



The Effect of ESG, Retention Ratio, and Green Accounting on Firm Value

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Abstract: This research intends to analyze the effect of ESG (Environmental, Social, and Governance), Retention ratio, and Green accounting on Firm Value in Infrastructure Sector Companies listed on the Indonesia Stock Exchange for the 2021-2024 period. This study uses a purposive sampling method. Based on the predetermined criteria, a sample of 17 issuers was gathered from a population of 60 issuers. This study uses multiple linear regression analysis as the data analysis tool utilizing the SPSS program version 22. The findings demonstrate that ESG (Environmental, Social, and Governance) does not have a significant effect on Firm Value, while Retention ratio and Green accounting have a positive and significant effect on Firm Value.

Keywords: ESG; Retention Ratio; Green Accounting; Firm Value

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INTRODUCTION

Firm value serves as one of the essential indicators in representing investor perceptions of a company's performance, prospects, and sustainability. The perspective on firm value in the globalization era is no longer determined solely by financial profitability, but is also supported by commitment to sustainability, business development, and environmental responsibility within business strategies. Firm value reflects the company's condition regarding its achievement of corporate performance as well as the public's assessment of the company, which is examined through various factors (Lestari & Khomsiyah, 2023).

In its development, various external factors have contributed to shaping this assessment, one of which is environmental issues that have increasingly gained global attention in influencing corporate business activities. According to the BMKG (2024) report, the global average temperature in 2024 was recorded to have exceeded the 1.5°C threshold above pre-industrial levels, as stipulated in the Paris Agreement, signaling an escalating risk of global warming. Conceptually, the increase in global average temperature can indirectly impact firm value through increased operational costs, project risks, environmental regulatory demands, and shifts in investor preferences that increasingly consider sustainability aspects.

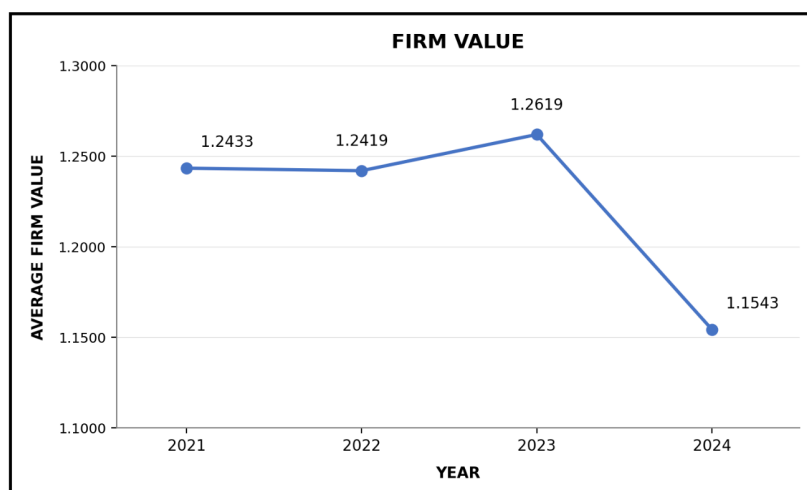


Figure 1. Average Firm Value in the Infrastructure Sector 2021–2024

The impact of climate change becomes increasingly relevant when associated with the dynamics of firm value in the infrastructure sector. Based on historical data presented in figure 1, the firm value of the infrastructure sector measured by Tobin's Q showed a significant decline of 10.76% in 2024 compared to the previous year. This decline indicates a market response to increasing uncertainty, including climate risks and environmental pressures, suggesting that firm value is no longer solely determined by financial performance, but also by market perceptions of sustainability commitment. In response to these conditions, infrastructure sector companies are required to optimize sustainability-oriented strategies, including through the implementation of ESG (Environmental, Social, and Governance) factors as a form of sustainability disclosure, retention ratio as a profit retention policy, and green accounting as a commitment to environmental management, which are expected to generate positive signals to investors and potentially increase firm value.

ESG (Environmental, Social, and Governance) is a framework that encompasses three main elements: environmental, social, and governance. ESG (Environmental, Social, and Governance) can influence firm value because sustainability disclosure serves as a positive signal to investors regarding the effectiveness of governance and the company's long-term commitment. Transparent ESG (Environmental, Social, and Governance) information can reduce information asymmetry and enhance investor confidence in the company's prospects and stability.

