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The Effect of Financial Performance on Firm Value with Capital Structure as a Moderating Variable in the Infrastructure Sector for the 2023–2024 Period

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Abstract: This study aims to analyze the effect of financial performance on firm value with capital structure as a moderating variable in infrastructure sector companies listed on the Indonesia Stock Exchange (IDX) during the 2023–2024 period. This study employed a quantitative method using secondary data obtained from the financial statements of infrastructure companies. The population consisted of 67 companies. Using purposive sampling, 50 companies were selected, and after the outlier treatment process, the final sample comprised 37 companies. Data were analyzed using panel data regression with the Random Effect Model (REM), while the moderating effect was tested using Moderated Regression Analysis (MRA) with EViews 13. The results indicate that Return on Assets (ROA) has a positive and significant effect on firm value, whereas the Current Ratio (CR) and Debt to Equity Ratio (DER) have no significant effect on firm value. Furthermore, the Debt to Equity Ratio (DER) is unable to moderate the relationship between Return on Assets (ROA) and firm value or between the Current Ratio (CR) and firm value. These findings contribute to the literature on the determinants of firm value and provide useful insights for corporate management and investors in financial decision-making.

Keywords: Firm Value, Financial Performance, Capital Structure, Moderated Regression Analysis (MRA), Infrastructure Sector.

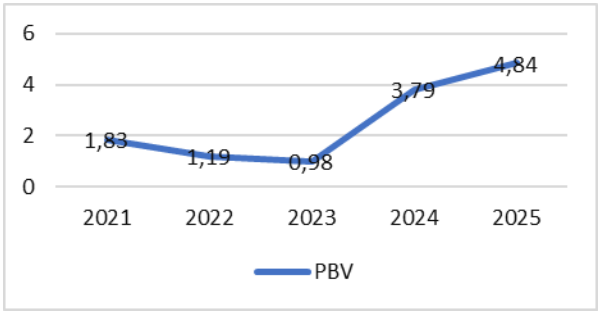
Indonesian Abstract: *Penelitian ini bertujuan untuk menganalisis pengaruh kinerja keuangan terhadap nilai perusahaan dengan struktur modal sebagai variabel moderasi pada perusahaan sektor infrastruktur yang terdaftar di Bursa Efek Indonesia (BEI) periode 2023–2024. Penelitian ini menggunakan metode kuantitatif dengan data sekunder yang diperoleh dari laporan keuangan perusahaan sektor infrastruktur. Populasi penelitian terdiri atas 67 perusahaan. Melalui teknik purposive sampling diperoleh 50 perusahaan sebagai sampel, kemudian setelah proses penanganan outlier diperoleh sampel akhir sebanyak 37 perusahaan selama periode penelitian. Analisis data dilakukan menggunakan regresi data panel dengan Random Effect Model (REM), sedangkan pengujian moderasi menggunakan Moderated Regression Analysis (MRA) dengan bantuan perangkat lunak EViews 13. Hasil penelitian menunjukkan bahwa Return on Assets (ROA) berpengaruh positif dan signifikan terhadap nilai perusahaan, sedangkan Current Ratio (CR) dan Debt to Equity Ratio (DER) tidak berpengaruh signifikan terhadap nilai perusahaan. Selain itu, Debt to Equity Ratio*

(DER) tidak mampu memoderasi pengaruh Return on Assets (ROA) maupun Current Ratio (CR) terhadap nilai perusahaan. Hasil penelitian ini memberikan kontribusi terhadap pengembangan literatur mengenai determinan nilai perusahaan serta menjadi referensi bagi manajemen perusahaan dan investor dalam pengambilan keputusan keuangan.

Keywords: *Nilai Perusahaan, Kinerja Keuangan, Struktur Modal, Moderated Regression Analysis (MRA), Sektor Infrastruktur.*

INTRODUCTION

The infrastructure sector plays an important role in supporting the national economy and is one of the largest contributors to funding on the Indonesia Stock Exchange. It also has considerable growth potential due to resource availability and high market demand (Anniza & Suwaidi, 2023; Wardoyo et al., 2022 in Andriyani, 2024). During the post-COVID-19 period, particularly in 2023–2024, the sector showed strong recovery after experiencing a slowdown in infrastructure projects due to the government's shift in budget allocation toward the health sector during the pandemic (Sujai, 2021). The improvement in economic activity and public mobility subsequently strengthened infrastructure companies' performance and increased investor confidence.



Source: www.idx.co.id (2026), processed by the author.

Figure 1. Development of Price to Book Value (PBV) in the Infrastructure Sector, 2021–2025

This development is reflected in firm value, which can be measured using Price to Book Value (PBV). The PBV of the infrastructure sector declined from 1.83 times in 2021 to 0.98 times in 2023, indicating an undervalued condition. However, PBV increased significantly to 3.79 times in 2024 and reached 4.84 times in 2025, reflecting stronger market valuation and investor confidence. This fluctuation indicates the importance of examining the factors affecting firm value.

