

International Journal of Economics and Financial Issues

ISSN: 2146-4138

available at https://ijefijournal.com

International Journal of Economics and Financial Issues, 2025, 15(6), 51-58

THE EFFECT OF PROFITABILITY AND LIQUIDITY ON FIRM VALUE WITH CAPITAL STRUCTURE AS A MODERATING VARIABLE: A STUDY DURING THE ECONOMIC RECOVERY PERIOD OF TRANSPORTATION AND LOGISTICS SECTOR 2021-2024.

Aliya Desy Kusdickayati[1]*, Gatot Nazir Ahmad[2], Dicky Iranto[3]

[1,2] Management, Faculty of Economics & Business, State University of Jakarta, Indonesia

*Email: aliyadesy13@gmail.com, gnahmad@unj.ac.id, dicky@unj.ac.id

Received: February 28 2026 **Accepted: March 8 2026** **DOI: 10.5281/zenodo.18906457**

ABSTRACT

This study aims to analyze the effect of profitability and liquidity on firm value with capital structure as a moderating variable in transportation and logistics sector companies listed on the Indonesia Stock Exchange during the economic recovery period of 2021–2024. This research uses a quantitative approach with secondary data obtained from the financial statements of companies in the transportation and logistics sector. The sampling technique used is purposive sampling, and the data are analyzed using panel data regression and Moderated Regression Analysis (MRA). Profitability is measured using Return on Assets (ROA), liquidity using the Current Ratio (CR), firm value using Tobin's Q, and capital structure using the Debt to Equity Ratio (DER), with firm size as a control variable. The results indicate that profitability has a positive and significant effect on firm value, while liquidity does not have a significant effect on firm value. Furthermore, capital structure is able to moderate the relationship between profitability and firm value, but does not moderate the relationship between liquidity and firm value. These findings indicate that companies with strong profitability and optimal capital structure tend to have higher firm value. In addition, effective financial management plays an important role in strengthening investor confidence and improving company performance during the economic recovery period.

Keywords: Profitability, Liquidity, Firm Value, Capital Structure, Transportation and Logistics Sector.

1. INTRODUCTION

Every company fundamentally aims to maximize profits and enhance the welfare of owners, management, and all related stakeholders. One indicator that can measure a company's success in achieving these objectives is an increase in firm value, which reflects investors' perceptions of the company's performance and prospects (Candra & Cipta, 2022). An increase in firm value represents one of the long-term strategic objectives designed to improve the prosperity of shareholders (investors). Furthermore, the enhancement of firm value also serves as a benchmark for evaluating management performance, where investors are able to assess the efficiency of corporate management based on fluctuations in firm value (Zahro et al., 2024).

In the context of financial performance, an increase in firm value cannot be separated from the company's internal conditions, particularly its ability to generate profits (profitability) and maintain sufficient cash to meet short-term obligations (liquidity) (Fadillah et al., 2021). Profitability is one of the primary indicators assessed by investors because the level of profit reflects the effectiveness of a company in managing its resources and generating returns. Companies that demonstrate high profitability are considered to have promising growth prospects, thereby providing positive signals that can increase demand for their shares, which ultimately drives an increase in firm value. In addition to profitability, liquidity also plays an important role in shaping investors' perceptions of firm value. An adequate level of liquidity indicates a company's ability to meet its short-term obligations without facing financial pressure, thereby reflecting financial stability and sound financial management (Sari &

Purbawati, 2023).

The increase in firm value is closely related to the level of investor confidence in a company, where investors tend to prefer companies that demonstrate solid and stable financial performance and are capable of generating profits consistently (Erlangga, 2025). According to data from PT Kustodian Sentral Efek Indonesia (KSEI), the number of capital market investors in Indonesia reached 14.87 million Single Investor Identification (SID) in December 2024, representing an increase of approximately 22.21% compared to December 2023, which recorded 12.16 million investors. This condition provides opportunities for companies to demonstrate optimal performance in order to attract investor interest.

Indonesia's economic recovery after the COVID-19 pandemic has continued to demonstrate positive progress and has contributed to optimism in global economic dynamics. Entering 2024, Statistics Indonesia (BPS) recorded national economic growth of 5.11% year-on-year in the first quarter of 2024. In line with this trend, the transportation and warehousing sector also experienced relatively stable growth, although it fluctuated during the 2022–2024 period. Entering 2024, the performance of the transportation and warehousing sector again showed improvement with growth reaching 10.33% in the fourth quarter of 2023 and 9.56% in the second quarter of 2024 (Statistics Indonesia, 2024).

In addition to showing positive growth trends, the transportation and warehousing sector has also made a significant contribution to Indonesia's Gross Domestic Product (GDP) during the period of 2022–2024. Based on data from Statistics Indonesia (2024), the sector's contribution has increased consistently, with land transportation dominating, reaching approximately 2.80–2.88% of GDP in early 2024.

Although the transportation and logistics sector continues to show positive growth for the national economy, not all listed companies in this sector have experienced an increase in firm value in line with their performance. Several companies still face challenges in maintaining profitability and sustaining liquidity levels. Based on financial reports published by the Indonesia Stock Exchange (2024), the financial performance of several issuers in the transportation and logistics sector experienced a decline in 2024. One example is PT Garuda Indonesia (Persero) Tbk (GIAA), which still recorded a net loss of US$69.78 million or approximately IDR 1.15 trillion. The loss was mainly caused by rising operating expenses, particularly fuel and aircraft maintenance costs, which increased by 18.32% (Jakartamu.com, 2025).

