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The Effect of Free Cash Flow, Liquidity, and Firm Size on Financial Performance (Study on Transportation and Logistic Sector Listed on IDX)

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Abstract: The transportation and logistics sector plays a vital role in supporting economic activities, however, it experienced significant operational and financial challenges in the post-COVID-19 period. This study aims to examine the effect of free cash flow, liquidity, and firm size on the financial performance of transportation and logistics companies listed on the Indonesia Stock Exchange during 2020–2024. This research employs a quantitative approach using secondary data obtained from companies annual reports and financial statements. The purposive sampling technique was applied, resulting in 140 observations from 28 companies. The data were analyzed using panel data regression with the Common Effect Model (CEM). The findings indicate that free cash flow and liquidity have a positive and statistically significant effect on financial performance, whereas firm size has a positive but statistically insignificant effect. The results suggest that effective free cash flow management and maintenance of short term liquidity are critical factors in improving corporate profitability. Furthermore, efficient management of free cash flow and liquidity contributes more significantly to financial performance than merely possessing larger asset bases. The novelty of this study lies in its focus on post pandemic period and its application of panel data regression analysis to examine the determinants of financial performance in the transportation and logistics sector.

Keywords: Free Cash Flow, Liquidity, Firm Size, Financial Performance.

INTRODUCTION

The transportation and logistics sector plays a vital role in supporting national economic activities by facilitating the distribution of goods, providing mobility services, and ensuring supply chain continuity. In recent years, the sector has experienced substantial growth, driven by the rapid expansion of e-commerce and digital transformation. However, the COVID-19 pandemic significantly disrupted operational activities and reduced transportation demand, adversely affecting the financial performance of companies in this industry. According to the Ministry of Finance of the Republic of Indonesia (Kementerian Keuangan RI, 2023),

Indonesia's Logistics Performance Index indicates a decline in logistics quality, tracking capability, and delivery timeliness. These conditions suggest that companies in the transportation and logistics sector continue to face considerable challenges in maintaining operational efficiency and profitability, highlighting the importance of examining the determinants of their financial performance.

One of the key factors influencing a company's financial performance is free cash flow, which represents the cash remaining after operating and investing activities have been financed. Free cash flow provides financial flexibility by enabling companies to expand their operations, repay outstanding obligations, or distribute dividends to shareholders. In addition, liquidity reflects a company's ability to meet its short-term obligations using current assets, thereby ensuring operational stability and reducing the risk of financial distress. Despite the theoretical importance of these variables, previous empirical studies have reported inconsistent findings. For instance, (Mursidah et al., 2023) and (Aminah et al., 2023) found that free cash flow and liquidity have a positive effect on financial performance. In contrast, (Prastiyono & Nurwulandari, 2024) and (Gunawan et al., 2022) reported different or statistically insignificant results indicating that the relationship between these variables and financial performance remains inconclusive.

Firm size is also considered an important determinant of financial performance, as it reflects the scale of a company's operations and the resources it controls, typically measured by total assets. Larger firms are generally expected to have greater access to external financing, stronger bargaining power, and higher operational efficiency resulting from economies of scale. However, empirical evidence regarding the relationship between firm size and financial performance remain inconclusive. (Gunawan et al., 2022) found that firm size has a positive and significant effect on financial performance, suggesting that larger companies tend to achieve higher profitability due to their superior resource capacity and stronger market position. In contrast, (Arifaj et al., 2023) reported that firm size does not significantly affect financial performance, indicating that greater asset ownership does not necessarily translate into more efficient profit generation, particularly in industries characterized by high operational complexity such as the transportation and logistics sector. These inconsistent findings suggest that, although firm size is widely recognized as a potential determinant of financial performance, its actual impact remains subject to debate and warrants further empirical investigation.

Previous studies have examined financial performance in the transportation and logistics sector from various perspectives. (Wijaya et al., 2024) investigated the effect of CEO characteristics on the financial performance of transportation and logistics companies during the 2018-2022 period. However, their study focused on non financial determinants and covered the pre pandemic and pandemic periods, thereby failing to capture the financial conditions of the sector in the post-COVID-19 environment. Furthermore, (Mutmainnah et al., 2024) analyzed the financial performance of transportation and logistic companies using financial ratio analysis. Nevertheless, their research primarily focused on evaluating financial performance rather than examining the specific financial determinants, such as free cash flow, liquidity, and firm size, that may influence corporate profitability. Therefore, a clear research gap remains regarding the financial factors affecting the financial performance of transportation and logistics companies, particularly in the post pandemic period. This study addresses this gap by examining the effects of free cash flow, liquidity, and firm size on the financial performance of transportation and logistics companies listed on Indonesia Stock Exchange during 2020-2024 period.