Moreover, the concept of retention ratio (retained earnings ratio) emerges as an important metric that measures the portion of earnings not distributed (Asyifa et al., 2025). Earnings retention indicates that the company has confidence in productive internal investment opportunities and the ability to finance growth from internal funding sources. This condition strengthens the company's financial foundation, enhances reputation, and builds public and investor trust. Ultimately, this positive market perception is reflected in increased firm value.

Furthermore, efforts and forms of social and environmental responsibility activities have also become one of the non-financial performance programs that all public companies must implement. This performance assessment can be measured using the green accounting

concept, which is calculated by dividing environmental or CSR (Corporate Social Responsibility) costs by the company's net profit (Fapriansyah & Abidin, 2025). Green accounting can enhance firm value because this measurement reflects the extent of the company's commitment in allocating its financial resources to activities oriented toward environmental conservation, thereby strengthening investor trust and the company's image.

The integration of these three variables enables a more comprehensive analysis in assessing how corporate sustainability performance and financial policies are reflected in firm value, and the research focus on the 2021–2024 period is considered relevant in line with the strengthening sustainability agenda, tightening ESG (Environmental, Social, and Governance) related regulations, and increasing investor attention to non-financial factors in formulating investment decisions. Therefore, this study aims not only to provide practical benefits for infrastructure sector company management in formulating long-term sustainability strategies, but also to enrich the literature on financial management and sustainability accounting through an integrated examination of ESG (Environmental, Social, and Governance), Retention Ratio, and Green Accounting on Firm Value.

LITERATURE REVIEW

Signaling theory is a theory whereby parties possessing information (company management) convey signals or cues, namely information that represents the condition of a company that is beneficial to recipients (investors) (Ramadhayani & Widiyati, 2024). These signals are reflected in information that depicts management actions and practices through various policies and disclosures that reflect the company's performance, strategy, and sustainability, and play a crucial role as key indicators for investors in making investment decisions.

Firm value is one of the main variables that functions as an indicator in reflecting market assessment of a company's prospects, performance, and risk level. In this study, firm value is measured using Tobin's Q ratio, which considers market value and total assets of the company, whereby a higher Tobin's Q value indicates a better condition (Martini & Rismawandi, 2024). This ratio is also useful in reflecting the company's ability to manage assets to create value.

ESG (Environmental, Social, and Governance) is a variable that serves to measure the extent to which companies implement sustainable and responsible business practices in social, environmental, and corporate governance aspects. This non-financial ESG (Environmental, Social, and Governance) information can serve as an important signal for investors or stakeholders to measure and evaluate the performance of corporate operational activities, not merely from economic factors, but also from their impacts on the environment, society, and the quality of corporate governance. This study adopts the GRI Consolidated Standards 2021 in determining the ESG disclosure index because this standard represents an international, structured, and comprehensive guideline for measuring corporate performance (Fitria & Mariana, 2025).

Retention ratio represents the proportion of net profit retained by the company for reinvestment rather than distributed as dividends, thereby supporting business growth and expansion through internal financing (Prayogo et al., 2023). This indicates that the retention ratio serves as an indicator of the company's ability to finance operational activities, particularly for long-term projects and investments from internal funding sources without excessive dependence on debt. The higher the retention ratio value, the greater the budget available for

the company to undertake expansion, increase production capacity, and strengthen capital structure (Asyifa et al., 2025).

Green accounting is a variable utilized to measure the level of corporate capability in incorporating environmental factors as elements within the context of accounting practices, financial cost reporting, and managerial decision-making. According to Tambunan et al. (2025) green accounting is a category of environmental accounting that reflects efforts to integrate environmental benefits and expenses into the economic decision-making process or financial outcomes of a business. This concept holds appeal for investors as it reflects the company's concern and responsibility toward the environment arising from its operational activities, particularly for the infrastructure sector where projects have significant environmental impacts (Fapriansyah & Abidin, 2025).