Based on data from Statistics Indonesia (BPS) cited by Katadata, the transportation group recorded annual inflation of 1.42% in August 2024, with gasoline and diesel experiencing inflation rates of 0.66% and 0.43%, respectively (katadata.co.id, 2024). This indicates that rising fuel prices not only affect individual consumers but also directly increase operational costs for transportation and logistics companies. Furthermore, fluctuations in aviation fuel and industrial diesel prices throughout 2023–2024 have attracted attention from the Ministry of Energy and Mineral Resources (KESDM), which plans to review the aviation fuel pricing formula due to price differences reaching 22–43% compared to other countries (kontan.co.id, 2024).

External factors such as rising raw material prices and increasing logistics costs can significantly influence various financial performance ratios, which in turn affect firm value and investor confidence. In this context, financial ratios include several important aspects such as profitability, liquidity, and solvency ratios (Rahayu et al., 2023). Imbalances in managing these ratios may reduce investor interest in company shares, as financial ratios are considered key indicators for assessing corporate stability, potential returns, and risk levels (Rosalia Simangunsong et al., 2025).

Given the various challenges and impacts faced in maintaining financial performance stability, particularly in sustaining profitability, liquidity, and solvency ratios, numerous studies have been conducted to further analyze factors influencing firm value. Previous studies have shown that profitability has a significant effect on firm value (Badruzaman et al., 2022; Jihadi et al., 2021; Propheta et al., 2025a; Simanullang et al., 2021; Supriyadi, 2021). However, other studies present contradictory findings, suggesting that profitability does not significantly influence firm value (Kartikasari et al., 2023; Khalifaturofi'ah & Setiawan, 2025).

Furthermore, regarding liquidity ratios, previous studies have found that liquidity influences firm value (Damayanti & Sucipto, 2022; Jihadi et al., 2021; Jonathan & Purwaningsih, 2023; Kartikasari et al., 2023). However, other studies have found that liquidity ratios do not have a significant effect on firm value (Harahap et al., 2020; Ichsani et al., 2021; Neldi et al., 2023).

Capital structure represents the proportion of debt and equity within a company. If the proportion of debt increases without considering the interest burden that must be borne, the company's financial costs will rise and may increase the risk of bankruptcy (Mardevi et al., 2020). Previous studies have shown that capital structure significantly influences firm value (Adityaputra & Perdana, 2024; Lisda & Kusmayanti, 2021; Manurung, 2023; Setiawan et al., 2021). Therefore, it can be concluded that capital structure has the potential to moderate the relationship between financial performance and firm value, consistent with previous studies (Sagita et al., 2023; Zulfa et al., 2022).

Based on the background described above, the researcher identifies a research gap in the literature due to inconsistent findings from previous studies examining the influence of financial performance on firm value. Therefore, this study refers to recommendations from previous research to include moderating variables in examining the relationship between financial performance and firm value (Fahriza Tampubolon et al., 2021; Immaduddin & Andayani, 2021; Mareta & Anggraini, 2021), add control variables (Nurdin et al., 2025; Propheta et al., 2025a), extend the research period (Denny & Yanti, 2025;

Loekito, 2021; Nurdin et al., 2025), and use samples from other industry sectors such as the transportation and logistics sector (Harahap et al., 2020; Pratama & Andhitiyara, 2020; Testa & D'Amato, 2017). Therefore, this study is conducted under the title "The Effect of Profitability and Liquidity on Firm Value with Capital Structure as a Moderating Variable: A Study During the Economic Recovery Period of Transportation and Logistics Sector 2021-2024."

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Signalling Theory

Signaling theory, first introduced by Spence (1973), explains that managers, as holders of internal information, convey signals through data that reflect the company's condition. According to Ferriswara et al. (2022), signaling theory suggests that the information disclosed by a company plays an important role for investors in assessing corporate performance. This information is highly valuable for investors in evaluating a company before making investment decisions. In the context of financial performance, this theory indicates that the more information disclosed by a company, the more positive the signals received by external parties. The more comprehensive the information presented, the clearer the picture of the company's condition becomes, thereby increasing investor confidence (Propheta et al., 2025b).

2.2. Trade-Off Theory

The trade-off theory of capital structure was first proposed by Kraus and Litzenberger (1973) and later further developed by Myers and Majluf (1984). This theory explains that there is an optimal level of capital structure at which a company can maximize its firm value by balancing the tax benefits derived from the use of debt and the costs arising from the risk of financial distress. More specifically, companies will continue to increase their level of debt until the tax advantages obtained from interest payments are equal to the potential costs of bankruptcy that may arise (Bui et al., 2023a).

2.3. Firm Value

Firm value is a key indicator that reflects a company's business performance, its future prospects, and the level of market confidence in its long-term sustainability (Nurdin et al., 2025). Firm value is generally associated with the market price of its shares. This value, which is reflected through stock market indicators, is highly influenced by the investment opportunities available to the company. The presence of such investment opportunities provides a positive signal regarding future growth prospects, thereby potentially increasing firm value (Loekito, 2021).

$$\text{Tobin's Q} = \frac{\text{Market Value of Equity} + \text{Total Liabilities}}{\text{Total Assets}}$$

2.4 Profitability

Profitability reflects a company's ability to generate profits within a certain period (Harahap et al., 2020). An increase in profit indicates the efficiency of management in managing company resources, which contributes to improvements in overall corporate performance. This ratio provides an overview of the effectiveness of a company's management in operating its business activities. Higher profitability indicates better performance, as it leads to increased prosperity for the company's owners (Amelia & Reviandani, 2022).