Therefore, this study contributes to the existing literature by examining the effects of free cash flow, liquidity, and firm size on the financial performance of transportation and logistics companies during the post pandemic period (2020-2024). Using panel data regression within

the framework of Signalling Theory, this study provides a comprehensive analysis of how these internal financial factors influence corporate financial performance under post pandemic conditions. The findings are expected to provide empirical evidence that enriches the financial management literature, particularly by enhancing the understanding of how internal financial decisions serve as key determinants of corporate performance in a dynamic and uncertain business environment

Literature Reviews

Signaling Theory

Signaling Theory, first introduced by (Spence, 1973), explains that corporate actions serve as signals that convey information from management to external parties, particularly investors, regarding the company's future prospects. In a context of information asymmetry, managers possess superior internal information compared to external stakeholders, which makes financial policies an important mechanism to communicate firm conditions to the market. According to (Brigham, Eugene F.; Houston, 2019), firms utilize financial decisions such as dividend policy, capital structure, and financial reporting transparency as signals that reflect their internal performance and expected future growth. In relation to financial performance, indicators such as Return on Assets (ROA) function as positive signals that reflect efficient asset utilization and profitability, which may strengthen investor confidence. Similarly, free cash flow is interpreted as a signal of financial flexibility, where higher free cash flow may indicate stronger operational capacity and potential for value creation through investment or dividend distribution. Liquidity reflects the firm's ability to meet short-term obligations, serving as a signal of financial stability and risk management effectiveness. Firm size, measured by total assets, also acts as a signal of corporate strength, market position, and access to resources, which may influence investor perception of long-term sustainability. Therefore, the effectiveness of financial management in optimizing free cash flow, maintaining liquidity, and utilizing firm size can be interpreted as strategic signals that shape market perception and ultimately influence the firm's financial performance.

Financial Performance

Financial performance can be defined as a measure of a company's effectiveness in managing its assets over a specific period to achieve its established operational and financial objectives. A company's performance can be measured by its financial performance in generating profits, which is reflected in the company's profitability level (Hapsari et al., 2025). The metode used to assess financial performance is Return on Assets (Amin et al., 2014; Mutianingsih et al., 2024). ROA is used because it reflects the company ability to generate profits and the company performance (Shiyammurti & Ningsih, 2024).

Free Cash Flow

Free cash flow defined as the cash remaining after a company has financed all of its operating and investment activities that have a positive present value, taking into account the discounted cost of capital (Weygandt, Jerry J. ; Kimmel, Paul D. ; Kieso, 2019). Free cash flow is measured using a ratio to assess a company's ability to generate cash flow (Penman, 2007).

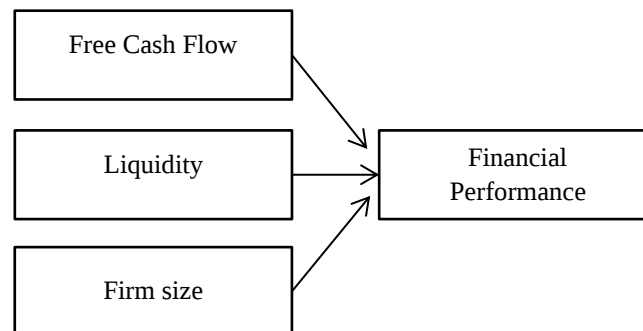
Liquidity

Liquidity can be defined as a company's ability to meet its financial obligations that are due or must be paid immediately (Arifin & Koerniawan, 2025). One of the ratios used to assess a company's liquidity is the current ratio (Hery, 2015). This ratio illustrates a company's ability to meet its short term obligations as they become due by utilizing its total current assets.

Firm Size

Firm size is an indicator of the scale of a business entity, which can be measured by equity value, total sales, number of employees, and total assets (Gunawan et al., 2022). Firm size indicates how large or small a company, and is generally calculated based on its total assets listed in audited financial reports, which are then expressed in logarithmic (Ln) form (Pertiwi & Mahardika, 2022).

This research develops a conceptual framework to examine the effect of free cash flow, liquidity, and firm size on financial performance. The model is constructed based on Signaling Theory, which explains that financial indicators serve as signals to external stakeholders regarding firm performance and future prospects.