The Effect of ESG (Environmental, Social, and Governance) on Firm Value

ESG (Environmental, Social, and Governance) has become one of the crucial factors for the market in determining the quality level of companies, which is viewed not only from a financial perspective, but also from their social responsibility and business sustainability. As stakeholder awareness of sustainability issues increases, ESG (Environmental, Social, and Governance) disclosure has become one of the indicators of particular consideration in evaluating corporate sustainability prospects and firm value. Consistent ESG (Environmental, Social, and Governance) disclosure reflects management efforts to provide positive signals regarding the company's commitment to conducting sustainable business, good governance, and long-term risk management. These signals are interpreted by investors and stakeholders as an indication of the company's ability to maintain business sustainability, thereby enhancing market confidence which potentially leads to increased firm value.

H₁: ESG (Environmental, Social, and Governance) has a positive and significant effect on Firm Value

The Effect of Retention Ratio on Firm Value

Retention ratio reflects the company's policy in balancing interests between internal financing for long-term growth and shareholder interests in investment returns. A high retention ratio indicates that a greater proportion of net profit is reinvested in the company and serves as a positive signal that management has confidence in internal investment opportunities and the company's long-term growth. These signals are interpreted by investors and stakeholders as an indication of the company's ability to maintain business sustainability, thereby enhancing credibility which is reflected in increased firm value.

H₂: Retention Ratio has a positive and significant effect on Firm Value

The Effect of Green Accounting on Firm Value

Green accounting in this study is operationalized through the ratio of CSR costs to the company's net profit. While green accounting broadly refers to the integration of environmental and social costs into corporate accounting systems, the use of CSR cost allocation relative to net profit as its proxy is grounded in the argument that the proportion of financial resources deliberately directed toward social and environmental activities reflects the degree to which a company has internalized environmental responsibility into its financial decision-making. In the Indonesian infrastructure sector context, where standardized

environmental cost reporting remains underdeveloped, the ratio of CSR costs to net profit represents the most consistently available and measurable indicator of a company's commitment to green accounting practices. This proportion signals management's seriousness in embedding environmental and social considerations into resource allocation decisions, which is expected to enhance investor perceptions of governance quality and long-term sustainability prospects, thereby contributing to increased market confidence and firm value.

H₃: Green Accounting has a positive and significant effect on Firm Value

The primary objective of this study is to examine and provide empirical evidence on the significant influence of ESG (Environmental, Social, and Governance), Retention Ratio, and Green Accounting on Firm Value, with a focus on infrastructure sector companies listed on the Indonesia Stock Exchange (IDX) over the period of 2021-2024. A theoretical framework is systematically constructed to enhance the understanding of the research direction, for which a conceptual thinking framework is correspondingly defined. In light of several analyses related to the determinants of firm value, the research framework formulated for this study is presented as follows:

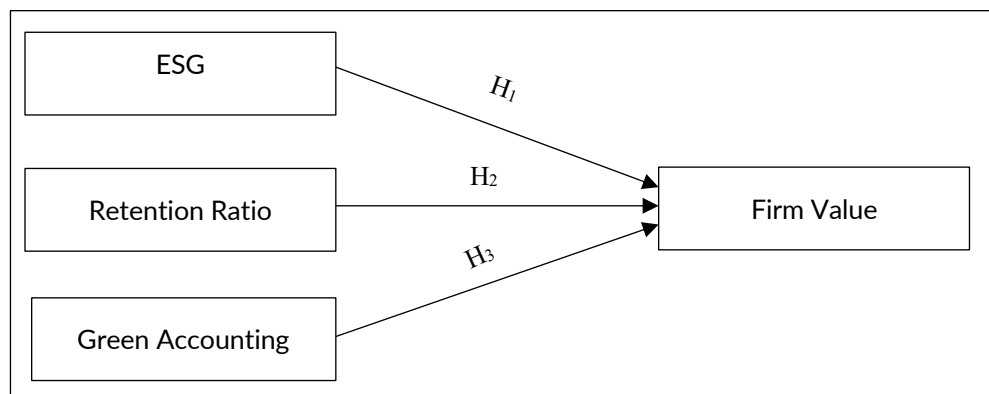


Figure 2. Theoretical Framework

METHOD

Population and Sample of the Study

This study employs a causal relationship research design and utilizes a quantitative research method. This study uses independent variables consisting of ESG (Environmental, Social, and Governance), Retention Ratio, and Green Accounting. Meanwhile, the dependent variable is Firm Value. This research is constructed referring to annual reports, financial statements, and sustainability reports of infrastructure sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2021-2024. The sample is determined using the purposive sampling method, with the following criteria considered in sample selection:

1. Infrastructure Sector Companies in Indonesia listed on the IDX for the period 2021-2024.
2. Infrastructure Sector Companies that prepare their financial statements using the Indonesian Rupiah (Rp) currency.
3. Infrastructure Sector Companies that have complete research data, including financial statements, annual reports, and sustainability reports throughout the observation period.
4. Infrastructure Sector Companies that did not experience losses during the research period.

