

MARKET REACTION TO ESG DISCLOSURES: EVIDENCE FROM FINANCIAL FIRMS IN INDONESIA

Arif Budi Satrio^{1*}, Hadi Santoso², Thomas Averio³

¹⁻³ Faculty of Economics and Business, Universitas Widya Dharma Pontianak, Indonesia

*Email corresponding author: arif.budi.satrio.li@gmail.com

Abstract

This study analyzes environmental, social, and governance (ESG) disclosures on market reactions in financial firms listed on the Indonesia Stock Exchange. Using a causal-comparative approach, this research examines panel data from all financial firms in Indonesia. ESG performance is collected manually based on the Global Reporting Initiative (GRI) indicator, while Tobin's Q reflects market reaction. The analysis is conducted in stages using a panel data regression model, including Pooled OLS and Random Effect, which are first tested for model specifications. The test results indicate that investors have not integrated ESG information into investment decision-making. In contrast, financial indicators at the firm level play a significant positive role. In this instance, investors incorporate more traditional financial information into financial decision-making than sustainable information. These results remain robust when tested using the generalized method of moments modeling and the propensity score matching method. This study offers valuable insights for researchers, investors, regulators, and firms regarding the role of ESG in developing countries.

Keywords: ESG, Market Reaction, Corporate Governance, Emerging Market, Indonesia

INTRODUCTION

The increasing global attention on sustainability issues and responsible investment has made firms' implementation and compliance with environmental, social, and governance (ESG) regulations made this issue become crucial. The information firms convey to the public on these topics is no longer considered a form of compliance with existing regulations, but also becomes a strategic decision by firm management to influence public perception, which leads to the valuation of the firm's value. This issue is also essential for firms in developing countries, including Indonesia. However, is this strategic decision vital in forming a positive public reaction?

Recent massive studies have attempted to examine ESG issues from various perspectives and results. On the one hand, ESG implementation is considered to have positive benefits for firms. ESG has gradually become one of the essential indicators in evaluating firms (Gao et al., 2022). The benefits include increasing investor confidence and reducing risk, especially when the public is faced with a very uncertain situation. Xu et al. (2025) reported that ESG scores positively impacted stock returns during and after the COVID-19 pandemic, where responsibility for environmental issues played the strongest role. ESG also has a positive role for firms when associated with reducing stock pledge risk (Bai et al., 2024), firm-specific risk (Atak, 2024), and crash risk (Yu et al., 2023). The overall results of these studies indicate that ESG is a signal of long-term resilience, especially when firms face economic turmoil.

Although ESG has a positive role, studies in different contexts have found different results. ESG does not show a systematic role in global corporate stock returns (Alves et al., 2025). Higher ESG scores are associated with adverse effects, primarily on returns (Cheng & Huang, 2024; Tan & Pan,

2023), liquidity (Cheng & Huang, 2024), and volatility (Tan & Pan, 2023). ESG news at the firm level does not drive abnormal returns (Galema & Gerritsen, 2025).

The gap between global and regional study results underscores the importance of understanding ESG dynamics nationally, especially in developing countries where ESG implementation frameworks are still developing. In this case, Indonesia presents a unique context that needs to be analyzed, considering that this country is one of the largest developing countries in Southeast Asia, facing high information inequality (Satrio, 2022b; Satrio et al., 2022). The country has progressed through ESG reporting through the Indonesia Stock Exchange (IDX) and regulations. However, the unclear relationship between disclosure quality and public reaction in the capital market in Indonesia makes this topic a hot issue.

This study provides novel insights into the literature on sentiment-related stock markets and the impact of ESG on firm market value by analyzing financial firms listed on the IDX during the period 2019-2022, including the COVID-19 crisis. The analysis in this sector is due to two considerations. First, when associated with ESG information, each industry has its specific factors (Du et al., 2025) and sensitivity (Chen et al., 2024). Second, firms in this sector are highly vulnerable, especially during economic instability. Focusing on this sector that plays a crucial role in sustainable capital and finance allocation, this study investigates whether ESG disclosures measured using up-to-date indicators from the Global Reporting Initiative (GRI) shape public reactions. Manually collected data on the GRI indicators is the next novel in this study, with the main objective of exploring the role of ESG reporting on market participants. The analysis is also conducted by controlling for firm-level characteristics, including leverage, size, and profitability, that can shape investor perceptions.