Source: Processed Research Model

Figure 1. Research Model

The research model illustrates the relationship between free cash flow, liquidity, and firm size as independent variables and financial performance as proxied by Return on Assets (ROA) as the dependent variable. Each independent variable is expected to have a direct effect on financial performance, where free cash flow represents internal financial flexibility, liquidity reflects short-term financial stability, and firm size indicates the scale of resources and operational capacity owned by the firm. Based on Signaling Theory, these financial indicators are interpreted by external stakeholders as signals of firm quality and future performance prospects.

METHOD

Methodology Study

This study employs a quantitative research approach to examine the effects of free cash flow, liquidity, and firm size on the financial performance of transportation and logistics companies listed on the Indonesia Stock Exchange (IDX) during 2020–2024 period. The study utilizes secondary data obtained from the companies officially published annual reports and financial statements. Panel data regression analysis was employed because the dataset consists of both cross sectional and time series data (T. Basuki, 2021). Data processing and statistical analyses were conducted using Microsoft Excel and EViews 12. The panel data regression model used in this study is specified as follows:

$$ROA_{it} = \beta_0 + \beta_1 FCF_{it} + \beta_2 CR_{it} + \beta_3 SIZE_{it} + \epsilon_{it}$$

Where:

ROA = Return on Assets

β_0 = Constant

$\beta_1, \beta_2, \beta_3$ = Regression Coefficient

FCF = Free Cash Flow

CR = Current Ratio

SIZE	= Firm Size
i	= Cross Sectional Unit
t	= Time Period
ϵ	= Error Term

Population and Sample

The population in this study comprises all transportation and logistics companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. The sample was selected using a purposive sampling technique based on predetermined criteria to ensure that the selected companies met the objectives and requirements of this study.

Tabel 1. Sampling Criteria

Sampling Criteria	Size
Transportation and logistics companies listed on the Indonesia Stock Exchange for the 2020–2024 period	37
Transportation and logistics companies that did not consistently publish annual reports for the 2020–2024 period.	(8)
Transportation and logistics companies that have gone bankrupt	(1)
Total research sample	28
Total observations in the study for 2020–2024 (28 × 5 years)	140

Source: Data processed by author's

Based on Table 1, the sample selection process was conducted using purposive sampling, a nonprobability sampling technique in which samples are selected based on predetermined criteria aligned with the research objectives. The initial population consisted of 37 transportation and logistics companies listed on the Indonesia Stock Exchange (IDX). A series of screening procedures was then applied to identify companies that met the study criteria. First, 8 companies were excluded because they did not consistently publish annual reports throughout the 2020–2024 observation period. Subsequently, 1 company was excluded due to bankruptcy, making it ineligible for inclusion in the analysis. Following the screening process, a final sample of 28 companies was obtained. Given the five year observation period, the study comprised a total of 140 firm year observations, calculated by multiplying the 28 companies by 5-year observations.

Operational Variables

Tabel 2. Operational Variables

Variables	Measurement	Scale	Source
Return on Assets (Y)	$ROA = \frac{\text{Net profit after tax}}{\text{Total Assets}} \times 100\%$	Ratio	(Mutianingsih et al., 2024)
Free Cash Flow (X1)	$\frac{(\text{Operating Cash Flow} - \text{Investing Cash Flow})}{\text{Total Assets}} \times 100\%$	Ratio	(Penman, 2007)
Liquidity (X2)	$CR = \frac{\text{Current Assets}}{\text{Current Liability}}$	Ratio	(Gunawan et al., 2022)
Firm Size (X3)	$\text{Firm Size} = \ln(\text{Total Assets})$	Ratio	(Thresna & Suherman, 2024)

Source: Data processed by author's

RESULTS AND DISCUSSION

Descriptive Statistics

This study utilizes secondary data obtained from transportation and logistics companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period, a panel data regression approach was employed to examine the effects of free cash flow, liquidity, and firm size on financial performance. The analysis commenced with descriptive statistics to summarize the characteristics and distribution of each variable. Subsequently, panel data regression analysis was conducted to examine the relationship between the independent variables and financial performance.