The criteria considered in determining the research sample refer to the study by Afsari et al. (2025), which emphasizes the use of the Indonesian Rupiah (Rp) currency to maintain

uniformity and comparability of financial data and avoid the influence of exchange rate fluctuations, while the criterion of companies not experiencing losses is selected so that the analysis reflects stable and unbiased financial performance.

Although the minimum sample size criteria have been met, this study is subject to several limitations. The relatively small sample of 68 observations may reduce statistical power and limit the stability and generalizability of the findings. Furthermore, the focus on infrastructure companies listed in Indonesia and the restricted observation period constrain the external validity of the results.

The application of the fourth sampling criterion – excluding companies that reported net losses – potentially introduces survivorship bias, as the sample tends to be dominated by financially stable firms, which may distort the true relationships among the variables examined. Accordingly, the findings of this study should be interpreted with caution, and future research is encouraged to employ larger and more diverse samples across extended time horizons to enhance the robustness and broader applicability of the results.

Research Model and Path Diagram

Multiple linear regression analysis serves as the analytical framework in this study. This method is applied to assess the impact of three independent variables ESG (Environmental, Social, and Governance), Retention Ratio, and Green Accounting, on the dependent variable of Firm Value. The research model formulated in this study is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Notes:

Y	= Firm Value
a	= Constant
$\beta_1, \beta_2, \beta_3$	= Regression Coefficients
x_1	= ESG (<i>Environmental, Social, and Governance</i>)
x_2	= <i>Retention Ratio</i>
x_3	= <i>Green Accounting</i>
e	= Error Term

ANALYSIS AND DISCUSSION

The normality test was conducted to evaluate whether the residual values of the regression model follow a normal distribution, which constitutes a fundamental assumption in classical linear regression analysis. In this study, the One-Sample Kolmogorov-Smirnov Test (K-S) was employed in conjunction with the Monte Carlo simulation approach, which is widely regarded as a more robust technique for handling small to medium sample sizes. The output of the normality test generated through SPSS v.22 is presented in Table 1 below.

Table 1. Normality Test Results *One-Sample Kolmogorov-Smirnov Test*

		Unstandardized Residual	
N			67
Normal Parameters ^{a,b}	Mean		.0000000
	Std. Deviation		.19813998
Most Extreme Differences	Absolute		.146
	Positive		.146
	Negative		-.063
Test Statistic			.146
Asymp. Sig. (2-tailed)			.001c
Monte Carlo Sig. (2-tailed)	Sig.		.104d
	99% Confidence Interval	Lower Bound	.096
		Upper Bound	.111

Source: Data processed by the author, 2026

Based on the output presented in Table 1, the One-Sample Kolmogorov-Smirnov Test reveals a Monte Carlo Sig. (2-tailed) value of 0.104, which exceeds the significance threshold of 0.05, leading to the acceptance of H₀. It can accordingly be concluded that the residual data follow a normal distribution, and the study may therefore proceed to further analysis. As stated by Ghozali (2021) in *Aplikasi Analisis Multivariate dengan Program IBM SPSS 26*, data are deemed normally distributed when the p-value obtained from the Monte Carlo-based normality test surpasses 0.05. This result signifies that no significant discrepancy exists between the empirical data distribution and the theoretical normal distribution, thus confirming that the normality assumption is duly fulfilled.

Consistent with this finding, several prior studies have similarly employed the One-Sample Kolmogorov-Smirnov Test with the Monte Carlo approach to verify the normality of data distribution. A systematic review of four scholarly articles, including research conducted by Kasihyana et al. (2023), Azizah et al. (2023), Kennedy et al. (2023), and Mustofa & Nurfadillah (2021), collectively reported Monte Carlo simulation significance values above 0.05, all of which confirm that the respective datasets conformed to a normal distribution.

