

THE EFFECT OF ESG ON COMPANY VALUE WITH OWNERSHIP STRUCTURE AS A MODERATING VARIABLE IN THE TECHNOLOGY SECTOR IN THE 2021-2025 PERIOD

Aura Berlian Sefadu¹⁾, Diyah Santi Hariyani²⁾

¹Management Program, Faculty of Economics and Business, Universitas PGRI Madiun
email: auraberlian2324@gmail.com

²Management Program, Faculty of Economics and Business, Universitas PGRI Madiun
email : diyah.santi@unipma.ac.id

Abstract

This study aims to examine the influence of Environmental, Social, and Governance (ESG) factors on firm value, using ownership structure—proxied by institutional ownership and foreign ownership—as a moderating variable. The study focuses on technology sector companies listed on the Indonesia Stock Exchange during the 2021–2025 period. A quantitative approach was employed, using secondary data sourced from annual reports, sustainability reports, and financial statements. The sample was selected using purposive sampling, resulting in 128 firm-year observations over the five-year period. Data analysis was conducted using regression equations and Moderated Regression Analysis (MRA). The results indicate that Environmental, Social, and Governance (ESG), institutional ownership, and foreign ownership do not have a significant effect on firm value. However, institutional ownership was found to significantly moderate the influence of ESG on firm value, whereas foreign ownership was not found to moderate this relationship.

Keywords : *Environmental Social Governance (ESG), Firm Value, Institutional Ownership, Foreign Ownership*

A. INTRODUCTION

Changes in macroeconomic conditions, such as inflation, interest rates, and exchange rates, can affect stock price movements and company value. Rising interest rates cause investors to shift funds to safer investment instruments, such as deposits, resulting in decreased demand for shares (Zulhelfi, 2025). This decreased demand for shares can cause share prices to fall, impacting company value. This phenomenon demonstrates the close relationship between macroeconomic conditions and capital market stability and investor perceptions of companies (Tarape & Yusuf, 2025).

Corporate value is crucial for a company, as a high corporate value indicates its attractiveness. Increasing corporate value is best achieved through organizational and financial perspectives. Business owners and managers must work harder to improve management functions within business operations. Corporate value can be expressed as share price in the capital market, which directly impacts public companies. The higher the share price, the higher the company's value (Septiyuliana, 2016, cited in Farhan & Muawanah, 2022).

The factors underlying a company's value generally originate from the company's internal and external conditions (Nugraha & Maryani, 2025). Internally, profitability indicates a company's ability to generate profits, while excessive *leverage* can increase company risk (Taufiqurrahman & Sari, 2025). Externally, macroeconomic conditions such as inflation, interest rates, and exchange rates can also influence a company's value because they impact investor decisions (Devi & Cipta, 2024).

The technology sector is engaged in the research, development, and distribution of technology-based goods and services. It is considered a highly dynamic and growing sector. Companies operating within this sector are those involved in the manufacture of electronics, software, computers, or services related to information technology, which are highly sought after in today's era. The development of the technology sector in Indonesia has experienced ups and downs.

However, in 2022, investment levels declined due to the unstable global economy post-pandemic. High inflation and central bank interest rate hikes led to changes in investor behavior. Investors shifted to safer investments and "saving," leading to a significant decline in capital flows to the *startup sector* (Rasyid, 2022).

Furthermore, ESG is also a crucial factor in company value. Investors are concerned because companies with good ESG disclosures can increase transparency and reduce information imbalances between companies and investors, thereby enhancing market confidence (Rismawati

et al ., 2025). Furthermore, companies that effectively manage ESG risks are considered more stable and sustainable in the long term (Prayogo *et al .*, 2026).

Previous research has found inconsistent results regarding the influence of ESG on company value. Therefore, an ownership structure plays a crucial role within a company. This ownership structure determines how monitoring, control, and decision-making are carried out (Rachmawati & Suzan, 2024). This ownership structure is represented by institutional ownership and foreign ownership.

Institutional ownership generally has better resources, analytical capabilities, and access to information than individual investors, enabling more effective monitoring (Aulia *et al .*, 2026). Meanwhile, foreign ownership plays a role in improving management quality and corporate competitiveness through technology transfer, international experience, and the implementation of global governance standards (Tambunan & Wahyuliza, 2024).

The novelty of this research lies in the integration of ESG implementation and ownership structure within the context of the technology sector, which is experiencing post- investment *boom* and funding downturn dynamics. This research specifically examines the technology sector in Indonesia, considering the phenomenon of declining investment, company efficiency, and changes in investor behavior. Furthermore, this study uses the 2021-2025 period, reflecting the transition from post- investment *boom* to a period of declining investment.