One factor that may affect firm value is financial performance, which in this study is measured by profitability through Return on Assets (ROA) and liquidity through Current Ratio (CR). Higher profitability may increase investor interest and ultimately firm value (C. Dewi et al., 2025). However, previous findings are inconsistent. Afni et al. (2023) found that ROA had a positive and significant effect on PBV, while Purnama et al. (2024) found no significant effect. Similarly, findings regarding CR are inconsistent: Afni et al. (2023) found a negative and insignificant effect, whereas Dewi et al. (2022) found a positive and significant effect.

Capital structure, measured by Debt to Equity Ratio (DER), may influence the relationship between financial performance and firm value. Appropriate capital structure management can support financial performance and potentially strengthen the contribution of profitability and liquidity to firm value (Rahayu & Mahirun, 2025). Nevertheless, Afni et al. (2023) found that DER was unable to moderate the effects of both ROA and CR on PBV. Wijaya and Viriany (2022) also found that capital structure did not moderate the effect of profitability on firm value. Their study was limited to manufacturing companies and a pre-

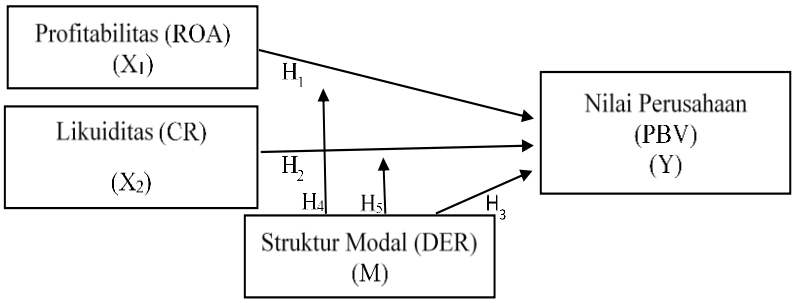
pandemic period, creating an opportunity for further research in different sectors and post-pandemic conditions.

Therefore, this study extends previous research by incorporating liquidity (CR), focusing on infrastructure companies during the post-pandemic recovery period of 2023–2024, and applying Moderated Regression Analysis (MRA). MRA is used to examine whether capital structure strengthens or weakens the effects of financial performance on firm value. Accordingly, this study aims to analyze the effect of financial performance on firm value with capital structure as a moderating variable in infrastructure sector companies in Indonesia during 2023–2024.

This study is based on Signaling Theory, Trade-Off Theory, and Pecking Order Theory. Signaling Theory explains that financial performance, reflected by profitability and liquidity, provides information to investors regarding the company's condition and future prospects, which may affect firm value. Trade-Off Theory explains that companies consider the benefits and costs of debt in determining an appropriate capital structure, while Pecking Order Theory suggests that companies prioritize internal financing, followed by debt and external equity.

These theories provide a basis for explaining the relationship between financial performance, capital structure, and firm value, including the role of capital structure as a moderating variable. Based on the theoretical perspectives and previous research discussed above, the following hypotheses are proposed to examine the effects of financial performance and capital structure on firm value, as well as the moderating role of capital structure:

H1: Return on Assets (ROA) affects firm value (PBV).
H2: Current Ratio (CR) affects firm value (PBV).
H3: Debt to Equity Ratio (DER) affects firm value (PBV).
H4: Debt to Equity Ratio (DER) moderates the effect of Return on Assets (ROA) on firm value (PBV).
H5: Debt to Equity Ratio (DER) moderates the effect of Current Ratio (CR) on firm value (PBV).



Source: Based on the study by Wijaya and Viriany (2021)

Figure 2. Research Framework

METHODS

This study employs a quantitative approach to examine the effect of financial performance on firm value with capital structure as a moderating variable. The population consists of 67 infrastructure sector companies listed on the Indonesia Stock Exchange (IDX) during 2023–2024. The sample was determined using purposive sampling based on predetermined criteria. After the outlier treatment process, the final sample consisted of 37 companies with 74 firm-year observations. The study uses secondary data obtained from the financial statements of infrastructure companies listed on the IDX.

The variables used in this study consist of firm value as the dependent variable, financial performance represented by profitability and liquidity as independent variables, and capital

structure as both an independent and moderating variable. The operational definitions and measurements of the variables are presented in Table 1.