Multicollinearity Test

The multicollinearity test was conducted to examine whether high intercorrelations exist among the independent variables in the regression model. The detection was carried out by observing the Tolerance and Variance Inflation Factor (VIF) values for each independent variable, with the criterion that a regression model is considered free from multicollinearity when all Tolerance values exceed 0.1 and all VIF values remain below 10. The results of the multicollinearity test obtained through SPSS v.22 are presented in Table 2 below.

Table 2. Multicollinearity Test Results

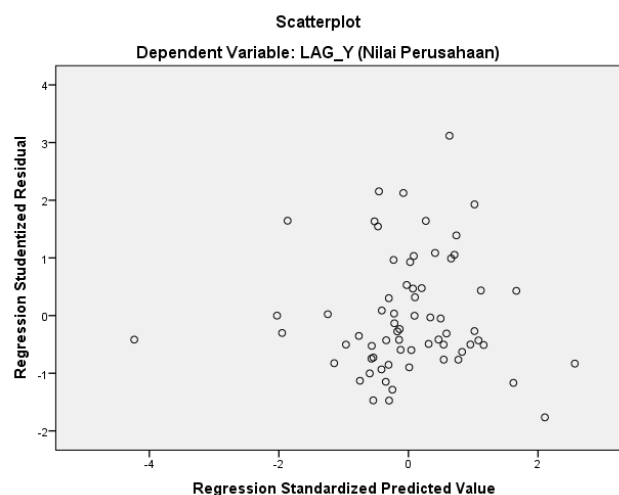
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	LAG_X1 (ESG)	.907	1.103
	LAG_X2 (Retention Ratio)	.939	1.065
	LAG_X3 (Green Accounting)	.965	1.036

Source: Data processed by the author, 2026

As presented in Table 2, each independent variable yields a VIF value below the threshold of 10, specifically ESG (Environmental, Social, and Governance) (1.103), Retention Ratio (1.065), and Green Accounting (1.036). Correspondingly, the Tolerance values for all independent variables exceed 0.1, with ESG (Environmental, Social, and Governance) recording 0.907, Retention Ratio 0.939, and Green Accounting 0.965. On the basis of these diagnostic results, it can be concluded that the regression model is free from multicollinearity issues among the independent variables, given that all Tolerance values surpass 0.1 and all VIF values remain below 10. This finding confirms that no substantial intercorrelation exists among the independent variables, thus ensuring the stability of the regression model and the reliability of its estimated coefficients.

Heteroskedasticity Test

The heteroskedasticity test was performed to determine whether the variance of the residuals remains constant across observations (homoscedasticity) or varies systematically (heteroscedasticity). In this study, a graphical approach was applied through visual examination of the scatterplot, which displays the relationship between standardized predicted values and standardized residuals. The output of the heteroskedasticity test is presented in Figure 4 below.

**Figure 4.** Heteroskedasticity Test Results Using Graphical Analysis (Scatterplot)

Based on Figure 4, a visual inspection of the SPSS output demonstrates that the data points are randomly scattered both above and below or around zero, showing no tendency to cluster in any particular direction, and displaying no systematic pattern in their distribution. These characteristics confirm that the regression model is free from heteroscedasticity, rendering it appropriate and reliable for use in this research.

Autocorrelation Test

The autocorrelation test was conducted to detect the presence of correlation among residuals in successive observations, which would otherwise violate the assumption of independence in classical linear regression. In this study, the Durbin- Watson statistic was applied after performing lag-based data transformation to address potential autocorrelation issues commonly encountered in time-series and panel-based financial data. The results of the autocorrelation test are presented in Table 3 below.

Table 3. Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.346a	.120	.078	.20280	1.775

a. Predictors: (Constant), LAG_X3 (Green Accounting), LAG_X2 (Retention Ratio), LAG_X1 (ESG)

b. Dependent Variable: LAG_Y (Firm Value)

Source: Data processed by the author, 2026

Based on Table 3, the autocorrelation diagnostic test performed after applying lag-based data transformation produces a Durbin-Watson statistic of 1.775. With three independent variables ($k = 3$) and a sample size of 67 observations ($n = 67$), the Durbin-Watson critical values at a significance level of $\alpha = 5\%$ are established as $dL = 1.5122$ and $dU = 1.6988$. The obtained statistic falls within the acceptable range, satisfying the condition $dU (1.6988) < DW (1.775) < 4-dU (2.3012)$, which confirms that the regression model is entirely free from autocorrelation.

