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The Effect of Liquidity, Leverage, Good Corporate Governance, and Firm Size on the Profitability of Maritime Transportation Companies Listed in Indonesia

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Abstract

Although the maritime transport sector plays a strategic role in Indonesia's economy, empirical research examining the determinants of shipping profitability amid recent regulatory and market shifts remains limited. This study aims to analyze and empirically test the effects of liquidity, proxied by the Current Ratio; leverage, proxied by the Debt-to-Equity Ratio; Good Corporate Governance, proxied by the proportion of independent commissioners; and firm size on the financial performance of maritime transport issuers listed on the Indonesia Stock Exchange during the 2020–2024 period, measured by Return on Assets. A quantitative approach with a causal-associative design was employed. The sample was selected through purposive sampling, resulting in 11 shipping companies and 55 balanced panel observations. Data were obtained from audited annual financial reports and analyzed using panel data regression with the Fixed Effect Model (FEM) in EViews. The findings indicate that liquidity has a positive and significant effect on Return on Assets, whereas leverage has a significant negative effect. Conversely, Good Corporate Governance and firm size do not have significant effects on profitability. These

findings suggest that financial performance in the capital-intensive maritime transport sector is primarily determined by working capital efficiency and debt control rather than board composition or scale expansion. This study contributes to the development of agency theory and signaling theory by demonstrating context-specific resource constraints in emerging maritime markets. The findings provide practical implications for shipping management, creditors, and regulators by emphasizing the importance of rigorous short-term liquidity management and optimal leverage thresholds to sustain long-term maritime financial performance.

Keywords: Financial Performance; Firm Size; Good Corporate Governance; Leverage; Liquidity

INTRODUCTION

Maritime transportation serves as the backbone of global trade, with more than 80% of world trade volume being transported by sea (UNCTAD, 2024). Globally, maritime trade grew by 2.4% in 2023, reaching 12.3 billion tons, although this recovery remains fragile due to geopolitical tensions, disruptions to strategic shipping routes such as the Suez and Panama Canals, and rising operating costs (UNCTAD, 2024). For Indonesia, the world's largest archipelagic country, dependence on maritime transportation is even greater than the global average. The shipping industry plays a crucial role in reducing national logistics costs through transportation efficiency, port infrastructure quality, and the implementation of the cabotage principle, which requires domestic cargo to be transported by Indonesian-flagged vessels (Dermawan et al., 2024). Indonesia's transportation and warehousing sector recorded growth rates of 19.87% in 2022 and 13.96% in 2023, consistently outperforming the national GDP growth rate (CNBC Indonesia, 2026). This growth makes maritime transportation companies a strategic subject for financial performance studies, given the industry's complex dynamics and its strong exposure to both global and domestic macroeconomic conditions.

Despite favorable sectoral growth, the profitability of maritime transportation companies listed on the Indonesia Stock Exchange (IDX) exhibited substantial fluctuations and heterogeneity throughout the 2020–2024 period. Based on annual financial statements, PT Samudera Indonesia Tbk (SMDR) recorded a Return on Assets (ROA) of -0.40% in 2020, which surged to 28.35% in 2022 when global freight rates peaked, before declining to 5.97% in 2024. PT Logindo Samudramakmur Tbk (LEAD) reported negative ROA for four consecutive years, ranging from -1.91% in 2020 to -4.18% in 2023, before recovering to

2.72% in 2024. In contrast, PT Jasa Armada Indonesia Tbk (IPCM) maintained relatively stable ROA ranging from 5.70% to 10.36% throughout the period. Overall, the sample exhibited an average ROA of only 6.93%, with a standard deviation of 9.45%, reflecting substantial disparities in performance among firms operating within the same industry and macroeconomic environment. According to (Kasmir, 2019), ROA reflects management's ability to utilize corporate resources efficiently to generate profits. Therefore, these pronounced differences in ROA suggest the existence of internal factors that affect the performance of individual shipping companies differently.

The first variable presumed to influence profitability is liquidity, as measured by the Current Ratio (CR). According to Hery (2018), liquidity reflects a firm's ability to meet its short-term financial obligations. Firms with adequate liquidity are better able to maintain operational continuity without financial disruptions that may hinder productivity. The data reveal considerable variation in CR across the sample firms, suggesting that short-term liquidity management strategies differ substantially within the sub-sector. Zildanis et al. (2026) found that CR has a positive and significant effect on ROA among transportation and logistics companies listed on the IDX during 2020–2024. Safira (2025) reported that CR has a positive and significant effect on ROA among transportation and logistics companies listed on the IDX during 2020–2024. However, Satria & Monika (2023) reported that CR has no significant effect on the ROA of a manufacturing firm, suggesting that the impact of liquidity may be industry-specific. These inconsistent findings suggest that the impact of liquidity on profitability is context-dependent and warrants further investigation within the maritime transportation sub-sector.