Testing with causal-comparative research design and robust panel data testing, this study contributes to developing the literature that assesses the financial implications of ESG in emerging markets. Given the gap in evidence from previous studies and the increasing focus on regulation in Indonesia, this study offers timely insights into whether ESG disclosure matters to the public. The results show that the role of ESG adoption in public financial firms in Indonesia is still insignificant in shaping positive public perceptions. This suggests that current ESG disclosures may be viewed as a symbol of regulatory compliance rather than a signal for shaping public perception. This study also indicates indirectly that market players in Indonesia prioritize traditional financial indicators over sustainability information. The gap between ESG disclosure and market response underscores the need to improve ESG reporting practices and the quality of disclosures.

These findings affect scholars, researchers, individual investors, regulators, and firms. For scholars and researchers, the lack of market reaction underscores the need for a deeper analysis of ESG materiality, which is not fully explored in this study. The study's findings underscore the importance of looking beyond formal disclosures to ESG issues for investors. For regulators, the lack of ESG impact suggests the need for stronger standardization and verification of corporate ESG disclosures. Finally, firms in emerging markets should focus on disclosure, prioritize improving ESG communication, and focus on performance to build investor engagement.

This paper is structured as follows. The second section presents a literature review and hypothesis formulation. The third section discusses the research methods used. Furthermore, the fourth section presents the test results, interpretation, and discussion. The final section presents the conclusions of this study.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

The importance of adopting ESG-related provisions in firms can be explained through stakeholder, legitimacy, and institutional theories. Stakeholder theory (Freeman, 1984) explains that firm management should not only focus on shareholder interests by increasing their wealth alone, but also consider all stakeholder interests in making decisions. The stakeholder assumption assumes

that the firm is part of a broader social system with moral obligations. The firm's attention to stakeholders is needed for long-term value creation and sustainability.

Legitimacy theory (Suchman, 1995) suggests that firms operate on a social contract where they will continue to exist if they comply with society's norms, values, and expectations. Furthermore, institutional theory (DiMaggio & Powell, 1983) explains how organizations deal with pressure to conform to the standards and rules of their institutional environment. Legitimacy and institutional theory provide a theoretical basis for understanding the importance of corporate involvement in ESG activities. These activities not only act as a reflection of the firm's intrinsic value but also reflect a strategic response to external expectations and institutional pressures. ESG, in this case, acts as a legitimacy mechanism (legitimacy theory) and a symbol of institutional conformity (institutional theory) in enhancing the firm's reputation, trust, and, at the same time, maintaining the firm's sustainability from a stakeholder perspective (stakeholder theory).

The increasing attention to ESG issues from both academic and practitioner perspectives has sparked debate about the role of ESG in shaping public perception, especially concerning stock prices, returns, volatility, and even market risk. This is evidenced by the massive number of recent studies analyzing this issue, but with inconclusive results, often depending on the specific context. There are at least two groups related to the role of ESG.

The first group stated that ESG adoption has a positive impact on firms. ESG can be helpful as a risk reducer. ESG performance is found to reduce stock idiosyncratic risk and extreme risk through reducing earnings management and strengthening corporate reputation (Xu et al., 2025). In line with that, Atak (2024) and Bai et al. (2024) also found that consecutive ESG performance can reduce firm-specific risk and mitigate stock pledge risk. The higher ESG-related news, in this case, can reduce the risk of a firm's stock crash (Wattanatorn & Jantarakolica, 2025; Yu et al., 2023) by lowering adverse ESG incidents, information asymmetry, and agency costs (Yu et al., 2023). ESG performance also benefits stock returns and performance (Bang & Ryu, 2024; Ha et al., 2024; Xu et al., 2023). ESG performance, in this case, positively affects stock returns in China during and after the COVID-19 pandemic (Xu et al., 2023), including the investor's marginal utility in the U.S. (Bang & Ryu, 2024) and stock prices in Vietnam primarily through the environmental pillar (Ha et al., 2024).