Hypothesis Testing

Analysis of Multiple Linear Regression

Multiple linear regression analysis was conducted to examine the magnitude and direction of the influence exerted by ESG (Environmental, Social, and Governance), Retention Ratio, and Green Accounting on Firm Value. This technique enables the simultaneous estimation of the contribution of each independent variable to the dependent variable while controlling for the effects of the other variables in the model. The estimation results obtained from SPSS v.22 are presented in Table 4 below.

Table 4. Analysis of Multiple Linear Regression Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	-.165	.090		-1.839	.071
	LAG_X1 (ESG)	-.063	.068	-.114	-.921	.361
	LAG_X2 (Retention Ratio)	.284	.136	.256	2.096	.040
	LAG_X3 (Green Accounting)	2.519	1.202	.252	2.095	.040

a. Dependent Variable: LAG_Y (Firm Value)

Source: Data processed by the author, 2026

Based on the coefficients presented in Table 4, the constant (α) is -0.165 and the coefficients are $\beta_1 = -0.063$; $\beta_2 = 0.284$; and $\beta_3 = 2.519$, resulting in the following multiple linear regression equation:

$$\text{Firm Value} = -0.165 - 0.063 \text{ ESG} + 0.284 \text{ Retention Ratio} + 2.519 \text{ Green Accounting} + \varepsilon$$

Referring to the regression equation results, the constant value of -0.165 indicates that if the ESG (Environmental, Social, and Governance), Retention Ratio, and Green Accounting variables are valued at zero, the firm value will be -0.165. The ESG (Environmental, Social, and Governance) regression coefficient (β_1) has a negative value of -0.063, meaning that when other independent variables are assumed constant, each one-unit increase in ESG (Environmental, Social, and Governance) can result in a decrease in firm value of 0.063, and vice versa. The negative sign on this coefficient reflects a negative influence between the ESG (Environmental, Social, and Governance) variable and the firm value variable. Furthermore, the Retention Ratio regression coefficient (β_2) has a positive value of 0.284, indicating that if the Retention Ratio increases by one unit with other variables held constant, firm value can increase by 0.284, and vice versa. This demonstrates a positive influence between the Retention Ratio variable and the firm value variable. Meanwhile, the Green Accounting regression coefficient (β_3) has a positive value of 2.519, meaning that an increase in Green Accounting by one unit, assuming other independent variables remain constant, can result in an increase in firm value of 2.519, and vice versa. Thus, the Green Accounting variable positively influences the firm value variable.

Analysis of the Coefficient of Determination (R^2)

The coefficient of determination (R^2) test was performed to evaluate the proportion of variance in Firm Value that can be explained by the combined effect of the independent variables, namely ESG (Environmental, Social, and Governance), Retention Ratio, and Green Accounting. In the context of multiple regression with multiple predictors, the Adjusted R Square value is regarded as a more reliable indicator because it accounts for the number of independent variables included in the model. The output of the coefficient of determination test is presented in Table 5 below.

Table 5. Analysis of the Coefficient of Determination (R^2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.346a	.120	.078	.20280	1.775

Source: Data processed by the author, 2026

Based on Table 5, the Adjusted R Square value of 0.078 indicates that 7.8% of the variance in Firm Value is accounted for by ESG (Environmental, Social, and Governance), Retention Ratio, and Green Accounting variables. The residual 92.2% (100% – 7.8%) is attributable to other variables not incorporated in the model. The relatively low Adjusted R Square value indicates that the predictive capability of the model remains limited, suggesting that the model specification has not yet been fully comprehensive in capturing the primary determinants of Firm Value. This also reflects that ESG (Environmental, Social, and Governance), Retention Ratio, and Green Accounting variables may only serve as complementary factors rather than principal determinants in explaining changes in Firm Value, particularly within the sector and study period employed. Furthermore, this finding suggests the possibility that the relationship between the independent variables and Firm Value is not entirely linear, or may be influenced by moderating or mediating variables not yet incorporated into the model. Therefore, the development of a more complex model, such as the application of non-linear models or a more comprehensive panel data approach, may be considered to improve the accuracy and validity of the research findings.