Table 1. Operational Definitions and Measurement of Variables

No	Variabel	Indikator	Skala
1.	Price to Book Value (Y)	$\frac{Market\ Price\ per\ Share}{Book\ Value\ per\ Share}$ Sumber: (Gitman et al., 2015).	Ratio
2.	Return On Asset (X_1)	$\frac{Earning\ After\ Tax}{Total\ Assets}$ Sumber : (Gitman et al., 2015).	Ratio
3.	Current Ratio (X_2)	$\frac{Current\ Assets}{Current\ Liabilities}$ Sumber: (Gibson, 2012)	Ratio
4.	Debt To Equity Ratio (X_3 & M)	$\frac{Total\ Debt}{Total\ Equity}$ Sumber: (Gitman et al., 2015).	Ratio

Source: (Gitmanetal.,2015),(Gibson,2012)

The data analysis uses panel data regression because the observations combine cross-sectional data from infrastructure companies and time-series data for the 2023–2024 period. The appropriate panel regression model was determined using the Chow test, Hausman test, and Lagrange Multiplier (LM) test, which are used to select among the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). Based on the model selection results, the Random Effect Model (REM) was selected as the appropriate estimation model. The analysis was conducted using EViews 13.

To examine the moderating role of capital structure, this study applies Moderated Regression Analysis (MRA) by including interaction variables between ROA and DER and between CR and DER. The regression model is formulated as follows:

$$PBV_{it} = \beta_0 + \beta_1 ROA_{it} + \beta_2 CR_{it} + \beta_3 DER_{it} + \beta_4 (ROA_{it} \times DER_{it}) + \beta_5 (CR_{it} \times DER_{it}) + \varepsilon_{it}$$

where:

PBV represents firm value
ROA represents profitability
CR represents liquidity
DER represents capital structure
ROA × DER and CR × DER represent the moderating effects of capital structure.
β_0 = Constant
β_1–β_5 = Regression coefficients
i = Company
t = Observation period
ε = Error term

The analysis consists of descriptive statistical analysis, classical assumption tests, and hypothesis testing. The classical assumption tests include normality, multicollinearity, autocorrelation, and heteroscedasticity tests. Hypothesis testing is conducted using the coefficient of determination (R^2), F-test, and t-test. The coefficient of determination (R^2) is used to assess the extent to which ROA, CR, DER, and the interaction terms explain variations in firm value as measured by PBV. The F-test is used to examine the simultaneous effect of ROA, CR, DER, and the interaction terms on PBV, while the t-test is used to examine the partial effects of each variable on PBV. Furthermore, the interaction terms ROA × DER and CR × DER are included to examine whether DER moderates the effects of ROA and CR on firm value, respectively. The hypotheses are tested at a 10% significance level (α = 0,10).

RESULTS AND DISCUSSION

Descriptive Statistics

Table 2. Descriptive Statistics of Research Variables

	PBV_Y	ROA_X1	CR_X2	DER_M
Mean	J0.912761	J0.042832	J1.261166	J0.777728
Median	J0.841784	J0.034500	J1.099500	J0.700196
Maximum	J3.127167	J0.242300	J4.870000	J3.340000
Minimum	-2.514718	-0.058400	J0.026700	-1.390000
Std. Dev.	J0.776306	J0.049790	J1.114426	J0.720817
Observations	J74	J74	J74	J74

Sumber: Output Eviews, 2026.

Panel Data Model Selection

Chow Test

Table 3. Chow Test Results

Redundant Fixed Effects Tests			
Equation: Untitled			
Test cross-section fixed effects			
Effect Test	Statistic	d f	Prob.
Cross-section F	6.538953	(36,32)	0.0000
Cross-section Chi-square	157.103359	36	0.0000

Source: EViews Output, 2026

The Chow test was conducted to determine the most appropriate model between the Common Effect Model (CEM) and the Fixed Effect Model (FEM). Based on the Chow test results, the probability value was 0.0000. Since the probability value is lower than the 10% significance level (0.10). Therefore, the Fixed Effect Model (FEM) is considered more appropriate than the Common Effect Model (CEM).

Uji Hausman Test

Table 4. Hausman Test Results

Correlated JRandom JEffects J- JHausman JTest			1:10
Equation: Untitled		1:16	1:13
Test cross-section random effects			1:12
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	9.333035	5	0.0965

Source: EViews Output, 2026.

The Hausman test resulted in a probability value of 0.0965. Since the probability value is greater than the 10% significance level (0.10), Random Effect Model (REM) is considered more appropriate than the Fixed Effect Model (FEM).

Lagrange Multiplier Test

Table 5. Lagrange Multiplier Test Results

Lagrange Multiplier Tests for Random Effects			
Null hypotheses: No effects			
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided			
(All others) alternatives			
	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	15.07825	0.793163	15.87141
	(0.0001)	(0.3731)	(0.0001)

Source: EViews Output, 2026.

The LM test resulted in a probability value of 0.0001. Since the probability value is lower than the 10% significance level (0.10). Therefore, the Random Effect Model (REM) is considered more appropriate than the Common Effect Model (CEM).

Based on the Chow, Hausman, and Lagrange Multiplier tests, the Random Effect Model (REM) was selected as the most appropriate model for estimating the panel data regression.