The second group stated that ESG performance does not have a positive role for the firm. Alves et al. (2025) found minimal impact in testing global stock returns, and even investment in ESG did not systematically affect investment performance. The combination of ESG scores was negatively correlated with the firm's stock returns and liquidity (Cheng & Huang, 2024). In the same direction, it was also found that differences in ESG ratings had a significant adverse effect on stock returns (Tan & Pan, 2023; Wang et al., 2024), including stock volatility (Tan & Pan, 2023). Inconsistencies related to ESG performance, especially in market reactions, can weaken the effectiveness of ESG adoption in firms.

The inconsistency of the results likely stems from the heterogeneous nature of market reactions to news and sentiments related to ESG. Differences in industry sensitivity and differences in attributes of ESG (Chen et al., 2024), short-lived market reactions (Vu et al., 2024), delayed reactions (Galema & Gerritsen, 2025), and different periods will provide different sentiments (Gaies et al., 2025). The current literature shows that ESG performance and sentiment can affect market reactions. This market reaction is highly dependent on the observation period, public perception, consistency of ratings, and even media influence.

The overall description suggests that ESG performance can function as a signal, and the public can react positively to ESG performance, especially if the firm conveys the information well. Thus, the hypothesis in this study is:

H1: Firms with better ESG performance will be associated with positive market reactions to firm value.

RESEARCH METHODS

This study used a quantitative causal-comparative research design. The aim was to test the impact of Environmental, Social, and Governance (ESG) variables on market reactions by controlling for firm characteristics. The analysis was conducted on all financial firms listed on the Indonesia Stock Exchange, with a sample of 97 firms from 2019 to 2022. This period was chosen in addition to considering the sustainability reports of firms in Indonesia and capturing market reactions in uncertain situations, namely the COVID-19 crisis. All data were obtained from four primary sources: annual financial reports, annual reports, sustainability reports of each firm, and the Indonesian Stock Exchange (IDX) website. In addition, data was also collected from each firm's website to fill in data gaps. All data was collected manually and carefully, including those related to ESG indicators.

Testing with strong, balanced panel data was conducted using STATA version 18. The analysis was performed using two main models. The first model was built using pooled ordinary least squares to detect the key role of firm characteristics in shaping market reactions. The second model, which aims to test the role of each firm's ESG disclosure on market reactions, was tested in stages, namely by being preceded by model specification tests, including the Chow Test, Hausman Test, and Breusch and Pagan Lagrangian Multiplier Test. The following are the two main models:

$$MR_{i,t} = \alpha + \beta_1 \text{Leverage}_{i,t} + \beta_2 \text{Size}_{i,t} + \beta_3 \text{Profit}_{i,t} + \epsilon_{i,t} \dots\dots\dots (1)$$

$$MR_{i,t} = \alpha + \beta_1 \text{ESG}_{i,t} + \beta_2 \text{Leverage}_{i,t} + \beta_3 \text{Size}_{i,t} + \beta_4 \text{Profit}_{i,t} + \epsilon_{i,t} \dots\dots\dots (2)$$

where market reaction (MR) is measured based on Tobin's Q indicator, which is the sum of the market value of equity and the book value of the firm's debt, which is then compared to the book value of total assets. To ensure that the market reacts to the disclosure of information, especially related to ESG, stock market price analysis is carried out based on the publication date of each firm's annual report. This immediate analysis of ESG disclosure, while still considering trading days and hours in Indonesia, was carried out by considering the arguments of previous studies (Vu et al., 2024), which showed that market reactions to ESG performance did not last long. Furthermore, firm characteristics are analyzed using three approaches, namely leverage, size, and profit. Leverage measures the proportion of debt a firm owns to its total assets. Size is calculated based on the natural logarithm (Ln) of total assets, while profit is determined based on the net profit generated by the firm against the firm's total assets (Satrio, 2022a).