Tabel 3. Descriptive Statistics

	LnROA	FCF	LnCR	SIZE
Mean	0,009429	0,048207	0,068743	27,27449
Median	0,014156	0,034639	0,199506	26,64208
Maximum	1,122253	0,630915	4,108545	32,65219
Minimum	-0,868233	-0,461736	-3,685832	24,59605
Std. Deviation	0,182516	0,132106	1,211922	1,935238
Skewness	0,162168	0,607690	-0,741045	0,879587
Kurtosis	16,89792	8,444304	4,710130	3,023978
Jacque-Bera	1127,334	181,5193	29,87329	18,05571
Probability	0,000000	0,000000	0,000000	0,000120
Sum	1,320025	6,749033	9,624050	3818,428
Sum Sq. Dev	4,630390	2,425829	204,1570	520,5751
Observation	140	140	140	140

Source: Data processed by Author's with Eviews 12

Based on Table 3, the descriptive statistics indicate that the Return on Assets (ROA) and Current Ratio (CR) variables were transformed using the natural logarithm (Ln). This transformation was applied to address the presence of outliers identified in the ROA variable for TAXI Company in 2021 and in the CR variable for TAXI Company in 2024. Rather than removing these observations, the natural logarithm transformation was employed to reduce the influence of outliers while preserving the integrity of the dataset. Logarithmic transformation is an effective approach for mitigating the impact of outliers without excluding the effected observations (A. T. Basuki & Prawoto, 2017; Gujarati & Porter, 2009).

The descriptive statistics further show that the transformed Return on Assets (LnROA) variable has a minimum value of -0,868233 and a maximum value of 1,122253. The FCF variable ranges from a minimum value of -0,461736 to a maximum value of 0,630915. The transformed Current Ratio (LnCR) variable has a minimum value of -3,685832 and a maximum value of 4,108545. The Firm Size (SIZE) variable ranges from a minimum value of 24,59605 to a maximum value of 32,65219.

Chow Test

Tabel 4. Chow Test Result

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1,232953	(27,109)	0,2233
Cross-section Chi-Square	37,312446	27	0,0894

Source: Data processed by Author's with Eviews 12

Based on Table 4, the chow test produced a probability value of 0,0894, which is greater than the significance level of 0,05. Therefore, the null hypothesis cannot be rejected, indicating that the Common Effect Model (CEM) is more appropriate than the Fixed Effect Model (FEM). Consequently, the model selection procedure proceeded to the Lagrange Multiplier test to determine whether the Common Effect Model (CEM) or the Random Effect Model (REM) was the most appropriate model for the panel data regression analysis.

Lagrange Multiplier Test

Tabel 5. Lagrange Multiplier Test Result

	Cross-section	Time	Both
Breusch-Pagan	0,003979	0,482295	0,486274
	(0,9497)	(0,4874)	(0,4856)
Honda	0,063080	-0,0694474	-0,446463
	(0,4749)	(0,7563)	0,6724
King-Wu	0,063080	-0,694474	-0,625464
	(0,4749)	(0,7563)	(0,7342)
Standardized Honda	0,441663	-0,438999	-4,539774
	(0,3294)	(0,6697)	(1,0000)
Gourieroux, et. al.	-	-	0,003979
			(0,7244)

Source: Data processed by Author's with Eviews 12

Based on Table 5, the lagrange multiplier test produced a Breusch-Pagan Both probability value of 0,4856 which exceed the 0,05 significant level. Therefore, the null hypothesis cannot be rejected, indicating that the Common Effect Model (CEM) is ,ore appropriate than the Random Effect Model (REM).

Based on the results of both the Chow test and the Lagrange Multiplier test, the Common Effect Model (CEM) was selected as the most appropriate panel data regression model for this study. The selection of the CEM indicates that there are no statistically significant individual effect across the cross sectional units. This model is considered appropriate because of the transportation and logistics companies included in the sample exhibit relatively homogeneous characteristics as publicly listed companies operating under the same industry regulations. Consequently, firm specific effects are not sufficiently distinct to warrant separate estimation through the Fixed Effect Model (FEM) or the Random Effect Model (REM).

Classical Assumption Test

Normality Test

Tabel 6. Normality Test Result

Normality Test	
Jarque-Bera	337,1434
Probability	0,000000

Source: Data processed by Author's with Eviews 12

Based on Table 6, the result of normality test indicate that the probability value is 0,000000 which is lower than 0,05 significant level. This finding suggest that the residuals are not normally distributed. However this issue is not considered critical because the study includes 140 firm year observations. According to (Ghozali, 2018) the assumption of normality becomes less restrictive when the sample size exceed 30 observations, as the Central Limit Theorem (CLT) states that the sampling distribution of the estimators will approximate a normal distribution as the sample size increases. Therefore, despite the non normal distribution of the residuals, the regression analysis remains valid and reliable due to the sufficiently large sample size.