Classical Assumption Tests
Multicollinearity Test

Table 6. Correlation Matrix for Multicollinearity Test

	ROA	CR	DER	ROA_DER	CR_DER
ROA	J1.000000	J0.039366	-0.285376	J0.497949	-0.181087

CR	J0.039366	J1.000000	-0.097059	J0.050881	J0.614438
DER	-0.285376	-0.097059	J1.000000	J0.190783	J0.473346
ROA DER	J0.497949	J0.050881	J0.190783	J1.000000	J0.181602
CR DER	-0.181087	J0.614438	J0.473346	J0.181602	J1.000000

Source: EViews Output, 2026.

The multicollinearity test was conducted to determine whether a high correlation exists among the variables in the regression model. Based on the correlation matrix, all correlation coefficients are below 0.80, with the highest correlation value of 0.6144 between CR and CR×DER. Therefore, the regression model does not indicate a multicollinearity problem.

Heteroscedasticity Test

Table 7. Heteroscedasticity Test Results

Dependent Variable: ABS_RESID				
Method: Panel EGLS (Cross-section random effects)				
Sample: 2023 2024				
Periods included: 2				
Cross-sections included: 37				
Total panel (balanced) observations: 74				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.732204	0.153288	4.776647	0.0000
ROA	-3.264078	1.482411	-2.201872	0.0311
CR	-0.056897	0.090457	-0.628994	0.5315
DER	-0.199228	0.130604	-1.525439	0.1318
ROA_DER	4.807356	1.569432	3.063119	0.0031
CR_DER	0.007078	0.148998	0.047504	0.9623

Source: EViews Output, 2026.

Based on Table 7, the Glejser test shows that ROA has a probability value of 0.0311, while ROA×DER has a probability value of 0.0031, both of which are below the 10% significance level ($\alpha = 0.10$). These results indicate the presence of heteroscedasticity in the regression model. Therefore, the Model 3 estimation was re-estimated using White Cross-section Robust Standard Errors, and the robust estimation was subsequently used as the basis for hypothesis testing and interpretation.

Autocorrelation Test

Table 8. Autocorrelation Test

Weighted Statistics			
R-squared	0.236592	Mean dependent var	0.347869
Adjusted R-squared	0.180459	S.D. dependent var	0.410547
S.E. of regression	0.371662	Sum squared resid	9.393022
F-statistic	4.214845	Durbin-Watson stat	1.913329
Prob(F-statistic)	0.002140		

Source: EViews Output, 2026.

The autocorrelation test was conducted using the Durbin-Watson statistic to determine whether autocorrelation exists in the regression model. Based on the Model 3 estimation, the Durbin-Watson value was 1.9133. This value falls within the decision range of $du < d < 4 - du$, indicating that H_0 is accepted and H_a is rejected. Therefore, the regression model does not have an autocorrelation problem and satisfies the autocorrelation.

Hypothesis Testing
Coefficient of Determination (R^2)

Table 9. Coefficient of Determination (R^2) Results

Weighted Statistics			
R-squared	0.236592	Mean dependent var	0.347869
Adjusted R-squared	0.180459	S.D. dependent var	0.410547

Source: EViews Output, 2026.

The coefficient of determination (R^2) is used to measure the extent to which ROA, CR, DER, and the interaction variables ROA×DER and CR×DER explain the variation in firm value (PBV). Based on the Model 3 results, the R-squared value is 0.2366, while the Adjusted R-squared value is 0.1805. This indicates that the variables included in the model explain 23.66% of the variation in PBV, while the remaining 76.34% is explained by other factors outside the model.

F-Test (Simultan)

Table 10. F-Test Results

F-statistic	4.214845
Prob(F-statistic)	0.002140

Source: EViews Output, 2026.

The F-test is used to examine the simultaneous effect of ROA, CR, DER, ROA×DER, and CR×DER on firm value (PBV). Based on the Model 3 results, the F-statistic is 4.2148 with a probability value of 0.0021. Since the probability value is lower than the 10% significance level ($\alpha = 0.10$). Therefore, ROA, CR, DER, ROA×DER, and CR×DER simultaneously have a significant effect on PBV.

t-Tets (Parsial)

Table 11. t-Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.418875	0.633611	0.661092	0.5128
ROA	8.288577	4.703782	1.762109	0.0865
CR	0.060213	0.218822	0.275171	0.7848
DER	0.427994	0.582387	0.734896	0.4672
ROA_DER	-2.831129	4.795051	-0.5904272	0.5586
CR_DER	-0.225934	0.309602	-0.729756	0.4703

Source: EViews Output, 2026.