$$\text{Return on Assets} = \frac{\text{Net Income}}{\text{Total Assets}}$$

2.5 Liquidity

Liquidity refers to a company's ability to manage its current assets or convert assets into cash in order to meet short-term cash needs, which represents one of the key aspects of a company's financial health (Dahlquist, 2022). According to Juliyani and Gularso (2023), liquidity ratios describe a company's ability to meet its short-term obligations and measure the extent to which the company can settle liabilities that are due in the near future.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

2.6 Capital Structure

The first quantitative theory of capital structure was proposed by Modigliani and Miller (1958) through the capital structure irrelevance theory. This theory states that changes in the proportion of debt and equity do not affect the market value of a company; therefore, financing decisions are considered irrelevant to firm value (Abate & Kaur, 2023). However, according to the trade-off theory, the use of debt can provide benefits in the form of tax savings. Consequently, up to a certain point, financing through debt is considered more efficient than issuing new equity (Alwan & Risman, 2023).

$$\text{Debt to Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

2.7 Firm Size

Firm size is an important characteristic often used as an indicator of a company's ability to manage financial risk, access funding, and maintain its market reputation (Nurdin et al., 2025). According to Denny & Yanti (2025), company size is a classification that indicates the size of a company, as measured by total sales, total assets, stock market value, and other indicators. In this study, company size was used as a control variable..

$$\text{Firm Size} = \text{Ln (Total Assets)}$$

2.8 Relationship Among Variables and Hypothesis Development

2.8.1 The Effect of Profitability on Firm Value

Profitability reflects a company's ability to generate profits within a certain period (Harahap et al., 2020). Based on signaling theory, a high level of profitability provides a positive signal to investors regarding the company's future financial prospects, thereby increasing stock prices and firm value (Ferriswara et al., 2022). Previous studies indicate that profitability, measured by ROA or ROE, has a significant positive effect on firm value (Badruzaman et al., 2022; Jihadi et al., 2021; Simanullang et al., 2021; Supriyadi, 2021). Referring to these previous studies, the research hypothesis is formulated as follows:

H1: Profitability has a positive effect on firm value.

2.8.2 The Effect of Liquidity on Firm Value

Liquidity reflects a company's ability to meet its short-term obligations (Juliyani & Gularso, 2023b). Based on signaling theory, a high level of liquidity indicates a healthy financial condition and provides a positive signal to investors that the company is capable of managing its current assets effectively. Previous studies have shown that liquidity has a significant positive effect on firm value (Jihadi et al., 2021; Jonathan & Purwaningsih, 2023; Kartikasari et al., 2023). Referring to these previous studies, the research hypothesis is formulated as follows:

H2: Liquidity has a positive effect on firm value.

2.8.3 Capital Structure Moderates the Relationship between Profitability and Firm Value

Capital structure reflects the composition of financing between a company's debt and equity (Alwan & Risman, 2023). Based on trade-off theory, companies strive to achieve an optimal capital structure by balancing the tax benefits of using debt and the potential costs of bankruptcy (Bui et al., 2023b). When a company has high profitability and an optimal capital structure, its ability to generate profits increases market confidence, thereby strengthening the positive effect of profitability on firm value. Previous studies have shown that capital structure can strengthen the relationship between profitability and firm value (Arsyada et al., 2022; Fitriani & Asyik, 2023; Oktaviani et al., 2024). Referring to these previous studies, the research hypothesis is formulated as follows:

H3: Capital structure strengthens the relationship between profitability and firm value.

2.8.4 Capital Structure Moderates the Relationship between Liquidity and Firm Value

A sound capital structure can strengthen the relationship between liquidity and firm value because the balance between debt and equity increases investor confidence in the company's financial stability (Zulfa et al., 2022). Based on trade-off theory, the proportional use of debt enables companies to maximize tax benefits without creating excessive financial pressure (Bui et al., 2023b). Several studies indicate that an optimal capital structure can strengthen the relationship between liquidity and firm value (Indira et al., 2021; Prasetia, 2024; Zulfa et al., 2022). A company's ability to fulfill its short-term obligations reflects that its capital structure remains stable, which ultimately contributes to an increase in firm value (Zulfa et al., 2022). Referring to these previous studies, the research hypothesis is formulated as follows:

H4: Capital structure strengthens the relationship between liquidity and firm value.

3 RESEARCH METHODOLOGY

3.1 Research Design

The research design in this study is presented in a visual form that illustrates the variables and their relationships, where profitability and liquidity act as independent variables influencing firm value (Y) as the dependent variable. Capital structure serves as the moderating variable, while firm size functions as the control variable. This study presents a conceptual mapping that illustrates the role of each variable in influencing firm value, which is depicted in Figure 3.1.

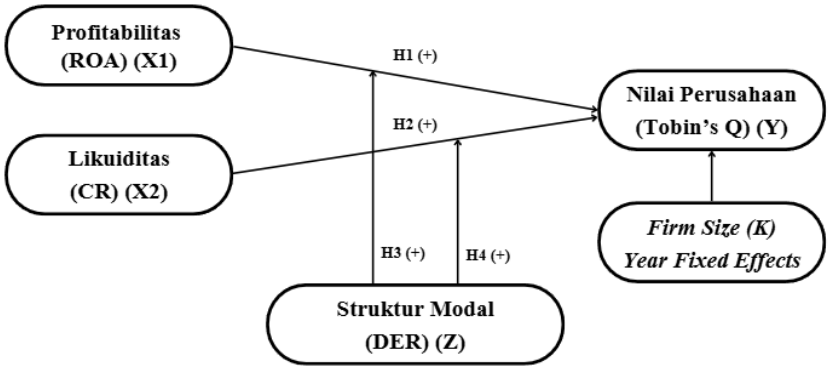


Figure 3. 1 Research Design

3.3 Population and Sample

The population of this study consists of 38 companies in the transportation and logistics sector listed on the Indonesia Stock Exchange (IDX) that consistently published financial statements and annual reports during the period of 2021–2024. This research employs a non-probability sampling method using a purposive sampling technique. Based on the sample selection process according to predetermined criteria, 34 companies were selected as the research sample from the transportation and logistics sector. With an observation period of four years, the total number of observations used in this study amounts to 136 data.