The second variable is leverage, measured by the debt-to-equity ratio (DER). According to Fahmi & Sawukir (2025), leverage reflects the extent to which a company relies on debt financing to support its operations and assets. In the capital-intensive shipping industry, debt financing is often unavoidable for fleet acquisition and renewal. The data reveal considerable differences in financing strategies among maritime transportation issuers, reflecting the varying degrees to which firms rely on debt to fund capital-intensive fleet operations. Damayanti & Darmayanti (2022) found that capital structure has a negative and significant effect on the firm value of transportation companies, suggesting that excessive debt burdens may erode profitability. In contrast, Simbolon et al. (2026) documented a positive and significant relationship between leverage and financial performance, implying that debt utilization may enhance profitability when managed efficiently. These inconsistent

findings indicate the existence of a research gap and highlight the need to re-examine the effect of leverage within the maritime transportation subsector using a more recent observation period.

The third variable is Good Corporate Governance (GCG), proxied by the proportion of independent commissioners. Jensen & Meckling (1976), through agency theory, argue that conflicts of interest between managers (agents) and shareholders (principals) can be mitigated through effective monitoring mechanisms, thereby enhancing operational efficiency and profitability. Although sample firms generally comply with the minimum 30% threshold stipulated by the Financial Services Authority (POJK No. 57/POJK.04/2017), the variation in board composition across firms remains relatively limited, potentially constraining the observable effect of this governance mechanism on profitability. Fahmi & Sawukir (2025) found that independent commissioners positively and significantly affect financial performance. However, Sutarti et al. (2025) reported that independent commissioners, board size, and audit committees do not necessarily exert a significant influence on ROA. Sirait et al. (2025) similarly found that independent commissioners did not significantly affect ROA in transportation and logistics companies listed on the IDX during 2020-2023, suggesting that board composition alone is insufficient to drive profitability improvements in this sector. Islami & Wulandari (2023) further argued that the effectiveness of GCG depends more on the quality of monitoring than merely on the number of board members.

The fourth variable is firm size, measured by the natural logarithm of total assets. Larger firms are generally expected to benefit from broader access to financing, more diversified business activities, and economies of scale, which may improve profitability (Ikhlas et al., 2026). Notably, the sampled maritime transportation firms exhibit relatively homogeneous asset scales, which may limit the model's ability to detect economies of scale effects on profitability. Fahmi & Sawukir (2025) found a positive and significant effect of firm size on profitability, whereas and Putri & Rajagukguk (2025) reported insignificant results. These discrepancies may be attributed to differences in industry characteristics and sample compositions.

Unlike prior studies that examine these variables in isolation or within the broader transportation and logistics sector, this study offers a simultaneous, sub-sector-specific examination of liquidity, leverage, Good Corporate Governance, and firm size within the Indonesian maritime transportation industry, a context shaped by pandemic recovery, global

freight rate normalization, and evolving domestic regulatory conditions throughout 2020–2024. The inconsistent findings regarding the four variables, coupled with the limited number of studies that simultaneously examine these variables within a single model for this sub-sector over the complete 2020–2024 economic cycle, indicate the existence of a relevant research gap. This study is grounded in signaling theory proposed by (Ross, 1977), which suggests that liquidity and capital structure decisions convey signals regarding a firm's financial condition to the market, and agency theory proposed by Jensen & Meckling (1976), which explains the role of independent commissioners in enhancing corporate efficiency. Accordingly, this study aims to empirically examine the effects of liquidity (CR), leverage (DER), Good Corporate Governance (DKI), and firm size (SIZE) on the profitability (ROA) of maritime transportation companies listed on the Indonesia Stock Exchange during the 2020–2024 period.

METHODS

This study employs a quantitative approach grounded in the positivist philosophy to examine causal relationships among variables through statistical analysis (Sugiyono, 2023). The research adopts a causal design using a panel data approach, which combines cross-sectional data across firms and time-series data covering the 2020-2024 period. The use of panel data enables the control of heterogeneity across observational units and provides more efficient estimation results compared to purely cross-sectional or time-series analysis (Basuki, 2021).