1) The t-test results for ROA show a coefficient of 8.2886, a t-statistic of 1.7621, and a probability value of 0.0865. Since the probability value of 0.0865 ≤ 0.10, H0 is rejected and Ha is accepted, indicating that ROA has a positive and significant effect on PBV in infrastructure sector companies during 2023–2024.
2) The t-test results for CR show a coefficient of 0.0602, a t-statistic of 0.2752, and a probability value of 0.7848. Since the probability value of 0.7848 > 0.10, Ha is rejected and H0 is accepted, indicating that CR has no significant effect on PBV in infrastructure sector companies during 2023–2024.
3) The t-test results for DER show a coefficient of 0.4280, a t-statistic of 0.7349, and a probability value of 0.4672. Since the probability value of 0.4672 > 0.10, Ha is rejected and H0 is accepted, indicating that DER has no significant effect on PBV in infrastructure sector companies during 2023–2024.
4) The t-test results for the ROA×DER interaction show a coefficient of −2.8311, a t-statistic of −0.5904, and a probability value of 0.5586. Since the probability value of 0.5586 > 0.10, Ha is rejected and H0 is accepted, indicating that DER does not moderate the effect of ROA on PBV in infrastructure sector companies during 2023–2024.
5) The t-test results for the CR×DER interaction show a coefficient of −0.2259, a t-statistic of −0.7298, and a probability value of 0.4703. Since the probability value of 0.4703 > 0.10, Ha is rejected and Ho is accepted, indicating that DER does not moderate the effect of CR on PBV in infrastructure sector companies during 2023–2024.

Discussion

The Effect of Return on Assets (ROA) on Firm Value (PBV)

Return on Assets (ROA) has a positive and significant effect on firm value (PBV). ROA has a regression coefficient of 8.2886, a t-statistic of 1.7621, and a probability value of 0.0865. Since the probability value is lower than the 10% significance level (α = 0.10), ROA has a positive and significant effect on PBV. This finding indicates that an increase in the company's ability to generate profits from its assets is associated with an increase in firm value. The positive effect of ROA indicates that profitability remains an important consideration for investors in assessing infrastructure companies. Companies that are able to utilize their assets efficiently to generate profits tend to provide more positive information regarding their financial performance and future prospects. Higher profitability may increase investor confidence, which can subsequently contribute to an increase in firm value as reflected by PBV. This finding supports Signaling Theory, which explains that financial performance can provide information to investors regarding a company's future prospects. High profitability can be interpreted as a positive signal because it indicates that management is able to utilize

company assets effectively to generate profits. This positive signal can increase investor confidence and ultimately contribute to higher firm value.

The finding is consistent with previous studies by Wijaya and Viriany (2021), which found that profitability has a positive and significant effect on firm value. It is also consistent with Sofiani and Siregar (2022), which reported a positive relationship between ROA and firm value. Thus, the findings reinforce the argument that profitability is an important factor in increasing firm value. For infrastructure companies during 2023–2024, the result indicates that investors continue to pay attention to the company's ability to generate profits despite the capital-intensive characteristics of the infrastructure sector. Therefore, companies that are able to maintain profitability through effective asset utilization are more likely to receive positive investor responses, resulting in higher firm value.

The Effect of Current Ratio (CR) on Firm Value (PBV)

Current Ratio (CR) does not have a significant effect on firm value (PBV). CR has a regression coefficient of 0.0602, a t-statistic of 0.2752, and a probability value of 0.7848. Since the probability value is greater than the 10% significance level ($\alpha = 0.10$), CR does not have a significant effect on PBV. This result indicates that changes in the company's ability to meet its short-term obligations do not necessarily influence firm value. Although a higher CR indicates greater short-term liquidity, investors may not consider liquidity as the primary factor in assessing the value of infrastructure companies. The infrastructure sector generally has long-term projects and substantial funding requirements, so short-term liquidity alone may not adequately reflect the company's overall performance and future prospects.

This finding can also be explained through Signaling Theory. A high level of liquidity may initially provide a positive signal because it indicates the company's ability to meet its short-term obligations. However, excessively high liquidity may also indicate that current assets are not being utilized optimally to support productive activities. Consequently, changes in CR may not necessarily provide a strong signal to investors regarding the company's future performance. The finding is consistent with Afni et al. (2023), which found that CR does not have a significant effect on firm value. It is also consistent with Pratama (2022), which reported that liquidity does not significantly affect firm value. Therefore, the results support previous findings that liquidity is not necessarily a primary determinant of firm value. In the infrastructure sector during 2023–2024, investors may place greater emphasis on profitability, project performance, and long-term business prospects rather than solely on the company's short-term liquidity position. Thus, differences in CR among companies do not necessarily result in differences in PBV.

The Effect of Debt to Equity Ratio (DER) on Firm Value (PBV)

Debt to Equity Ratio (DER) does not have a significant effect on firm value (PBV). DER has a regression coefficient of 0.4280, a t-statistic of 0.7349, and a probability value of 0.4672. Since the probability value is greater than the 10% significance level ($\alpha = 0.10$), DER does not have a significant effect on PBV. Although the regression coefficient of DER is positive, the effect is statistically insignificant. This means that an increase or decrease in the proportion of debt relative to equity does not necessarily result in a significant change in firm value. Therefore, the amount of debt used by infrastructure companies is not sufficient to explain differences in firm value during the 2023–2024 period.