This research is crucial because the technology industry is experiencing significant dynamics, marked by a decline in investment due to increasing global economic uncertainty, adjustments in technology company valuations, and changes in investor preferences in assessing company prospects. These conditions demonstrate that technology companies are not only required to have strong financial performance but also to be able to implement sustainability practices through ESG aspects to maintain investor confidence and increase company value. Furthermore, the role of ownership structures such as institutional ownership and foreign ownership is crucial because both types of shareholders have the capacity to monitor and exert

pressure on management to encourage transparency, good governance, and the implementation of sustainability strategies .

THEORETICAL REVIEW AND RESEARCH HYPOTHESIS

Agency Theory

Agency theory by Jensen & Meckling (1976) explains the relationship between company owners (shareholders) and company managers, where the two often have conflicting interests that give rise to agency problems. These differences give rise to agency costs, such as the costs of monitoring managers, the costs of ensuring that managers' actions align with the interests of owners, and the losses resulting from suboptimal managerial decisions, which can ultimately reduce the company's value.

Stakeholder Theory

Freeman's (1984) stakeholder theory states that companies are responsible not only to shareholders but also to all stakeholders, such as employees, customers, the community, the government, and the environment. Therefore, a company's success is measured not only by its financial performance but also by its ability to meet the expectations of these various parties.

Firm Value

Corporate value is expressed as investor perception of the company's level of success as reflected in stock prices. This value reflects the company's ability to create prosperity for shareholders while also indicating future performance prospects (Brigham & Houston (2007). From a stakeholder theory perspective, corporate value is formed due to stakeholder support for business sustainability. The better the company's relationship with stakeholders, the higher the company's legitimacy and reputation in the market. This can increase stock prices, attract investors, and strengthen the company's long-term prospects (Prayogo *et al* ., 2026).

Environmental Social Governance (ESG)

ESG was first introduced in the UN report “*Who Cares Wins*” (2004), as a set of issues that reflect the quality of corporate governance in facing a competitive and risky global business environment. In addition, ESG as a non-financial factor plays a role in increasing company value through controlling environmental, social, and governance risks, which ultimately increases investor confidence and company credibility in the eyes of stakeholders (Hartono *et al* ., 2026). According to Kocmanová & Šimberová, (2014), *Governance indicators* in ESG are used to assess corporate governance practices related to accountability, transparency, leadership, and internal control systems as part of measuring company sustainability performance.

Institutional ownership

Institutional ownership is the ownership of company shares by institutions with significant investment capacity, such as pension funds, insurance companies, banks, and mutual funds (Brigham & Houston, 2005). According to the agency theory proposed by Jensen and Meckling (1976), the greater the institutional ownership, the stronger the supervisory function over company management.

Foreign ownership

Foreign ownership is seen as a mechanism within the ownership structure that can influence company value by improving oversight and decision-making effectiveness. Foreign ownership in a company is also considered to encourage improvements in the quality of corporate governance and increase investor confidence in the company's performance (Abukosim *et al* ., 2014). Foreign ownership in a company can be explained through agency theory proposed by Jensen and Meckling (1976). This theory explains that in an agency relationship, there is a potential conflict

of interest between shareholders as principals and managers as agents. Managers do not always act to maximize company value, but may pursue personal interests, which incurs agency *costs* .

Research Hypothesis

H1: ESG Has a Positive Impact on Firm Value

H2: Institutional Ownership Has a Positive Influence on Firm Value

H3: Foreign Ownership Has a Positive Effect on Firm Value

H4: Institutional Ownership Can Positively Moderate the Effect of ESG on Firm Value

H5: Foreign Ownership Can Positively Moderate the Effect of ESG on Firm Value

B. METHOD

This study uses a quantitative research method. This research was conducted on technology subsector companies listed on the Indonesia Stock Exchange (IDX) for the period 2022–2024. The study population consisted of 37 companies. The sampling method used was purposive sampling, which resulted in 128 research samples. Research data were obtained from www.idx.co.id, annual reports, sustainability reports, and each company's website. Data analysis used included: classical assumption test, moderated regression analysis, partial test (t-test), simultaneous test (F-test), and coefficient of determination (R^2) ^{test} .

C. RESULTS AND DISCUSSIONS

t-test (Partial)

The basis for decision making is if the calculated t value is greater than the t table and the significance value is less than 0.05, then the null hypothesis H_0 is rejected and the alternative hypothesis H_a is accepted. While the calculated t value is smaller than the t table and the significance value is greater than 0.05, then H_0 is accepted and H_a is rejected.