3.3 Data Collection

This study employs a quantitative research method using secondary data, which refers to data that has been published by other parties. The type of data used in this study includes financial statements and annual reports of companies in the transportation and logistics sector for the period of 2021-2024.

3.4 Data Sources

The data sources were obtained from the official website of the Indonesia Stock Exchange (www.idx.co.id) as well as the official websites of each respective company.

3.5 Data Analysis

The data analysis technique in this study employs panel data

regression analysis to examine the effect of independent variables on the dependent variable. Prior to hypothesis testing, descriptive statistical analysis is conducted to describe the characteristics of the research data. Subsequently, classical assumption tests are performed, including multicollinearity, heteroscedasticity, and autocorrelation tests, to ensure that the regression model meets the required assumptions. Furthermore, panel data model selection tests are conducted using the Chow test, Hausman test, and Lagrange Multiplier test to determine the most appropriate regression model. Hypothesis testing is carried out using the t-test to examine the partial effect of each variable, while the coefficient of determination (R^2) is used to measure the explanatory power of the independent variables on the dependent variable. In addition, this study applies Moderated Regression Analysis (MRA) to examine the moderating role of capital structure in the relationship between profitability, liquidity, and firm value.

4 RESULTS AND DISCUSSION

4.1 Results

4.1.1 Descriptive Statistic Analysis

The descriptive statistical analysis rrfffrffpresented in Table 4.1 provides an overview of the characteristics of the research variables, including profitability (ROA), liquidity (CR), capital structure (DER), firm size, and firm value (Tobin's Q). The results show that profitability has a mean value of 0,041, with a minimum value of -0.203 and a maximum value of 0.220, indicating variations in companies' ability to generate profits during the observation period. Liquidity has an average value of 1,927, suggesting that most companies are able to meet their short-term obligations. Capital structure (DER) has a min value of -8161 and a max value of 3820,1. It's reflecting differences in the proportion of debt and equity used by companies. Firm size shows an average value of 27,14, indicating the scale differences among companies in the transportation and logistics sector. Meanwhile, firm value (Tobin's Q) has a mean value of 1,774, with a minimum value of 0.151 and a maximum value of 20,718, suggesting that market perceptions of company performance vary across firms during the 2021–2024 period.

Table 4.1. Descriptive Statistic Analysis

Variable		Mean	Std. dev.	Min	Max
Tobin's Q (Y)	Overall	1,774977	2,304333	0,1515776	20,71813
	Between		1,374683	0,4128714	6,692.637
	Within		1,860697	-3,205054	1,580047
ROE (X1)	Overall	0,0407436	0,0978679	-0,2039074	0,2205438
	Between		0,0784963	-0,1971035	0,1891497
	within		0,0596103	-0,1740514	0,31567
CR (X2)	overall	1,927206	1,701	0,1	6,8
	between		1,500421	0,1	6,8
	within		0,8319655	-1,147794	5,302206
DER (Z)	overall	13,08162	792,7519	-8161	3820,1
	between		225,6994	-934,875	498,2
	within		760,6887	-7213,043	4768,057
FirmSize (K)	overall	27,14055	1,891872	23,3053	32,29935
	Between		1,884226	24,70272	32,25905
	within		0,328281	25,67792	27,9039

Source: Processed by Researchers (2026

4.1.2 Panel Data Regression Analysis

Based on the results of the regression model selection using the Chow Test, Hausman Test, and Lagrange Multiplier Test, the Common Effect Model (OLS) was determined to be the most appropriate panel data regression model for this study. Based on the estimation results of the panel data regression using the Common Effect Model (OLS) with robust standard errors, which are applied to address violations of classical assumptions such as heteroscedasticity and autocorrelation, thereby producing more consistent coefficient estimates, a total of 136 observations were obtained. The R-squared value of 0.1133 indicates that the model is only able to explain 11.33% of the variation in Tobin's Q, while the remaining variation is influenced by other factors outside the model, such as macroeconomic conditions, industry risk, and market sentiment, which tend to fluctuate in the transportation and logistics sector during the research period.

Table 4.2. Panel Data Regression Analysis

Linear Regression				Number of obs = 136		
				F(4, 131) = 1,06		
				Prob > F = 0,3926		
				R-squared = 0,1133		
				Root MSE = 2,2284		
Tobin's Q (Y)	Coefficient	Robust Std. err.	T	P>|t|	[95% conf.	interval]
ROA (X1)	-4,130558	2,012396	-2,05	0,042	-8,112428	-0,1486886
CR (X2)	0,2454645	0,1244087	1,97	0,051	-0,0006994	0,4916285
DER (Z)	0,0000924	0,0000816	1,13	0,259	-0,000069	0,0002538
Firm Size (K)	-0,1802336	0,101317	-1,78	0,078	-0,3807066	0,0202394
Tahun						
2022	-0,9635178	0,6577494	-1,46	0,145	-2,264987	0,3379518
2023	-0,5330799	0,6852197	-0,78	0,438	-1,888904	0,8227444
2024	-0,9275563	0,6464345	-1,43	0,154	-2,206637	0,3515248
_cons	6,966678	3,214332	2,17	0,032	0,6065727	13,32678