This finding can be explained through the Pecking Order Theory, which states that companies generally prioritize internal financing, followed by debt financing, and external equity as the last alternative. Consequently, changes in the level of debt may not necessarily become the main determinant of firm value because debt is generally used to complement internal financing when internal funds are insufficient. The finding is consistent with Dewi et al. (2022), which found that capital structure does not significantly affect firm value. It is also

consistent with Faisal et al. (2024), which reported that capital structure has no significant effect on firm value. Differences in results across studies may be related to differences in sectors, research periods, and company characteristics. For infrastructure companies during 2023–2024, the insignificant effect of DER suggests that investors may not evaluate firm value solely based on the proportion of debt to equity. Instead, investors may consider broader aspects, particularly profitability, operational performance, project prospects, and the company's ability to generate future cash flows.

The Moderating Role of Debt to Equity Ratio (DER) in the Effect of Return on Assets (ROA) on Firm Value (PBV)

The interaction between Return on Assets (ROA) and Debt to Equity Ratio (DER) has a coefficient of −2.8311, a t-statistic of −0.5904, and a probability value of 0.5586. Since the probability value is greater than the 10% significance level (α = 0.10), the ROA×DER interaction is not significant. Therefore, DER does not moderate the effect of ROA on PBV. The negative coefficient of the ROA×DER interaction indicates a negative direction, but because the interaction is statistically insignificant, this negative direction cannot be interpreted as evidence that DER weakens the relationship between ROA and PBV. In other words, differences in the level of debt relative to equity do not significantly change the effect of profitability on firm value.

This finding is consistent with the Pecking Order Theory, which suggests that companies tend to prioritize internal funds as a source of financing. Companies with higher profitability generally have greater internal funds, thereby reducing their dependence on external debt. Consequently, differences in DER may not substantially change the relationship between profitability and firm value. The finding can also be viewed from the perspective of Trade-Off Theory, which suggests that debt can increase firm value when its benefits, such as tax advantages, exceed the costs associated with financial distress and agency problems. The insignificant ROA×DER interaction suggests that variations in debt levels among infrastructure companies during the research period were not sufficient to significantly alter the relationship between profitability and firm value.

This finding is not consistent with Arsyada et al. (2022), which found that capital structure moderates the relationship between profitability and firm value. However, it is consistent with Rahayu and Mahirun (2025), which found that capital structure does not moderate the relationship between profitability and firm value.Thus, in infrastructure companies during 2023–2024, profitability appears to influence firm value independently of the company's debt level. Investors may place greater emphasis on the company's ability to generate profits than on how the company's assets are financed.

The Moderating Role of Debt to Equity Ratio (DER) in the Effect of Current Ratio (CR) on Firm Value (PBV)

The interaction between Current Ratio (CR) and Debt to Equity Ratio (DER) has a coefficient of −0.2259, a t-statistic of −0.7280, and a probability value of 0.4703. Since the probability value is greater than the 10% significance level (α = 0.10), the CR×DER interaction is not significant. Therefore, DER does not moderate the effect of CR on PBV. The negative coefficient of the CR×DER interaction indicates a negative direction, but the effect is statistically insignificant. Therefore, it cannot be concluded that higher DER weakens the effect of CR on firm value. The result indicates that changes in the company's capital structure do not significantly change the relationship between liquidity and firm value.

This finding can be explained through Trade-Off Theory, which states that the use of debt can increase firm value only when the benefits of debt are greater than the costs associated with financial distress and other related costs. The insignificant CR×DER interaction indicates that differences in debt levels among infrastructure companies are not

strong enough to change the relationship between liquidity and firm value. The finding is consistent with Afni et al. (2023), which found that capital structure does not moderate the relationship between liquidity and firm value. It is also consistent with Rahayu and Mahirun (2025), which reported that capital structure does not function as a moderating variable in the relationship between liquidity and firm value. The result may be related to the characteristics of infrastructure companies during 2023–2024, which generally involve long-term projects and substantial financing requirements. In such conditions, short-term liquidity may not be sufficient to explain changes in firm value, while the level of debt does not significantly alter this relationship. Investors may therefore pay greater attention to profitability and long-term business prospects than to the combination of liquidity and capital structure.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

This study examined the effect of profitability, liquidity, and capital structure on firm value, as well as the moderating role of capital structure in the relationship between profitability and liquidity with firm value in infrastructure sector companies listed on the Indonesia Stock Exchange during the 2023–2024 period. The findings indicate that profitability, as measured by Return on Assets (ROA), has a positive and significant effect on firm value, as measured by Price to Book Value (PBV). This result indicates that companies with a greater ability to generate profits through the effective utilization of their assets tend to have higher firm value, as reflected in investor assessments.