Analysis of Model Feasibility Test Results (F-Test)

The model feasibility test (F-Test) was conducted to determine whether all independent variables, namely ESG (Environmental, Social, and Governance), Retention Ratio, and Green Accounting, simultaneously exert a statistically significant influence on Firm Value. The decision-making criterion is established when the significance value is less than 0.05 and the F calculated exceeds the F table, indicating that the regression model is statistically valid. The output of the F-Test is presented in Table 6 below.

Table 6. Analysis of Model Feasibility Test Results (F-Test)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.352	3	.117	2.851	.044b
	Residual	2.591	63	.041		
	Total	2.943	66			

a. Dependent Variable: LAG_Y (Firm Value)

b. Predictors: (Constant), LAG_X3 (Green Accounting), LAG_X2 (Retention Ratio), LAG_X1 (ESG)

Source: Data processed by the author, 2026

Based on Table 6, with a significance level $(0.044) < (0.05)$ and F calculated $(2.851) > F$ table (2.751) , the simultaneous test results demonstrate that ESG (Environmental, Social, and Governance), Retention Ratio, and Green Accounting variables jointly exert a significant influence on firm value. These findings indicate that the research model is statistically valid and appropriate for application.

Analysis of Partial Test Results (t-Test)

The partial test (t-Test) was conducted to examine the individual effect of each independent variable on Firm Value, while controlling for the influence of the other independent variables in the model. The criterion for acceptance is established when the significance value is below 0.05 and the t calculated exceeds the t table value (1.998 at $\alpha = 5\%$

with $df = 63$). Referring to the Coefficients output presented in Table 4, the t-Test results are elaborated as follows:

1. The effect of the ESG (Environmental, Social, and Governance) variable on the firm value variable yields a Sig. level of $0.361 > 0.05$ and a t calculated value $(-0.921) < t \text{ table } (1.998)$. Therefore, it is concluded that H1 is rejected, or no significant effect is identified between the ESG (Environmental, Social, and Governance) variable and the firm value variable.
2. The effect of the Retention Ratio variable on the firm value variable shows a Sig. level of $(0.040) < (0.05)$ and a t calculated value $(2.096) > t \text{ table } (1.998)$, thus it is concluded that H2 is accepted, or a significant effect is identified between the Retention Ratio variable and the firm value variable.
3. The effect of the Green Accounting variable on the firm value variable shows a Sig. level of $(0.040) < (0.05)$ and a t calculated value $(2.095) > t \text{ table } (1.998)$, thus it is concluded that H3 is accepted, or a significant positive effect exists between the Green Accounting variable and the firm value variable.

Discussion

The Effect of ESG (Environmental, Social, and Governance) on Firm Value

The partial test (t-test) results indicate that ESG (Environmental, Social, and Governance) does not significantly influence firm value in the Indonesian infrastructure sector. This finding suggests that the level of ESG (Environmental, Social, and Governance) implementation among sampled firms does not meaningfully affect market valuation during the observation period. From a Signaling Theory perspective, the insignificant result implies that ESG (Environmental, Social, and Governance) disclosure has not functioned as an effective and credible signal to investors. Several theoretical explanations may account for this failure. First, the quality and substance of ESG (Environmental, Social, and Governance) disclosures in Indonesia remain largely normative and compliance-driven, reducing their informational value to market participants. When disclosures lack specificity and verifiability, investors may perceive them as symbolic rather than substantive. Second, investor sophistication in the Indonesian capital market may limit the capacity to fully process and price non-financial information, leading market participants to rely predominantly on traditional financial signals such as profitability, leverage, and liquidity rather than ESG (Environmental, Social, and Governance) metrics. Third, a methodological limitation of this study that may have contributed to the null result is the use of a binary ESG (Environmental, Social, and Governance) disclosure index, which captures only the presence or absence of disclosure items rather than their depth, consistency, or quality. In contrast, standardized ESG (Environmental, Social, and Governance) scoring instruments such as MSCI ESG Ratings or Bloomberg ESG Disclosure Scores provide a more granular and comparable measure of ESG (Environmental, Social, and Governance) performance.