ESG measurements are carried out based on the Global Reporting Initiative (GRI) indicator with three perspectives, namely environmental (E), social (S), and governance (G). Environmental issues are measured based on GRI codes 302, 305, and 308. Social problems are calculated using indicators 401, 404, 405, 406, 413, and 418. Furthermore, corporate disclosures related to governance issues are carried out based on GRI 205, 206, 207, and 415. All disclosure items made by each firm are analyzed carefully by covering subcodes for each indicator. Each ESG indicator is tested in stages by considering each issue. Each ESG indicator (E, S, and G) is calculated by averaging the value of each GRI indicator. The results of each indicator are then averaged to obtain the value of each test topic. Furthermore, testing is also carried out by calculating the overall ESG value based on the average of each value generated from E, S, and G.

RESULTS AND DISCUSSION

Descriptive Statistic

Table 1 shows the results of descriptive statistics on all variables covering market reaction (MR), overall ESG value (ESG), along with three ESG indicators covering economic, social, and governance topics (E, S, and G), leverage, firm size, and firm profitability.

Table 1. Descriptive Statistics

	Mean	Std. dev.	Min	Max	Q1	Q2	Q3
MR	2.3117	6.9994	0.1589	81.9275	0.8994	0.9990	1.4430
ESG	0.0942	0.0978	0.0000	0.6935	0.0254	0.0674	0.1212

E	0.0324	0.0912	0.0000	0.6959	0.0000	0.0000	0.0068
S	0.1585	0.1527	0.0000	0.8639	0.0417	0.1257	0.2222
G	0.0555	0.0972	0.0000	1.0000	0.0000	0.0200	0.0755
Leverage	0.8567	3.4085	0.0001	64.6505	0.3743	0.6942	0.8166
Size	29.6108	2.4326	20.7681	35.2282	27.7919	29.7295	30.9729
Profit	0.0539	1.1011	-8.8956	17.1384	0.0009	0.0080	0.0274

Source: STATA 18.

The results presented in Table 1 show that investors react differently when assessing financial firms in Indonesia. This is evidenced by the undervalued condition of almost half of the firms (Q2 0.9990), and there are firms with very low stock prices, indicated by the minimum MR value of 0.1589. The diversity of public assessments of firms is also marked by overvaluation in several firms, with a maximum value of up to 81.9275. The results of descriptive statistics are also an early indication of the lack of attention from financial firms in Indonesia to ESG issues, especially in environmental matters, where half of the firms sampled did not report this issue (Q2 0.0000). Management seems to be more focused on social problems (Q1 0.0417).

In addition, when viewed from the firm's characteristics, financial firms have very diverse financial performances, as indicated by profitability values ranging from -8.8956 to 17.1384. Furthermore, there are also financial firms that rely more on funding from equity components. This is indicated by a minimum leverage value of 0.0001.

Correlation and Variance Inflation Factor

Table 2 presents the correlation of all variables that form this research model.

Table 2. Correlation Matrix

	VIF	MR	ESG	E	S	G	Leverage	Size	Profit
MR		1							
ESG	1.06	-0.0499	1						
		0.3963							
E	1.90	-0.0519	0.7921*	1					
		0.3078	0.0000						
S	1.71	-0.0443	0.9270*	0.5519*	1				
		0.3846	0.0000	0.0000					
G	1.37	-0.0446	0.7007*	0.4909*	0.4322*	1			
		0.4486	0.0000	0.0000	0.0000				
Leverage	1.17	0.5971*	-0.0171	-0.0150	-0.0053	-0.0351	1		
		0.0000	0.7709	0.7684	0.9168	0.5507			
Size	1.15	-0.2587*	0.2273*	0.2958*	0.2415*	0.1677*	-0.1821*	1	
		0.0000	0.0001	0.0000	0.0000	0.0041	0.0003		
Profit	1.12	0.1697*	0.0033	-0.0119	-0.0038	0.0312	-0.2987*	-0.0544	1
		0.0008	0.9551	0.8157	0.9400	0.5964	0.0000	0.2848	

Note: The symbol * indicates a significant correlation at the 0.05 level.