In contrast, liquidity, as measured by Current Ratio (CR), does not have a significant effect on firm value. This finding suggests that the company's ability to meet short-term obligations was not a primary factor considered by investors in determining the value of infrastructure companies during the observation period. Capital structure, as measured by Debt to Equity Ratio (DER), also does not have a significant effect on firm value. Thus, the level of debt financing used by infrastructure companies during 2023–2024 was not sufficient to significantly increase or decrease firm value. Furthermore, DER does not significantly moderate the relationship between ROA and PBV, indicating that changes in capital structure neither strengthen nor weaken the effect of profitability on firm value. Similarly, DER does not significantly moderate the relationship between CR and PBV, meaning that changes in capital structure do not strengthen or weaken the effect of liquidity on firm value.

Overall, the findings indicate that profitability is the primary financial factor associated with firm value in infrastructure sector companies during the observation period, while liquidity and capital structure do not show a significant direct effect, and capital structure does not function as a moderating variable in the relationships examined. These findings contribute to financial management research by providing empirical evidence regarding the determinants of firm value and the role of capital structure in the infrastructure sector, particularly during the 2023–2024 period.

Limitations

This study has several limitations. First, the research was limited to companies in the infrastructure sector listed on the Indonesia Stock Exchange and covered only the 2023–2024 observation period. Therefore, the findings cannot necessarily be generalized to other sectors or longer periods. Second, this study examined a limited number of variables, namely profitability, liquidity, and capital structure, while other factors may also influence firm value. Third, the relatively short observation period limits the ability of the study to capture long-term changes in the financial conditions and investment characteristics of infrastructure companies. Therefore, the findings should be interpreted within the scope and characteristics of the sample and observation period used in this study.

Recommendations

For infrastructure companies, the findings suggest that greater attention should be given to improving profitability, particularly through more effective and efficient asset management, because ROA has a positive and significant relationship with firm value. Although CR and DER were not found to have significant effects on firm value, companies should continue to manage liquidity and capital structure appropriately to maintain financial stability, support operational activities, and maintain investor confidence.

For investors, profitability, particularly ROA, can be considered an important financial indicator when assessing infrastructure companies because the results demonstrate its significant relationship with firm value. Meanwhile, information concerning liquidity and capital structure may be used as supporting information alongside other financial and non-financial indicators when making investment decisions.

For future researchers, the scope of research can be expanded by increasing the sample size, extending the observation period, and including companies from other industrial sectors. Future studies may also incorporate other variables that could influence firm value, such as firm size, company growth, dividend policy, or Good Corporate Governance. In addition, researchers may consider alternative moderating variables or analytical approaches to develop a more comprehensive research model and obtain a deeper understanding of the factors influencing firm value.

Author Contributions

The author was responsible for the conceptualization of the study, development of the theoretical framework, data collection, data processing and analysis, interpretation of the research findings, preparation of the manuscript, revision of the manuscript, and final approval of the article.

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REFERENCES

Afni, C. N., Meliza, & Ayuningrum, A. P. (2023). Analisis Pengaruh Profitabilitas, Ukuran Perusahaan, dan Likuiditas Terhadap Nilai Perusahaan dengan Struktur Modal Sebagai Variabel Moderasi. Analisis Pengaruh Profitabilitas, Ukuran Perusahaan, Dan Likuiditas Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Moderasi, 26(Maret). www.jurnal.unikal.ac.id/index.php/jebi%0APENGARUH

Andriyani, K. (2024). Kinerja Perusahaan dan Nilai Perusahaan. JIEF Journal of Islamic Economics and Finance, 4(1), 14–26. http://dx.doi.org/10.28918/jief.v4i1.7230%0Ahttps://e-journal.uingusdur.ac.id/jief/article/download/7230/1673

Anismadiyah, V. (2021). Dasar -Dasar Analisis Laporan Keuangan.

Arsyada, A. B., Fajarini, I., & Wahyuningrum, S. (2022). Pengaruh Ukuran Perusahaan , Profitabilitas , Dan Keputusan Investasi Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Moderating. 6(April), 1648–1663.

Basuki, A. T. (2021). Analisis Data Panel Dalam Penelitian Ekonomi dan Bisnis (Dilengkapi dengn Penggunaan Eviews).

Brigham, E. F., & Ehrhardt, M. C. (2017). Financial Management - Theory and Practice, 15e. Cengage Learning, 1221.

Devina, M. S., & Purnama, M. (2022). Analisis Pengaruh Current Ratio, Return On Asset, Debt Ratio, Dan Inventory Turnover Terhadap Nilai Perusahaan Pada Perusahaan Sektor Property And Real Estate Yang Terdaftar Di Bursa Efek Indonesia Periode Tahun 2016-2020. 2(1), 1–6.

Dewi, C., Tyas, N., & Prastiwi, A. (2025). Pengaruh Profitabilitas terhadap Nilai Perusahaan dengan ESG Performance sebagai Variabel Moderasi. 9(April), 946–954.

Dewi, K. W., Herlinawati, E., Suryaningprang, A., Sudaryo, Y., Manajemen, P. S., Indonesia, U., & Bandung, M. (2022). Pengaruh CR , DER , TATO , dan ROA Terhadap PBV Pada PT Indomobil Sukses Internasional Tbk. 3(2), 269–283.