Source: Processed by Researchers (2026)

4.1.3 Classical Assumption Test

4.1.3.1 Multicollinearity Test

Table 4.3. Multicollinearity Test

Variable	VIF	1/VIF
ROA (X1)	1,09	0,916395
CR (X2)	1,14	0,877611
DER (Z)	1,03	0,967282
FirmSize (K)	1,07	0,936173
Tahun		
2022	1,54	0,649584
2023	1,52	0,656251
2024	1,53	0,652008
Mean VIF	1,28	

Source: Processed by Researchers (2026)

Based on the results of the multicollinearity test in Table 4.9, all independent variables have low VIF values, namely ROA (1.09), CR (1.14), DER (1.03), Firm Size (1.07), and the variables for 2022 (1.54), 2023 (1.52), and 2024 (1.53), with a Mean VIF of 1.28. These VIF values are all far below the general limit (VIF <10 or even <5), so it can be concluded that there are no symptoms of multicollinearity in the regression model.

4.1.3.2 Heteroscedasticity Test

Based on the results of the Breusch–Pagan/Cook–Weisberg test, as shown in Table 4.4, the Prob value > chi2 of 0.0000 was obtained, which is smaller than the 5% significance level, so it can be concluded that the regression model experiences

heteroscedasticity, which indicates that the error variance is not constant. Therefore, to overcome this problem and obtain more accurate estimation results, this study uses a regression method with robust standard errors, so that hypothesis testing can still be carried out validly. The results of the regression estimation with robust standard errors are then presented in Table 4.2.

Table 4.4. Heteroscedasticity Test

Breusch–Pagan/Cook–Weisberg test for heteroskedasticity
Assumption: Normal error terms
Variable: Fitted values of Y
H0: Constant variance
chi2(1) = 110,27
Prob > chi2 = 0,0000

Source: Processed by Researchers (2026)

4.1.3.3 Autocorrelation Test

Based on the results of the Wooldridge test for autocorrelation in panel data, the Prob value > F of 0.0000 was obtained, which is smaller than the 5% significance level, so it can be concluded that the regression model experiences autocorrelation. This indicates the presence of error correlation between periods within a single panel unit. Therefore, to address the problems of heteroscedasticity and autocorrelation that occur in the model, this study uses regression estimation with robust standard errors, so that the results of the hypothesis testing remain consistent and can be interpreted validly.

Table 4.5. Autocorrelation Test

Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
F(1, 33) = 75,482
Prob > F = 0,0000

Source: Processed by Researchers (2026)

4.1.4 Moderated Regression Analysis (MRA) Test

Based on the results of Moderated Regression Analysis (MRA) with 136 observations, the Prob value was obtained > F = 0.1287 (> 0.05), which indicates that all variables in the model simultaneously have no significant effect on company value. The R-squared value of 0.1286 indicates that the model is only able to explain 12.86% of the variation in Tobin's Q, while the remainder is influenced by other factors outside the model.

Table 4.6. Moderated Regression Analysis (MRA) Test

Linear regression					Number of obs = 136 F(9, 126) = 1,58 Prob > F = 0,1287 R-squared = 0,1286 Root MSE = 2,2265	
Tobin's Q (Y)	Coefficient	Robust std. err.	T	P>t	[95% conf.	interval]
ROA (X1)	-4,273771	1,956162	-2,18	0,031	-8,144959	-0,4025836
CR (X2)	0,2878513	0,1199122	2,40	0,018	0,0505486	0,525154
DER (Z)	0,0001362	0,000158	0,86	0,390	-0,0001765	0,000449
Interaksi 1 (ROA X DER)	0,0494847	0,0243254	2,03	0,044	0,0013454	0,0976239
Interaksi 2 (CR X DER)	-0,0003489	0,0026858	-0,13	0,897	-0,0056639	0,0049662
FirmSize (K)	-0,213299	0,1090217	-1,96	0,053	-0,4290497	0,0024517
Tahun						
2022	-0,915038	0,670869	-1,36	0,175	-2,242668	0,4125921
2023	-0,4563301	0,7038141	-0,65	0,518	-1,849157	0,9364973
2024	-0,8149705	0,6638862	-1,23	0,222	-2,128782	0,4988409
Cons	7,572947	3,320882	2,28	0,024	1,00102	14,14487

Source: Processed by Researchers (2026)

4.1.5 Partial Hypothesis Test (t-Test)

Based on the results of Moderated Regression Analysis (MRA) on transportation and logistics sector companies for the period 2021–2024 as shown in table 4.6, the partial test results show that profitability (ROA) has a negative and significant effect on firm value with a coefficient of -4.273771, t = -2.18, and p-value = 0.031 (<0.05). Conversely, liquidity (CR) has a positive and significant effect on firm value with a coefficient of 0.2878513, t = 2.40, and p-value = 0.018 (<0.05). Meanwhile, capital structure (DER) does not have a direct significant effect on firm value (p-value = 0.390). The results of the interaction analysis show that ROA × DER is significant (p-value = 0.044), which means that capital structure is able to moderate and strengthen the relationship between profitability and firm value, while CR × DER is not significant (p-value = 0.897), so that capital structure does not moderate the relationship between liquidity and firm value. In addition, the firm size control variable shows a negative effect with marginal significance (p-value = 0.053), while the 2022–2024 dummy is not significant, indicating that variations in firm value are more influenced by fundamental characteristics between firms than differences in observation periods.