The population of this study consists of all maritime transportation companies listed on the Indonesia Stock Exchange (IDX). The sample was selected using purposive sampling based on three criteria: companies continuously listed on the IDX during 2020-2024, companies that published complete audited annual financial statements throughout the study period, and companies with complete data for all research variables (Sugiyono, 2023). From a population of 27 companies, 11 companies met these criteria, resulting in 55 total observations covering WINS, TCPI, SMDR, SHIP, PSSI, NELY, LEAD, BLTA, IPCM, BBRM, and MBSS. This study utilizes secondary data in the form of audited annual financial statements obtained from the official website of the Indonesia Stock Exchange (idx.co.id). Data collection was conducted during March–April 2026, accessing reports published for the fiscal years 2020 through 2024.

The operational variables are defined as follows: Profitability (ROA) = Net Income / Total Assets; Liquidity (CR) = Current Assets / Current Liabilities; Leverage (DER) = Total Debt / Total Equity; Good Corporate Governance (DKI) = Number of Independent Commissioners / Total Board of Commissioners, based on the minimum requirement of 30% stipulated in POJK No. 57/POJK.04/2017; and Firm Size (SIZE) = Ln(Total Assets). Descriptive statistical analysis was conducted to provide an overview of the central tendency and dispersion of each research variable. The data were then analyzed using panel data regression with EViews software. The appropriate estimation model was selected through two sequential tests. The Chow Test was first conducted to choose between the Common Effect Model (CEM) and Fixed Effect Model (FEM); if the probability value is below 0.05, the FEM is preferred. The Hausman Test was subsequently applied to choose between the FEM and Random Effect Model (REM); if the probability value is below 0.05, the FEM is retained as the final model.

Classical assumption tests were conducted prior to hypothesis testing, including: (1) the normality test using the Jarque–Bera statistic, where residuals are considered normally distributed if the probability value exceeds 0.05; (2) the multicollinearity test using the correlation matrix, where a correlation coefficient below 0.85 among independent variables indicates the absence of multicollinearity; (3) the heteroscedasticity test using the residual plot method, where a model is considered free from heteroscedasticity if the residual values do not exceed the thresholds of 500 and −500; and (4) the autocorrelation test using the Durbin–Watson statistic, where the model is free from autocorrelation if the DW value falls within the range $dU < DW < (4 - dU)$ (Napitupulu et al., 2021).

Hypothesis testing was performed using the partial t-test and simultaneous F-test, where the statistical significance was determined based on a value below 0.05 ($p < 0.05$), alongside the Adjusted R-squared to measure the model's explanatory power (Napitupulu et al., 2021). The panel data regression model employed in this study is expressed as $ROA_{it} = \alpha + \beta_1 CR_{it} + \beta_2 DER_{it} + \beta_3 DKI_{it} + \beta_4 SIZE_{it} + \varepsilon_{it}$, where ROA = Return on Assets; CR = Current Ratio; DER = Debt-to-Equity Ratio; DKI = Proportion of Independent Commissioners; SIZE = Ln(Total Assets); α = constant; β_1–β_4 = regression coefficients; i = company; t = year; and ε = error term. The entire research process, including phenomenon identification, literature review, data collection from the Indonesia Stock Exchange, statistical

analysis using EViews, and final draft reporting, was conducted over a period of four months, starting from February 2026 to May 2026.

RESULTS

1. Estimation Model Selection

The descriptive statistics of the 55 observations (11 companies × 5 years, 2020–2024) are presented in Table 1 Descriptive Statistics below.

Table 1. Descriptive Statistics

Statistik	ROA	CR	DER	DKI	SIZE
Mean	0,0693	3,1752	0,9131	0,4193	28,4821
Median	0,0684	2,2193	0,5690	0,3333	28,5617
Maksimum	0,2835	20,4434	4,4375	0,6667	30,6670
Minimum	-0,3002	0,3545	0,0505	0,3333	26,8979
Std. Dev.	0,0945	3,5353	1,0404	0,1040	0,9077
Observasi	55	55	55	55	55

Source: EViews Output, processed data (2026)

The descriptive statistics reveal that ROA exhibits the highest relative dispersion among all variables, with a standard deviation of 0.0945 against a mean of 0.0693, indicating substantial heterogeneity in financial performance across the sample firms. CR shows the widest absolute range (0.3545–20.4434), reflecting markedly different liquidity positions among maritime transportation issuers. DER averages 0.9131, suggesting moderate overall leverage, though individual firm values range considerably. DKI variation is relatively constrained (std. dev. = 0.1040), implying that board composition differences across firms are limited. SIZE exhibits the lowest dispersion (std. dev. = 0.9077), indicating that the sampled companies are relatively homogeneous in asset scale.

