conduct purposive sampling on companies with strong and weak financial conditions so that the results are more valid. In addition, future studies could expand the sample size or include a variety of industries.

Consistent with signaling theory, which provides an explanation for the firm's motivation to provide financial statement data to outside parties. The company is compelled to share information due to information asymmetry, where the company has more knowledge about its operations and future potential than external parties such as investors and creditors (Trisnowati et al., 2022). By providing financial information, companies aim to increase transparency, allowing investors to assess the company's condition before making investment decisions.

During turbulent times like the Covid-19 pandemic, companies with solid finances may be better able to effectively implement ESG practices, which can then improve the performance in the marketplace. Companies with stronger financial performance are more likely to disclose ESG-related information as it serves as a key consideration for investors when evaluating ESG factors. It highlights that financial health may not act as a limiting or inhibiting influence on ESG disclosure but may also act as a factor that supports or strengthens the relationship.



CONCLUSION

This research indicates that disclosing ESG information according to the GRI standard significantly and positively influences abnormal returns. Therefore, the initial hypothesis proposed by this research is supported. Investors prioritize ESG disclosure when making investment decisions, and companies with high ESG disclosure may appear more attractive to these investors. In addition, companies with good ESG disclosure also show greater resilience in the face of difficult times such as the Covid-19 pandemic.

The second hypothesis that financial health reduces the effect of ESG disclosure on abnormal returns is rejected. Many companies in the manufacturing and energy sectors still have good financial performance. This study finds that financial health is a moderating variable that increases the correlation between ESG disclosure and abnormal return. It implies that better financial health strengthens the relationship between ESG disclosure and abnormal return.

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