4.1.6 Coefficient of Determination Test

Based on the results of Moderated Regression Analysis (MRA) on transportation and logistics sector companies for the period 2021–2024 as shown in table 4.6, the determination coefficient results show an R-squared value of 0.1286 was obtained, indicating that the independent variables in the study, namely profitability (ROA), liquidity (CR), capital structure (DER), moderation interactions (ROA×DER and CR×DER), company size (Firm Size), and year dummy, together were able to explain 12.86% of the variation in company value proxied by Tobin's Q. Thus, most of the variation in company value, namely 87.14%, was explained by other factors outside the model, such as investment and expansion policies, sales growth, operational efficiency, corporate governance quality, and macroeconomic conditions.

4.2 Discussion

4.2.1 The Effect of Profitability on Firm Value

The first hypothesis (H1) states that profitability has a positive effect on firm value. However, the panel data regression results show that Return on Assets (ROA) has a coefficient of -4.273771 with a significance value of 0.031 (<0.05), indicating that profitability has a negative and significant effect on firm value (Tobin's Q). Therefore, H1 is rejected. This finding is not fully consistent with Signaling Theory, which suggests that higher profitability provides positive signals to investors and increases firm value, as reported in several previous studies. Nevertheless, this result is consistent with the findings of Neldi et al. (2023) and Harahap et al. (2020), which indicate that profitability does not always have a positive effect on firm value. This condition may be explained by the asset-intensive nature of the transportation and logistics sector, where increases in ROA may result from short-term efficiency rather than long-term growth prospects.

4.2.2 The Effect of Liquidity on Firm Value

The second hypothesis (H2) in this study states that liquidity has a

positive effect on firm value. The regression results indicate that liquidity, proxied by the Current Ratio (CR), has a coefficient of 0.2878513 with a significance value of 0.018 (<0.05), indicating that liquidity has a positive and significant effect on firm value. Therefore, H2 is accepted. This finding is consistent with Signaling Theory, which suggests that a higher level of liquidity reflects a company's ability to meet its short-term obligations and reduce the risk of financial distress, thereby increasing investor confidence. This result also supports previous studies by Jihadi et al. (2021), Jonathan and Purwaningsih (2023), and Kartikasari et al. (2023), which found that liquidity has a positive effect on firm value. In the context of the transportation and logistics sector, which requires substantial working capital for operational activities, companies with higher liquidity levels tend to be perceived as having greater financial stability and lower default risk.

4.2.3 Capital Structure Moderates the Relationship between Profitability and Firm Value

The third hypothesis (H3) states that capital structure moderates the relationship between profitability and firm value. The moderation test results show that the interaction variable ROA × DER has a coefficient of 0.0494847 with a significance value of 0.044 (<0.05), indicating that capital structure, proxied by the Debt to Equity Ratio (DER), significantly moderates the relationship between profitability and firm value (Tobin's Q) with a strengthening effect. Therefore, H3 is accepted. This finding is consistent with Trade-Off Theory, which explains that the use of debt can increase firm value when companies achieve an optimal capital structure. In firms with higher leverage levels, profitability becomes a more relevant signal for investors as it reflects the company's ability to meet its debt obligations, thereby making increases in ROA more appreciated by the market. This result supports previous studies by Arsyada et al. (2022), Fitriani and Asyik (2023), and Oktaviani et al. (2024), although other studies suggest that capital structure does not always act as a significant moderating variable. In the context of the transportation and logistics sector during the 2021–2024 period, rising operational costs such as fuel prices may increase financial risk, leading investors to place greater value on profitability when companies are also able to manage their financing structure effectively.

4.2.4 Capital Structure Moderates the Relationship between Liquidity and Firm Value

The fourth hypothesis (H4) states that capital structure moderates the relationship between liquidity and firm value. However, the moderation test results show that the interaction variable CR × DER has a coefficient of -0.0003489 with a significance value of 0.897 (>0.05), indicating that capital structure, proxied by the Debt to Equity Ratio (DER), does not moderate the relationship between liquidity and firm value. Therefore, H4 is rejected. This finding indicates that the effect of liquidity, measured by the Current Ratio (CR), on Tobin's Q does not depend on the level of corporate leverage. From a financial perspective, liquidity mainly reflects a company's ability to meet short-term obligations and maintain operational continuity, whereas capital structure represents long-term financing decisions that may not directly alter investors' perceptions of a company's short-term financial capability. This result is consistent with previous studies by Harahap et al. (2020), Ichsani et al. (2021), and Neldi et al. (2023), although it differs from several other studies suggesting that capital structure can moderate this relationship. In the transportation and logistics sector, the high demand for working capital and the volatility of operational costs lead investors to view liquidity as a key indicator of short-term financial stability, making the effect of CR on firm value relatively consistent regardless of the level of DER.

5 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study aims to analyze the effect of profitability and liquidity on firm value and to examine the moderating role of capital structure in these relationships, with firm size included as a control variable in transportation and logistics companies listed on the Indonesia Stock Exchange. Based on panel data regression analysis using the Common Effect Model (OLS) with robust standard errors, the results show that profitability has a negative and significant effect on firm value, while liquidity has a positive and significant effect. Furthermore, the moderation test indicates that capital structure moderates the relationship between profitability and firm value, but does not moderate the relationship between liquidity and firm value. These findings suggest that financial performance and corporate financing decisions play an important role in influencing firm value in the transportation and logistics sector.

5.2 Recommendations

Based on the limitations of this study, several recommendations are proposed for future research. Future studies are expected to extend the observation period in order to better capture the long-term conditions of companies. In addition, subsequent research may broaden the research scope by including companies from other industry sectors to improve the generalizability of the findings. Future researchers are also encouraged to incorporate additional relevant variables, such as company growth, dividend policy, good corporate governance, or business risk, in order to enhance the explanatory power of the research model. Furthermore, the use of alternative analytical methods, such as the Fixed Effect Model (FEM) or Random Effect Model (REM), may also be considered to obtain more comprehensive results.