Notably, the panel data exhibit considerable heterogeneity. PT Logindo Samudramakmur Tbk (LEAD) recorded negative ROA for four consecutive years (2020–2023), ranging from −1.91% to −4.18%, before recovering to 2.72% in 2024, a pattern that stands in sharp contrast to the sample average of 6.93%. This intra-industry disparity suggests that firm-specific factors, beyond the variables captured in the model, play a meaningful role in shaping individual firm performance within the maritime transportation sub-sector.

2. Estimation Model Selection

The appropriate estimation model was determined sequentially through the Chow Test and Hausman Test. Results are presented in Table 2 Model Selection Test Results.

Table 2. Model Selection Test Results

Test	Statistic	Value	Prob.	Decision
Uji Chow	Cross-section F	2.785221	0.0103	FEM Preferred
	Cross-section Chi-square	29.064886	0.0012	FEM Preferred
Uji Hausman	Cross-section random	22.475954	0.0002	FEM Selected

Source: EViews Output, processed data (2026)

Based on Table 2 Model Selection Test Results, the Chow Test yielded probability values of 0.0103 (Cross-section F) and 0.0012 (Cross-section Chi-square), both below 0.05; thus H_0 is rejected and the Fixed Effect Model (FEM) is preferred over the Common Effect Model (CEM). The subsequent Hausman Test produced a probability value of 0.0002 (< 0.05), again rejecting H_0, confirming that the Fixed Effect Model (FEM) is the most appropriate final estimation model.

3. Classical assumption Tests

Prior to hypothesis testing, all classical regression assumptions were verified to ensure the validity and reliability of the model. The results are summarized in Table 3 Classical Assumption Test Results.

Table 3. Classical Assumption Test Results

Test	Method / Statistic	Value	Result
Normality	Jarque–Bera	Prob. = 0.796996	Normal
Multicollinearity	Correlation Matrix	All r < 0.85	No multicollinearity
Heteroscedasticity	Residual Plot	Max: 0.1356; Min: −0.1219	Homoscedastic
Autocorrelation	Durbin–Watson	DW = 2.071318	No autocorrelation

Source: EViews Output, processed data (2026)

Based on Table 3 Classical Assumption Test Results, all classical assumptions were satisfied. The Jarque–Bera test yielded a probability of 0.796996 (> 0.05), so H_0 is accepted and residuals are confirmed to be normally distributed. The correlation matrix shows all inter-variable correlations below 0.85, so H_0 is accepted and the model is free from multicollinearity. The residual plot indicates that all residual values fall well within the ±500 threshold, with a maximum value of 0.135561 and a minimum value of −0.121922; none of the observations approach the critical thresholds, so H_0 is accepted and the model is free from heteroscedasticity. The Durbin–Watson value of 2.071318 falls within the non-autocorrelation range (dU = 1.7246 < DW < 2.2754), so H_0 is accepted and the model is free from autocorrelation.

4. Fixed Effect Model Estimation Results and Hypothesis Testing

Having satisfied all classical assumptions, the Fixed Effect Model was estimated. The results, including hypothesis testing decisions, are presented in Table 4 Fixed Effect Model Estimation Results.

Table 4. Fixed Effect Model Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Direction
C	−1.469114	1.307904	−1.123258	0.2680	—
CR (X1)	0.008280	0.003274	2.529363	0.0155	Positive
DER (X2)	−0.064975	0.014836	−4.379491	0.0001	Negative
DKI (X3)	0.012026	0.132204	0.090962	0.9280	—
SIZE (X4)	0.054997	0.045351	1.212692	0.2324	—
R-squared	0.6799	Adj. R-squared	0.5678		
F-statistic	6.067373	Prob(F-stat)	0.000003		
DW stat	2.071318				

Source: EViews Output, processed data (2026)

Based on Table 4 Fixed Effect Model Estimation Results, the estimated regression equation is as follows:

$$ROA_{it} = -1.4691 + 0.0083CR_{it} - 0.0650DER_{it} + 0.0120DKI_{it} + 0.0550SIZE_{it} + \varepsilon_{it}$$

The F-statistic of 6.067373 (prob. = 0.000003 < 0.05) indicates that all independent variables jointly exert a significant effect on profitability, so H_5 is accepted. The Adjusted R-squared value of 0.5678 indicates that 56.78% of the variation in ROA is explained by CR, DER, DKI, and SIZE, while the remaining 43.22% is attributable to other factors outside the model.