Table 1t-Test Results

Coefficients ^a				
Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.

		B	Std. Error	Beta		
1	(Constant)	1,022	,608		1,681	,095
	ESG	-,010	,008	-,128	-1,293	,199
	Institutional Ownership	,005	,003	,137	1,490	,139
	Foreign Ownership	-,002	,006	-,038	-,392	,696
	Company Size	-,031	,022	-,131	-1,370	,173
	Leverage	6.298E-6	,000	,063	,630	,530
	ROA	,003	,004	,124	,812	,418
	ROE	,000	,002	-,033	-,220	,826

a. Dependent Variable: Company Value

Source: Data processed by SPSS, 2026

Based on the table above, the test results show that the ESG variable obtained a t-value of -1.293 with a significance level of 0.199 (> 0.05). This value indicates that ESG partially has no significant effect on firm value ($H1$ is rejected). The institutional ownership variable obtained a t-value of 1.490 with a significance level of 0.139 (> 0.05), which means that institutional ownership partially has no significant effect on firm value ($H2$ is rejected).

The foreign ownership variable obtained a t-value of -0.392 with a significance of 0.696 (> 0.05), which means that foreign ownership partially also has no significant effect on company value ($H3$ is rejected). Meanwhile, the control variables of company size, leverage, ROA, and ROE all showed insignificant results, so that these four control variables do not provide a significant partial effect on company value in this model.

F Test (Simultaneous)

The basis for decision making is if the calculated F value is greater than the F table and the significance level is less than 0.05, then $H0$ is rejected and H_a is accepted. Meanwhile, if the calculated F value is smaller than the F table and the significance level is greater than 0.05, then $H0$ is accepted and H_a is rejected.

Table 2F-Test Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13,277	7	1,897	1,035	,411 ^b
	Residual	216,304	118	1,833		

Total	229,581	125			
a. Dependent Variable: Company Value					
b. Predictors: (Constant), ESG, Institutional Ownership, Foreign Ownership, Company Size, Leverage, ROA, ROE					

Source: Data processed by SPSS, 2026

Based on Table 4.11, the F-test results show a calculated F-value of 1.035 with a significance level of 0.411 (greater than 0.05). This indicates that simultaneously, the ESG variables, institutional ownership, foreign ownership, and the control variables used in this study do not significantly influence firm value. In other words, the regression model developed in this study cannot be considered adequate to explain the overall variation in firm value.

Coefficient of Determination (R^2)

The basis for decision-making is that if the Adjusted R^2 approaches 1, there is a strong influence between the independent and dependent variables. If the Adjusted R^2 approaches 0, there is a weak or no influence between the independent and dependent variables. Meanwhile, if the Adjusted R^2 is equal to 1, there is a perfect influence between the independent and dependent variables.

Table 3 of the Determination Coefficient (R^2)

Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	,240 ^a	,058	,002	1.35391

a. Predictors: (Constant), ESG, Institutional Ownership, Foreign Ownership, Company Size, Leverage, ROA, ROE

Source: Data processed by SPSS, 2026

Based on Table 4.12, the results of the coefficient of determination test show an Adjusted R Square value of 0.002 or 0.2%. This value indicates that the ESG variables, institutional ownership, foreign ownership, and control variables (firm size, leverage, ROA, and ROE) together are only able to explain 0.2% of the variation in firm value, while the remaining 99.8% is explained by other variables outside this research model. This very small Adjusted R Square value is consistent with the results of the F test which shows the simultaneous model is insignificant.

DISCUSSION

The Influence of ESG on Company Value

Based on the results of the first regression equation test, the *Environmental, Social, and Governance* (ESG) variable obtained a t-value of -1.324 with a significance level of 0.188 (>0.05). These results indicate that ESG does not significantly influence firm value, thus rejecting H1. These results indicate that ESG disclosure has not been able to increase the value of technology companies listed on the Indonesia Stock Exchange for the 2021–2025 period.

This research finding is supported by Xaviera & Rahman (2023), who concluded that aggregate ESG performance had no significant impact on the value of companies listed on the IDX for the 2017–2021 period. The study explained that environmental and social performance is still viewed as an additional expense, while public awareness of sustainability issues in developing countries remains lower than in developed countries.

The Influence of Institutional Ownership on Firm Value

The results of the second equation test showed that the institutional ownership variable obtained a t-value of 1.490 with a significance level of 0.139 (>0.05). Thus, institutional ownership did not significantly influence firm value, thus rejecting H2. This result indicates that the high proportion of institutional share ownership has not been able to increase the value of technology sector companies listed on the Indonesia Stock Exchange for the 2021–2025 period.