These findings are consistent with Olivia et al. (2025), who similarly found that ESG (Environmental, Social, and Governance) does not significantly influence firm value. However, this contrasts with the findings of Anugrah & Widyawati (2025), who reported a significant positive effect of ESG (Environmental, Social, and Governance) on firm value, a discrepancy that may be attributed to differences in measurement instruments, sample composition, or the time period examined. Accordingly, future research is encouraged to adopt more rigorous and internationally recognized ESG (Environmental, Social, and Governance) measurement

frameworks to better capture the signal quality of ESG (Environmental, Social, and Governance) practices and their potential impact on firm value.

The Effect of Retention Ratio on Firm Value

The partial test (t-test) results and coefficient values indicate that Retention Ratio positively and significantly influences firm value. These findings suggest that an increase in Retention Ratio in the infrastructure sector will also result in an increase in firm value, and vice versa if it decreases. A higher Retention Ratio demonstrates that the company retains more earnings to strengthen internal capital and enhance firm value through long-term growth. Therefore, optimal management of Retention Ratio becomes important because the signals conveyed can increase investor confidence in the company's financial stability and growth prospects, which are represented in increased firm value. These findings are consistent with research conducted by Lestari & Khomsiyah (2023), who revealed that Retention Ratio positively and significantly influences firm value. However, different findings were identified in the study conducted by Sari & Kadarningsih (2024), who revealed that Retention Ratio does not significantly influence firm value.

The Effect of Green Accounting on Firm Value

The partial test (t-test) results and coefficient values indicate that Green Accounting positively and significantly influences firm value. This effect means that an increase in Green Accounting in the infrastructure sector will also result in an increase in firm value, and vice versa when it decreases. Green Accounting in this study is measured by CSR (Corporate Social Responsibility) costs relative to the company's net profit. The greater the proportion of CSR costs incurred compared to net profit, the higher the level of corporate attention to managing environmental impacts from its activities. Therefore, the consistency of disclosure and the magnitude of CSR allocation are considered capable of strengthening the reputation of infrastructure companies, which is then positively responded to by the market as an indicator of sustainability and quality of corporate management through improved firm value. These findings are consistent with the study conducted by Yolanda et al. (2024), which stated that Green Accounting positively and significantly influences firm value. However, different findings were identified in research conducted by Safitri & Widiyati (2024), which stated that Green Accounting not significantly influence firm value.

CONCLUSION

Based on the data analysis results conducted using multiple linear regression method with 17 samples of Infrastructure sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2021-2024, it is concluded that ESG (Environmental, Social and Governance) does not significantly influence Firm Value, while Retention Ratio and Green Accounting positively and significantly influence Firm Value.

This study has several research limitations, including: only incorporating three independent variables, namely ESG (Environmental, Social and Governance), Retention Ratio, and Green Accounting. Meanwhile, there are still many variables that can influence Firm Value, for instance, based on the coefficient of determination (R^2) results, 92.2% of the firm value variable is explained by other variables not included. Furthermore, the sample is limited to the infrastructure sector only and the research period covers only four years, namely 2021-2024.

Referring to this conclusion, managerial implications, and research limitations that have been explained, the suggestions that can be conveyed for future researchers include: it is recommended to expand the research object and observation period to be broader and longer in order to more accurately depict the influence of ESG (Environmental, Social, and Governance), retention ratio, and green accounting on firm value in the long term. Additionally, future researchers are expected to examine the quality of ESG (Environmental, Social, and Governance) disclosure, not merely from a quantitative perspective, so that research results better reflect actual sustainability practices.

Moreover, infrastructure sector company management is expected to enhance the quality and consistency of ESG (Environmental, Social, and Governance) disclosure so that it is integrated with business strategy, as well as optimally manage retention ratio to support productive investments, and the implementation of green accounting needs to be conducted consistently as part of financial policy to minimize environmental risks and enhance company reputation. For investors, ESG (Environmental, Social, and Governance) analysis should be conducted more critically by paying attention to the substance and real impact of disclosed information, while retention ratio and green accounting can be used as indicators of growth policy and sustainability risk management quality that influence stability and prospects for increasing firm value.

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