Multicollinearity Test

Tabel 7. Multicollinearity Test Result

	FCF	LnCR	SIZE
FCF	1,000000	-0,146259	-0,007757
LnCR	-0,146259	1,000000	-0,331783
SIZE	-0,007757	-0,331783	1,000000

Source: Data processed by Author's with Eviews 12

Based on Table 7, the results of the multicollinearity test indicate that the correlation coefficients among the independent variables FCF, LnCR, and SIZE are all below the threshold value of 0,90. Therefore, it can be concluded that there is no evidence of multicollinearity among the independent variables, indicating that each variable provides distinct information in explaining the variation in financial performance.

Autocorrelation Test

Tabel 8. Autocorrelation Test Result

Autocorrelation Test	
F-statistic	0,127559
Obs*R-squared	0,266035
Prob. F(2.134)	0,8803
Prob. Chi-Square	0,8754

Source: Data processed by Author's with Eviews 12

Based on Table 8, the results of the autocorrelation test indicate a Chi-Square probability value of 0,8754 which is greater than the 0,05 significant level. Therefore, the null hypothesis cannot be rejected, indicating that the regression model is free from autocorrelation problems.

Heteroscedasticity Test

Tabel 9. Heteroscedasticity Test Result
Heteroscedasticity Test

F-statistic	25,13399
Obs*R-squared	88,90596
Scaled explained SS	402,5946
Prob. F(9.130)	0,0000
Prob. Chi-Square(9)	0,0000
Prob. Chi-Square(9)	0,0000

Source: Data processed by Author's with Eviews 12

Based on Table 9, the result of heteroscedasticity test indicate a Chi-Square probability value of 0,0000 which is lower than the 0,05 significant level. This result indicates the presence of heteroscedasticity, suggesting that the variance of the residuals is not constant across observations. To address this issue, the regression model was estimated using White Diagonal Standard Errors, a heteroscedasticity consistent covariance estimator. This method provides robust standard errors that remain valid even when the assumption of homoscedasticity is violated (Gujarati & Porter, 2009; Widarjono, 2018).

The White Diagonal Standard Errors method was selected because it produces heteroscedasticity robust standard error estimates without altering the estimated regression coefficient. Consequently, the coefficient estimates remain consistent, although they are no longer efficient under the conventional Ordinary Least Squares (OLS) assumptions required for the Best Linear Unbiased Estimator (BLUE) property (Gujarati & Porter, 2009). The application of this correction ensures that the t test and F test results reported in this study are based on robust standard errors that account for the presence of heteroscedasticity. As a result, the statistical inferences drawn from the regression analysis remain valid despite the violation of the homoscedasticity assumption.

Panel Data Regression

Dependent Variable: LNROA
Method: Panel Least Squares
Date: 06/20/26 Time: 17:10
Sample: 2020 2024
Periods included: 5
Cross-sections included: 28
Total panel (balanced) observations: 140
White diagonal standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.323699	0.210831	-1.535351	0.1270
FCF	0.479827	0.207650	2.310749	0.0224
LNCR	0.092279	0.017555	5.256509	0.0000
SIZE	0.011133	0.007872	1.414197	0.1596
R-squared	0.399120	Mean dependent var		0.009429
Adjusted R-squared	0.385866	S.D. dependent var		0.182516
S.E. of regression	0.143032	Akaike info criterion		-1.023342
Sum squared resid	2.782307	Schwarz criterion		-0.939295
Log likelihood	75.63395	Hannan-Quinn criter.		-0.989188
F-statistic	30.11163	Durbin-Watson stat		2.292084
Prob(F-statistic)	0.000000			

Source: Data processed by Author's with Eviews 12

Figure 2. Panel Data Regression Result

Panel Data Regression Equation

Based on Figure 2, panel data regression results the Common Effect Model (CEM) was identified as the most appropriate estimation model. To address the presence of heteroscedasticity, the model was estimated using White Diagonal Standard Errors and Covariance, which provide heteroscedasticity robust standard errors. The estimated panel data regression equation is presented as follows:

$$LNROA_{it} = -0,323699 + 0,479827(FCF_{it}) + 0,092279(LNCR_{it}) + 0,011133(SIZE_{it})$$

Simultaneous Test (F)

Based on Figure 2, panel data regression result shows a Prob(F-statistic) value is 0,00 which is lower than 0,05 significant level. Therefore, the regression model is statistically significant, indicating that free cash flow, liquidity, and firm size collectively have a significant effect on financial performance of transportation and logistics companies.