Source: STATA 18.

The correlation values of the leverage and profitability variables with the MR variable are 0.5971 and 0.1697, respectively, and are significant, which means that the public reacts positively to the use of corporate debt and high profits. This is not surprising because the analysis was conducted on financial firms that generally depend heavily on raising funds from external parties to then be distributed in various forms, so the increasingly high use of debt indirectly indicates the availability of adequate funds in firms in this industry.

Furthermore, the correlation value of firm size is -0.2273, which is also significant, showing the phenomenon of financial firms in Indonesia that are getting bigger and actually have the opposite relationship with MR, at least during this analysis period. Investors seem to be focusing on smaller firms that have the potential to grow. This is not surprising because investors are more likely to buy the firm's future growth prospects when investing in the firm's shares. Furthermore, the correlation values between the E, S, G, and ESG indicators with MR show values of -0.0519, -0.0443, -0.0446, and -0.0499, all statistically insignificant. This value is an early indication that there is no role for ESG disclosure in market reactions in forming firm value.

Table 2 also shows the results of multicollinearity testing on all independent variables. The test results show that the variance inflation factor (VIF) values for ESG, E, S, G, leverage, size, and profit are 1.06, 1.90, 1.71, 1.37, 1.17, 1.15, and 1.12, respectively. All of these values indicate no multicollinearity problems in the regression equation model in this study.

Regression Results

This study was conducted to analyze the role of ESG in shaping public reactions. Initial testing was carried out with the first equation model, which examines the role of firm characteristics on MR. The second model was then continued with the analysis of the key role of ESG. Table 3 shows regression testing results on two models considering the effects of the crisis and industry on each financial firm in Indonesia.

The initial identification with pooled-OLS results in equation 1 shows that leverage and profit have regression direction coefficient values of 1.4065 and 2.3082, with standard error values of 0.1197 and 0.7961, all of which are significant at the 0.01 level. The results that align with the correlation analysis in Table 2 show that financial firms with higher debt will be more trusted by the public. Meanwhile, profitability, which is an indicator of financial performance and indirectly reflects the firm's prospects in the future, will also form a positive perception from the public. Firms with larger assets have the opposite role, as indicated by the direction coefficient value of -0.3114, which is also significant at the 0.01 level. The overall test results show that leverage, size, and profitability, which reflect firm characteristics and firm performance, have a dominant role in shaping public perception so that they will react according to the information.

Testing on equations 2 to 5 was carried out to determine the significance of the role of ESG disclosure on MR. The test was preceded by selecting the appropriate modelling, between the common effect (CE), fixed effect (FE), and random effect (RE) models. The results of the Chow test on equations 2 to 5 showed the same significance value, namely 0.0000. This value indicates that FE is a better model than CE in this study. The Breusch and Pagan Lagrangian Multiplier test also showed that RE was more suitable than CE, which was indicated by a significance that was also entirely 0.0000. The Hausman test was carried out to determine which test was more suitable for FE and RE. The results showed significance values of 0.8979, 0.8986, 0.6416, and 0.5907, respectively, which means that RE is the best estimation model in this study.

The test results of equations 2 to 5 show the direction coefficient values for ESG, E, S, and G are respectively -1.8815, -1.2151, -0.9509, and -1.0745, while the standard error values are 1.8388, 1.4277, 0.8311, and 1.1104. Overall, these test results indicate no role for ESG disclosure as a whole or for each indicator in shaping public perception. In other words, the public does not react significantly to all disclosure items made by financial firms in Indonesia.