REFERENCES

Abate, M., & Kaur, R. (2023). The Evolution Of Modern Capital Structure Theory: A Review. Central European Management Journal, 31(2). Https://Doi.Org/10.57030/23364890.Cemj.31.2.100

Adityaputra, S. A., & Perdana, D. (2024). Pengaruh Struktur Modal Dan Ukuran Perusahaan Terhadap Nilai Perusahaan Dengan Profitabilitas Sebagai Variabel Mediasi. Jesya, 7(1), 472–488. Https://Doi.Org/10.36778/Jesya.V7i1.1404

Alwan, R., & Risman, A. (2023). The Determinants Of Firm's Value Through Capital Structure, Financial Performance, And Company Growth. Jurnal Manajemen Dan Bisnis.

Arsyada, A. B., Sukirman, S., & Wahyuningrum, I. F. S. (2022). Pengaruh Ukuran Perusahaan, Profitabilitas, Dan Keputusan Investasi Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Moderating. Owner, 6(2), 1648–1663. Https://Doi.Org/10.33395/Owner.V6i2.785

Badan Pusat Statistik. (2024). Statistik-Pergudangan--Ekspedisi--Dan-Kurir-2024.

Badruzaman, J., Fadilah, A. R., & Abdurrahman, F. (2022). Determining The Effect Of Return On Equity (Roe) On Price Earnings Ratio (Per) And Price To Book Value (Pbv) In Lq45 Companies, Indonesia. Wseas Transactions On Business And Economics, 19, 1564–1575. Https://Doi.Org/10.37394/23207.2022.19.141

Bui, T. N., Nguyen, X. H., & Pham, K. T. (2023a). The Effect Of Capital Structure On Firm Value: A Study Of Companies Listed On The

Vietnamese Stock Market. International Journal Of Financial Studies, 11(3). Https://Doi.Org/10.3390/Ijfs11030100

Candra, A. G., & Cipta, W. (2022). Pengaruh Profitabilitas Dan Pengungkapan Corporate Social Responsibility Terhadap Nilai Perusahaan. Https://Doi.Org/10.23887/Jippg.V3i2

Dahlquist, J. (2023). Principles Of Finance. Openstax. Http://Openstax.Org/Details/Books/Principles-Finance

Denny, D., & Yanti, Y. (2025). Factors Influencing Firm Value With Firm Size As Moderating Variable. International Journal Of Application On Economics And Business, 3(1), 455–467. Https://Doi.Org/10.24912/Ijaeb.V3i1.455-467 Dzahabiyya, J.,

Fadillah, A., Tiara, S., & Elviani, S. (2021). Tinjauan Teoritis Likuiditas Dan Profitabilitas Terhadap Nilai Perusahaan. Jurnal Ilmiah Akuntansi Kesatuan, 9(3), 531–534. Https://Doi.Org/10.37641/Jiakes.V9i3.941

Ferriswara, D., Sayidah, N., & Agus Buniarto, E. (2022). Do Corporate Governance, Capital Structure Predict Financial Performance And Firm Value?(Empirical Study Of Jakarta Islamic Index). Cogent Business And Management, 9(1). Https://Doi.Org/10.1080/23311975.2022.2147123

Fitriani, S., & Asyik, N. (2023). Pengaruh Profitabilitas Dan Keputusan Investasi Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Pemoderasi Nur Fadjrih Asyik Sekolah Tinggi Ilmu Ekonomi Indonesia (Stiesia) Surabaya. Jurnal Ilmu Dan Riset Akuntansi, 12(7).

Ghozali, Imam. 2021. Aplikasi Analisis Multivariate Dengan Program Ibm Spss 25. Edisi 10, Semarang: Badan Penerbit Universitas Diponegoro. Hamad, S., Draz, M. U., & Lai, F. W. (2020). The Impact Of Corporate Governance And Sustainability Reporting On Integrated Reporting: A Conceptual Framework. In Sage Open (Vol. 10, Issue 2). Sage Publications Inc. Https://Doi.Org/10.1177/2158244020927431

Harahap, I. M., Septiani, I., & Endri, E. (2020). Effect Of Financial Performance On Firms' Value Of Cable Companies In Indonesia. Accounting, 6(6), 1103–1110. Https://Doi.Org/10.5267/J.Ac.2020.7.008

Ichsani, S., Izlia Nurhalshaeni Zaenudin, A., & Novia Damayanti, G. (2021). The Effect Of Financial Ratio On Firm Value: Empirical Evidence From Listed Firms In The Idx30 Index Vela Tresia 4 , Via Apriliana Putri 5. Via Apriliana Putri / Journal Of Asian Finance, 8(6), 103–0112. Https://Doi.Org/10.13106/Jafeb.2021.Vol8.No6.0103

Immaduddin, D., & Andayani, S. (2021). Pengaruh Ukuran Perusahaan, ROA, Solvabilitas terhadap Audit Delay. Prosiding Senapan (1).

Indira, I., Wany, E., Wijaya, U., & Surabaya, K. (2021). Struktur Modal Sebagai Variabel Moderasi Pengaruh Likuiditas Dan Profibilitas Terhadap Firm Value (Studi Kasus Pada Perusahaan Perbankan Di Bei Tahun 2016-2019). Media Mahardhika, 19(3), 457–470.