Coefficient of Determination (R2)

Based on Figure 2, panel data regression results indicate an Adjusted R-squared value of 0,385866. Suggesting that the independent variables included in the model free cash flow, liquidity, and firm size collectively explained approximately 38,58% of the variation in financial performance, proxied by Return on Assets (ROA). The remaining 61,42% of the variation is explained by other factors not incorporated into the model.

Partial Test (t)

This partial test was conducted to examine the individual effect of each independent variable on the dependent variable. Based on Figure 2, panel data regression result shows a probability on free cash flow value is 0,0224 which is lower than 0,05 significant level and coefficient value is 0,479827. Therefore the first hypothesis H1 is accepted, indicating that free cash flow has a positive and significant effect on financial performance.

Based on Figure 2, panel data regression result shows a probability on liquidity value is 0,0000 which is lower than 0,05 significant level and coefficient value is 0,092279. Therefore the second hypothesis H2 is accepted, indicating that liquidity has a positive and significant effect on financial performance.

Based on Figure 2, panel data regression result shows a probability on firm size value is 0,1596 which is higher than 0,05 significant value and coefficient value is 0,011133. Therefore, the third hypothesis H3 is rejected, indicating that firm size has a positive and no significant effect on financial performance.

CONCLUSION

This study aims to examine the effects of free cash flow, liquidity, and firm size on the financial performance in transportation and logistics sector listed on Indonesia Stock Exchange (IDX) during 2020-2024 period. Based on the results of a panel data regression analysis using the Common Effect Model (CEM), estimated with White Diagonal Standard Errors to correct for heteroscedasticity, the findings indicate that free cash flow, liquidity, and firm size collectively have a significant effect on financial performance.

The results further reveal that free cash flow has a positive and significant effect on financial performance in accordance with (Mursidah et al., 2023; Rompotis, 2024), this result suggests that effective management of free cash flow enhances a company's ability to generate profits by providing greater financial flexibility for operational and investment activities. Likewise, liquidity has a positive and significant effect on financial performance in accordance with (Aminah et al., 2023; Khoza, 2025), this finding indicates that the companies with

sufficient current assets to meet their short term obligations are better positioned to maintain operational continuity and improve profitability. These findings are consistent with Signalling Theory (Spence, 1973), which argues that a company's financial condition conveys signals to external stakeholders. Higher free cash flow serves as a positive signal that the company has healthy operational performance and strong managerial capability to generate future profits. This signal is particularly important in the post pandemic transportation and logistics sector, where investor and creditors remain cautious in evaluating firms that were significantly affected by supply chain disruptions and declining transportation demand. Similarly, adequate liquidity serves as a signal of short term financial stability, increasing investor and creditor confidence in the company's ability to fulfil its financial obligations under certain economic conditions. In contrast, firm size has a positive and insignificant effect on financial performance in accordance with (Arifaj et al., 2023), this result suggests that, within the transportation and logistics sector, larger asset ownership does not necessarily translate into higher profitability. Larger asset bases are often accompanied by substantial depreciation expenses and maintenance costs that may offset the potential benefits of economies scale. Conversely, smaller companies may demonstrate greater operational flexibility and adaptability to changing market conditions, enabling them to achieve profitability comparable to or even higher than the larger firms. The Adjusted R-squared value of 38,58% indicates that free cash flow, liquidity, and firm size collectively explain 38,58% of the variation in financial performance. The 61,42% is attributable to other factors not included in the research model, such as asset turnover, capital structure, corporate governance.

The findings of this study have several practical implications. For company management, the results highlight the importance of effectively managing free cash flow through efficient capital expenditure allocation and maintaining liquidity at a prudent level to support financial performance. For investors, these findings provide useful insights for evaluating transportation and logistics companies, suggesting that firms with strong free cash flow and adequate liquidity tend to achieve better financial performance regardless of their asset size. For policymakers and regulators, the results indicate the need to develop policies and incentives that encourage operational efficiency and financial resilience in the transportation and logistics sector during the post pandemic recovery period. This study also offers several directions for future research. Future studies are encourage to incorporate additional explanatory variables, such as leverage, asset turnover, corporate governance, and sales growth, to improve the explanatory power of the research model.

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