3. Regression Results					
	MR		MR		
	1	2	3	4	5
ESG		-1.8815 (1.8388)			

E			-1.2151 (1.4277)		
S				-0.9509 (0.8311)	
G					-1.0745 (1.1104)
Leverage	1.4065*** (0.1197)	1.4519*** (0.1173)	1.4681*** (0.1182)	1.4691*** (0.1181)	1.4507*** (0.1177)
Size	-0.3114*** (0.1155)	-0.2842 (0.2147)	-0.3068 (0.2240)	-0.3036 (0.2231)	-0.2950 (0.2195)
Profit	2.3082*** (0.7961)	2.3423*** (0.7734)	2.3304*** (0.7784)	2.3326*** (0.7782)	2.3400*** (0.7748)
Constant	9.8507*** (3.6540)	9.1986 (6.8225)	9.7586 (7.0501)	9.7608 (7.0604)	9.3699 (6.9052)
Year Effect	Yes	Yes	Yes	Yes	Yes
Sub-sector Effect	Yes	Yes	Yes	Yes	Yes
Chow Test (Prob.)	-	0.0000	0.0000	0.0000	0.0000
Hausman Test (Prob.)	-	0.8979	0.8986	0.6416	0.5907
Breusch and Pagan					
Lagrangian Multiplier Test (Prob.)	-	0.0000	0.0000	0.0000	0.0000
Model	Pooled	RE	RE	RE	RE
Number of Firms	97	97	97	97	97

Notes: Robust standard errors in parentheses. The symbols ***, **, and * show significance in 0.01, 0.05, and 0.1, respectively.

Source: STATA 18.

Robustness Check

Further robustness check testing is carried out to ensure the conclusion is drawn correctly. Testing uses the generalized method of moments (GMM) and propensity score matching (PSM). Analysis with GMM is carried out to ensure that it is free from endogeneity issues, while PSM is carried out to control selection bias and estimate treatment effects (ATT).

Table 4 presents the results of testing with the two-step system GMM. To ensure that the instrument used in the GMM test is valid and that the assumption of moment conditions is met, the Sargan and Hansen Tests are carried out. The results of testing equations 1 to 4 show Sargan Test values of 0.869, 0.889, 0.881, and 0.851, while the Hansen values are 0.200, 0.302, 0.267, and 0.184. Overall, these test results fail to reject the null hypothesis, indicating that the instrument is exogenous and appropriately specified so that testing with GMM modelling can be carried out.

The test results show that the firm characteristics indicated by the leverage indicator have directional coefficients of 1.3448, 1.3705, 1.3607, and 1.3239 with standard errors of 0.1506, 0.1400, 0.1407, and 0.1554, all of which are significant at the 0.001 level. Furthermore, the firm's performance reflected by the profit indicator generated by the firm has directional coefficients of 1.9770, 2.1778, 2.1040, and 1.8128 with standard error values of 0.9807, 0.8845, 0.9051, and 1.0342, which are also significant. These results are consistent with the tests in Tables 2 and 3, which show a positive role for this information in market reactions.

Table 4. GMM Results

	MR			
	1	2	3	4

L.MR	0.1584*** (0.0323)	0.1529*** (0.0301)	0.1552*** (0.0313)	0.1528*** (0.0361)
ESG	-2.0210 (1.2987)			
E		-1.4796 (1.1914)		
S			-1.4652 (0.9225)	
G				-1.2787 (0.8565)
Leverage	1.3448*** (0.1506)	1.3705*** (0.1400)	1.3607*** (0.1407)	1.3239*** (0.1554)
Size	-0.1533 (0.2004)	-0.1780 (0.1875)	-0.1730 (0.1804)	-0.1757 (0.2089)
Profit	1.9770** (0.9807)	2.1778** (0.8845)	2.1040** (0.9051)	1.8128* (1.0342)
Constant	5.1271 (6.1869)	5.7953 (5.8171)	5.8203 (5.6156)	5.7900 (6.5506)
Year Effect	Yes	Yes	Yes	Yes
Sub-sector Effect	Yes	Yes	Yes	Yes
Sargan Test	0.869	0.889	0.881	0.851
Hansen Test	0.200	0.302	0.267	0.184
Number of Firms	97	97	97	97

Notes: Robust standard errors in parentheses. The symbols ***, **, and * show significance in 0.01, 0.05, and 0.1, respectively.