Jihadi, M., Vilantika, E., Hashemi, S. M., Arifin, Z., Bachtiar, Y., & Sholichah, F. (2021). The Effect Of Liquidity, Leverage, And Profitability On Firm Value: Empirical Evidence From Indonesia. Journal Of Asian Finance, Economics And Business, 8(3), 423–431. Https://Doi.Org/10.13106/Jafeb.2021.Vol8.No3.0423

Jonathan, K. L., & Purwaningsih, S. (2023). The Effect Of Return On Assets, Debt To Equity Ratio And Current Ratio On Firm Value. Journal Of Applied Business, Taxation And Economics Research, 2(3), 266–287. Https://Doi.Org/10.54408/Jabter.V2i3.168

Juliyani, D., & Gularso, K. (2023a). Current Ratio, Debt To Equity Ratio And Total Asset Turnover To Firm Value Mediated By Return On Equity Attribution-Sharealike 4.0 International (Cc By-Sa 4.0). Asian Journal Of Social And Humanities, 2. Https://Ajosh.Org/ Kartikasari, E.,

Khalifaturofi'ah, S. O., & Setiawan, R. (2025). Profitability's Impact On Firm Value In Indonesia's Real Estate Firms: A Panel Data Investigation. Property Management, 43(2), 169–186. Https://Doi.Org/10.1108/Pm-08-2023-0082

Loekito, V. (2021). Almatiusmarsudi,+Layout+Editor,+1_2289-Vincent-Lohwen_Analisis+Pengaruh+Corporate+Social+Responsibility_1-26. Balance: Jurnal Akuntansi, Auditing Dan Keuangan, 18(1). Https://Doi.Org/10.25170/Balance.V18i1

Manurung, T. M. S. (2023). Pengaruh Struktur Modal Dan Ukuran Perusahaan Terhadap Nilai Perusahaan Pada Perusahan Sektor Makanan Dan Minuman Yang Terdaftar Di Bei Periode (2016-2020). Jurnal Ilmiah Manajemen Kesatuan, 11(1). Https://Doi.Org/10.37641/Jimkes.V11i1.1661

Mareta, S., & Anggraini, W. (2021). The Influence Of Current Ratio, Return On Asset, Debt To Equity Ratio And Good Corporate Governance On Market Value Added (Emipical Study On Basic Industry And Chemical Companies Listed On Indonesia Stock Exchange). 7(2), 189–196. Www.Cnnindonesia.Com

Neldi, M., Hady, H., Elfiswandi, & Lusiana. (2023). The Determinants Of Price Earning Ratio: Evidence From Indonesia. Journal Of Law And Sustainable Development, 11(4). Https://Doi.Org/10.55908/Sdgs.V11i4.1003

Nurdin, E., Awaluddin, I., Abdullah, M., Asni, N., & Sari, I. M. (2025). Capital Structure As A Determinant Of Firm Value: A Moderation Analysis Of Firm Size. Edelweiss Applied Science And Technology, 9(5), 3240–3248. Https://Doi.Org/10.55214/25768484.V9i5.7675

Prasetia, E. (2024). Pengaruh Profitabilitas Dan Likuiditas Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Moderasi. Journal Accounting International Mount Hope, 475–477. Https://Doi.Org/10.61696/Jaimo.V2i4.512

Propheta, M., Irmadariyani, R., & Kustono, A. S. (2025b). The Effect Of Esg Disclosure And Financial Performance On Company Value With Company Size As A Control Variable On Companies Listed On The Esg Leaders Index. Asian Journal Of Economics, Business And Accounting, 25(2), 49–63. Https://Doi.Org/10.9734/Ajeba/2025/V25i21663

Rosalia Simangunsong, R., Kusmawati, Y., & Karmiyati, S. (2025). Pengaruh Current Ratio (Cr) Dan Return On Asset (Roa) Terhadap Harga Saham Pada Pt Gudang Garam Tbk Periode. In Scientific Journal Of Reflection: Economic, Accounting, Management And Business (Vol. 8, Issue 2).

Sagita, R. M., Negara, I. K., & Kusmayadi, I. (2023). Analisis Pengaruh Profitabilitas, Likuiditas, Ukuran Perusahaan Dan Kebijakan Dividen Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Moderasi. Alexandria (Journal Of Economics, Business, & Entrepreneurship), 4(2), 60–66. Https://Doi.Org/10.29303/Alexandria.V4i2.458

Setiawan, M. R., Susanti, N., & Nugraha, N. M. (2021). Pengaruh Struktur Modal, Perputaran Modal Kerja, Dan Ukuran Perusahaan Terhadap Nilai Perusahaan. Owner : Riset Dan Jurnal Akuntansi, 5(1). Https://Doi.Org/10.33395/Owner.Xxx.Xxx

Simanullang, C. D., Rasinta, R. E., Ginting, R., & Simorangkir, E. N. (2021). The Effect Of Return On Assets (Roa) And Return On Equity (Roe) On Company Value With Capital Structure As Moderating Variables In Banking Companies Listed On The Indonesia Stock Exchange. International Journal Of Business, Economics And Law, 24(6). Www.Idx.Co.Id

Zahro, N., Zahra, I. A., & Faidhah, Y. S. (2024). Nailatuz+Zahro+493 (1). Zulfa, A., Novietta, L., & Azhar, M. K. S. (2022). Pengaruh Profitabiltias, Likuiditas, Ukuran Perusahaanterhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Moderasi. Inovatif: Jurnal Ekonomi, Manajemen, Akuntansi, Bisnis Digital Dan Kewirausahaan, 1(4). Http://Journal.Sinergicendikia.Com/Index.Php/Inov/Article/View/170