The results of this study are supported by Aulia *et al.* (2026), who found that institutional ownership had no significant effect on firm value because the monitoring function was not functioning optimally. The dominance of institutional ownership, which focuses on stability and long-term interests, makes its influence on market valuation less responsive. This finding is also in line with Rachmawati & Suzan (2024), who stated that the low involvement of institutional

investors in the management decision-making process results in the ineffectiveness of the monitoring function .

The Effect of Foreign Ownership on Company Value

The results of the second regression equation test showed that the foreign ownership variable obtained a t-value of -0.392 with a significance level of 0.696 (>0.05). These results indicate that foreign ownership does not significantly affect firm value, thus rejecting H3. This finding indicates that a large proportion of foreign ownership has not been able to increase the value of technology sector companies listed on the Indonesia Stock Exchange for the 2021–2025 period.

The results of this study are supported by Erika *et al* . (2022), who stated that foreign ownership does not affect company value because during the COVID-19 pandemic, all shareholders, both domestic and foreign, faced relatively similar conditions. Company value is more influenced by operational performance, management policies, and global economic factors than by foreign ownership. This finding is also supported by Sasanti *et al* . (2024), who explain that foreign investors tend to have a long-term investment orientation, making them more resilient to short-term market fluctuations.

The Role of Institutional Ownership in Moderating the Effect of ESG on Firm Value

The results of the third regression equation test showed that the interaction variable between ESG and institutional ownership obtained a coefficient of 0.001 with a significance value of 0.040 (<0.05). These results indicate that institutional ownership moderates the relationship between ESG and firm value, thus accepting H4. This finding indicates that the greater the institutional ownership, the stronger the influence of ESG disclosure on increasing the value of technology sector companies listed on the Indonesia Stock Exchange during the 2021–2025 period.

The results of this study align with those of Fauziah *et al.* (2024), who stated that institutional ownership serves as a moderating variable because institutional investors encourage companies to improve ESG disclosure through management oversight. Ellili (2023) also explained that institutional investors pay attention to business implementation that considers stakeholder interests, thus encouraging companies to disclose ESG information to reduce information asymmetry.

The Role of Foreign Ownership in Moderating the Effect of ESG on Firm Value

Based on the results of the third regression equation test, the interaction variable between ESG and foreign ownership obtained a significance value of 0.091 (>0.05), indicating that foreign ownership was not proven to moderate the relationship between ESG and firm value, thus rejecting H5. These results indicate that the size of foreign ownership has not been able to strengthen or weaken the influence of ESG disclosure on increasing the value of technology sector companies listed on the Indonesia Stock Exchange for the 2021–2025 period.

The results of this study are supported by Istikomah *et al.* (2023), who demonstrated that foreign ownership was unable to moderate the influence of ESG on company value. This is because the proportion of foreign ownership in the sample companies was not yet dominant enough compared to other ownership, resulting in limited influence of foreign investors on company policies, including ESG implementation. Sadiq (2020) stated that foreign investors do not necessarily use ESG information as the primary basis for investment decisions. Foreign investors still tend to consider a company's fundamental aspects, particularly its ability to generate profits, rather than the quality of ESG disclosure.

D. CONCLUSIONS

Based on the results of data analysis and hypothesis testing regarding the influence of *Environmental, Social, and Governance* (ESG) on company value with ownership structure as a

moderating variable in the technology sector in the 2021–2025 period, several conclusions can be drawn as follows:

1. *Environmental, Social, and Governance* (ESG) did not significantly impact firm value, thus rejecting the first hypothesis (H1). This indicates that ESG disclosure levels have not been able to increase firm value in technology sector companies during the study period.
2. Institutional ownership does not significantly influence firm value, thus the second hypothesis (H2) is rejected. The large proportion of institutional ownership has not been able to directly increase firm value.
3. Foreign ownership does not significantly impact firm value, thus the third hypothesis (H3) is rejected. These results indicate that the presence of foreign investors has not had a direct impact on increasing firm value.
4. Institutional ownership has been shown to moderate the relationship between ESG and firm value, thus the fourth hypothesis (H4) is accepted. These results indicate that institutional ownership can strengthen the effectiveness of ESG implementation in increasing firm value.
5. Foreign ownership has not been shown to moderate the relationship between ESG and firm value, thus rejecting the fifth hypothesis (H5). Thus, foreign ownership is unable to strengthen or weaken the influence of ESG on firm value.

E. SUGGESTIONS

For future researchers, it is recommended to expand the research object to other industrial sectors or use a longer observation period so that the research results can better describe the development of ESG implementation in Indonesia.

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