Source: STATA 18.

Furthermore, ESG testing based on environment, social, and governance is indicated by the direction coefficient values of -1.4796, -1.4652, and -1.2787, all of which are insignificant. In line with these results, the ESG indicator that includes the three indicators does not have a dominant role. These results indicate that ESG disclosure in financial firms in Indonesia does not have a significant role in boosting public perception.

Robustness testing is continued with the PSM method. Testing is carried out to estimate the impact of treatment or intervention from financial data that can predict receiving the treatment. In non-experimental testing, non-random units are treated as treatment or control groups, which can cause bias. Therefore, estimation with this method has a dominant role in this study. Estimating E, S, and G is done by forming binary variables.

Using PSM with nearest-neighbor estimation, this study calculates the average treatment effect on the treated (ATT) to assess ESG adoption's impact on market reactions. Preliminary testing with a logit model to estimate the probability of firms adopting ESG-E, ESG-S, and ESG-G based on leverage, size, and profit. Testing continues to determine the significance of estimates on key variables with matched regression.

Table 5 presents the ATT results of PSM on the three ESG components. No testing was carried out on the combined components of ESG due to insufficient observation data to form a control group. The test results in the first column in each ESG dimension present a logit model estimate to explain the possibility of firms adopting ESG. The size variable appears to be a consistent predictor of ESG adoption, especially in the social and governance components.

Table 5. ATT Results

E	MR	S	MR	G	MR
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	1	1	2	2	3	3
Leverage	0.0432 (0.3929)	0.0177 0.1343	-0.0775 (0.3530)	-0.0359 0.1538	-1.9834* (1.0816)	-0.9645 0.5145
Size	0.4230 (0.3211)	0.1649 0.1250	0.3233*** (0.0838)	0.1581 0.0416	0.3379** (0.1496)	0.1527 0.0674
Profit	-0.0296 (1.8978)	-0.0068 0.6261	-0.5637 (2.3625)	-0.2467 0.9549	-3.3395 (3.1710)	-1.5072 1.4538
Constant	-18.3218* (10.3048)	-7.6536 3.9751	-11.9994*** (2.5350)	-6.0539 1.2469	-12.4207*** (4.2844)	-5.8760 1.8899
AT-Difference	- -	-0.0219 (0.0471)	- -	0.3340 (0.4050)	- -	0.3840 (0.4332)
Observations	388	388	388	388	388	388

Note: Robust standard errors in parentheses. The symbols ***, **, and * show significance in 0.01, 0.05, and 0.1, respectively.

Source: STATA 18.

The matched regression column shows the test of the impact of ESG on MR. In all ESG dimensions, ATT shows a difference value of -0.0219, 0.3340, and 0.3840, all of which are statistically insignificant. This means that there is no substantial evidence that ESG disclosure leads to the formation of public perception with the MR indicator. An after-matching test was conducted to ensure the unbiased results of the ATT test. The standardized biases for all covariates are minimal; namely, all tests are in the range of -1.5 to 6. These results indicate an excellent balance between the treatment and control groups. The values in this range are also below the conventional threshold of 10%, often used as a benchmark for acceptable bias (Rosenbaum & Rubin, 1985). In other words, the test results with ATT in this study are strong.

The findings of this study reveal that ESG disclosure does not have a statistically significant impact on market reaction, as proxied by Tobin's Q. This result leads to the rejection of the initial hypothesis in this study, which states that better ESG performance is associated with more favorable market valuations. Nevertheless, this result provides valuable insights into the non-universality of ESG effects on firms in developing countries. This result is also consistent with Alves et al. (2025), who stated that ESG ratings do not systematically affect stock returns in the global market. In addition, this result is also in line with Cheng and Huang (2024), who reported that high ESG is negatively correlated with returns and liquidity. The results of this study strengthen the idea that ESG disclosure does not automatically generate public trust.