Faisal, B., Hermuningsih, S., & Hidayat, R. (2024). Pengaruh likuiditas, profitabilitas dan solvabilitas terhadap nilai perusahaan dengan struktur modal sebagai variabel moderasi. 13(05), 1813–1827.

Fauziah, I. N., & Sudiyatno, B. (2020). Pengaruh Profitabilitas Dan Pertumbuhan Perusahaan Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Moderasi (Studi Kasus pada Perusahaan Manufaktur yang Terdaftar di BEI Periode 2016-2018). Dinamika Akuntansi, Keuangan Dan Perbankan, 9(2),107–118. https://www.unisbank.ac.id/ojs/index.php/fe9/article/download/8284/3193/

Ghozali, H, I. (2021). Aplikasi Analisis Multivariate dengan Program IBM SPSS 26. In Aplikasi Analisis Multivariate Dengan Program IBM SPSS 26 (10th ed.).

Gibson, C. H. (2012). Financial Reporting & Analysis.

Gitman, J, L., & Zutter, C. . (2015). Principal of Managerial Finance 14th ed.

Gujarati, D. N. (2003). Basic Econometrics. In The Economic Journal (Vol. 82, Issue 326).

Hasanah, K., Chandrayanti, T., & Putri, S. Y. A. (2023). Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Dengan Corporate Social Responsibility Disclosure Sebagai Moderasi Pada Perusahaan Pertambangan Yang Terdaftar Di BEI Tahun 2017-2019. Jurnal Akuntansi Dan Manajemen, 1(1), 44–53. https://doi.org/10.31933/epja.v1i1.778

Hidayat, R., Khorunisa, A. R., Hermuningsih, S., Marhadi, M., & Sarwar, S. (2025). Capital Structure , Profitability and Corporate Value : The Moderation Effect of Corporate Social Responsibility in Indonesian Sharia Companies. 16(1), 63–90. https://doi.org/10.21580/economica.2025.16.1.25395

Pratama, G. N. I. (2022). Pengaruh Profitabilitas, Likuiditas, Dan Leverage Terhadap Nilai Perusahaan Dengan Kebijakan Dividen Sebagai Variabel Moderasi. Jurnal Ilmu Manajemen Dan Akuntansi Terapan (JIMAT), 11(1), 100–112. https://doi.org/10.36694/jimat.v11i1.225

Purnama, M. G., Yuniarti, S., Terdpaopong, K., Subiyantoro, E., & Khouroh, U. (2024). Determinants of Company Value: Empirical Evidence from Consumer Goods Industrial Companies in Indonesia. Jurnal Manajemen Bisnis, 15(1), 203–225. https://doi.org/10.18196/mb.v15i1.20114

Rahayu, A., & Mahirun. (2025). Pengaruh Rasio Profitabilitas dan Likuiditas Terhadap Nilai Perusahaan dengan Struktur Modal Sebagai Varibel Moderasi. 28(2019), 76–89.

Sagita, R. M., Negara, I. K., Kusmayadi, I., & Sagita, R. M. (2023). Analisis Pengaruh Profitabilitas , Likuiditas , Ukuran Perusahaan dan Kebijakan Dividen Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Moderasi. 4(2), 60–66. https://doi.org/10.29303/alexandria.v4i2.458

Sofiani, L., & Siregar, E. M. (2022). Analisis Pengaruh ROA , CR dan DAR terhadap Nilai Perusahaan Sektor Makanan dan Minuman. 10(1). https://doi.org/10.37641/jiakes.v10i1.1183

Sugiyanto, Kusumaningtyas, E., Subagyo, E., Adinugroho, W. C., Jacob, J., Berry, Y., Nuraini, A., Sudjono, & Syah, S. (2022). Konsep dan Praktik Ekonometrika Menggunakan Eviews. Academia Publication.

Sugiyono. (2023). Metode Penelitian Kuantitatif, kualitatif, dan R&D.

Sujai, M. (2021). Masa Depan Pembangunan Infrastruktur Pasca Pandemi. Harian Ekonomi Neraca. https://www.neraca.co.id/article/154202/masa-depan-pembangunan-infrastruktur-pasca-pandemi

Susilo, T. P. (2022). The Effect of Liquidity on Firm Value with Profitability as Moderating Variable. Journal of Economics, Finance and Management Studies, 05(12), 3763–3768. https://doi.org/10.47191/jefms/v5-i12-38

Trilogi, U. (2025). Pedoman Tugas Akhir Fakultas Ekonomi Bisnis dan Humaniora.

Wijaya, T., & Viriany. (2021). Faktor-Faktor Yang Memengaruhi Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Moderasi. Jurnal Proaksi, 8(2), 395–414. https://doi.org/10.24912/je.v26i11.784

Wooldridge, J. M. (2013). Introductory Econometrics. https://doi.org/10.2307/j.ctvqr1dqr