The absence of a significant role of ESG in market reactions can be interpreted from several perspectives. First, this condition indirectly reflects the immaturity of ESG integration in Indonesia's capital market. In this case, information related to ESG is not yet necessary for investors when making investment decisions. Unlike developed countries with strict regulations, the financial market in Indonesia seems to prioritize traditional financial indicators over sustainability disclosure. This is evidenced by the significance and robustness of financial information, such as leverage and profitability, in shaping public reactions.

Second, this study's results align with institutional and legitimacy theory, which suggests that ESG practices may be adopted more in response to external pressure or simply to comply with existing regulations. Financial firms in Indonesia do not seem to consider ESG as a strategic initiative; rather, they function more as a symbol to maintain legitimacy than long-term performance. In this case, investors may consider ESG as a report that is not standardized or less comparable, so they do not integrate ESG disclosure components into investment decision-making. Third, the quality and credibility of ESG disclosure play an important role. Although this study has taken the trouble to measure ESG performance based on each GRI-based ESG item in detail, including sub-items, it has

not explored the materiality or certainty of disclosure in each firm. The market, in this case, can react more significantly to prominent ESG aspects, and this reaction occurs over time (Galema & Gerritsen, 2025).

Fourth, related to investor awareness and interest in ESG information of financial firms in Indonesia. The absence of significant reactions can be interpreted that investors may not be able to evaluate ESG data in their decision-making process. Disclosure using sustainability reports and some firms combined in the annual report becomes a complexity in analyzing ESG in firms in Indonesia. Ambiguity regarding ESG reporting, in this case, can reduce investor sentiment (Wang et al., 2024).

Finally, the significant influence of financial-based indicators shows that traditional information remains dominant in investor decision-making, especially in times of high uncertainty such as COVID-19. On the other hand, the absence of a significant role of ESG in MR cannot be interpreted as meaning that ESG-related issues are irrelevant, but rather that its effectiveness as a signal depends on institutional maturity, investor sophistication, and disclosure practices.

CONCLUSION

This study aims to enrich the literature by analyzing the role of ESG adoption on market reactions in developing countries, namely Indonesia. Testing is carried out using robust balanced panel regression with stepwise testing, including testing with pooled OLS modelling and RE estimation models after going through a series of tests to determine the best modelling. Further analysis uses a two-step system GMM to counter the endogeneity problem and PSM to control selection bias. The results of this study indicate that ESG does not play a role in shaping public reactions. Public investment in Indonesia still seems to focus more on financial firms' characteristics and financial performance, such as the portion of debt used and profits generated.

The robust results of this study are helpful for scholars and researchers, investors, regulators, and firms. For scholars and researchers, the results of this study provide evidence related to context-specific outcomes, such as the fact that the impact of ESG is not universal, which strengthens the call for an in-depth analysis of ESG quality. In this case, the lack of market reaction may indicate that investors do not respond to the quantity of ESG disclosure but rather to quality, credibility, and materiality. These three topics are limitations of this study that can be explored in future studies. Nevertheless, this study has enriched the under-researched ESG literature in Indonesia, especially in the financial sector, which opens up space for cross-country comparative studies.

The results of this study enrich information for investors that illustrate the lack of attention or skepticism of investors towards ESG issues. Individual investors with minimal information can look beyond formal disclosures made by firms. Furthermore, for regulators in Indonesia. ESG disclosures that do not have an impact raise questions regarding the effectiveness of reporting in the Indonesian context. Standardization related to ESG disclosures and their verification needs to be considered when improving regulations. Finally, this study contributes to firms in developing markets, especially in Indonesia. Expanding communication strategies and focusing on ESG performance (not just disclosure) must be done to provide framing and investor engagement.

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