The partial hypothesis testing results are as follows:

Hypothesis 1: Liquidity (CR) has a positive and significant effect on the profitability (ROA) of maritime transportation companies listed on the Indonesia Stock Exchange. The significance value of CR is 0.0155, which is lower than 0.05. This indicates that Ha is accepted and H_0 is rejected. Therefore, it can be concluded that liquidity has a positive and significant effect on profitability.

Hypothesis 2: Leverage (DER) has a negative and significant effect on the profitability (ROA) of maritime transportation companies listed on the Indonesia Stock Exchange. The significance value of DER is 0.0001, which is lower than 0.05. This indicates

that Ha is accepted and H_0 is rejected. Therefore, it can be concluded that leverage has a negative and significant effect on profitability.

Hypothesis 3: Good Corporate Governance (DKI) does not have a significant effect on the profitability (ROA) of maritime transportation companies listed on the Indonesia Stock Exchange. The significance value of DKI is 0.9280, which is greater than 0.05. This indicates that Ha is rejected and H_0 is accepted. Therefore, it can be concluded that Good Corporate Governance does not have a significant effect on profitability.

Hypothesis 4: Firm Size (SIZE) does not have a significant effect on the profitability (ROA) of maritime transportation companies listed on the Indonesia Stock Exchange. The significance value of SIZE is 0.2324, which is greater than 0.05. This indicates that Ha is rejected and H_0 is accepted. Therefore, it can be concluded that firm size does not have a significant effect on profitability.

Hypothesis 5: Liquidity, leverage, Good Corporate Governance, and firm size simultaneously have a significant effect on profitability (ROA). The significance value of the F-statistic is 0.000003, which is lower than 0.05. This indicates that Ha is accepted and H_0 is rejected. Therefore, it can be concluded that liquidity, leverage, Good Corporate Governance, and firm size jointly have a significant effect on profitability.

DISCUSSION

The Effect of Liquidity (CR) on Profitability (ROA)

The estimation results show that CR has a coefficient of 0.008280 with a probability value of 0.0155 (< 0.05), indicating that liquidity has a positive and significant effect on profitability (H1 accepted). This suggests that greater short-term solvency leads to higher profitability. In the operationally intensive maritime transportation industry, adequate liquidity supports financial stability and operational continuity, thereby strengthening firms' ability to generate profits and enhancing financial resilience amid industry dynamics (Akhmadi et al., 2023; Zildanis et al., 2026). This finding is consistent with (Zildanis et al., 2026) and Safira (2025), who reported a positive and significant effect of CR on ROA among transportation and logistics firms, and supports signaling theory (Ross, 1977), which suggests that strong liquidity conveys a positive signal regarding a firm's financial health to stakeholders. This finding is further corroborated by Nisa & Tantra (2026), who evaluated

Indonesian transportation companies from 2021 to 2024 and concluded that maintaining an optimal balance of liquid assets is the most consistent internal driver for stabilizing and maximizing post-pandemic profitability.

The Effect of Leverage (DER) on Profitability (ROA)

The DER variable has a coefficient of -0.064975 with a probability value of 0.0001 (< 0.05), indicating that leverage has a negative and significant effect on profitability (H2 accepted). The coefficient implies that a one-unit increase in DER reduces ROA by 6.50 percentage points. This finding is particularly relevant to the capital-intensive shipping industry, where debt financing is commonly required for fleet acquisition and renewal (Setiawan, 2025). Higher debt levels increase financing costs, which may ultimately reduce profitability. The adverse effect becomes more pronounced during periods of freight rate normalization, such as 2023–2024, when revenues decline while debt obligations remain unchanged. From the perspective of signaling theory (Ross, 1977), high debt levels signal greater financial risk to the market. These findings are in line with Susilowati et al. (2025), Antoni. R & Jannah (2025) and Kijkasiwat et al. (2022), who reported a negative relationship between leverage and firm performance across different contexts, but contrast with Putri & Rajagukguk (2025) and Zildanis et al. (2026), who found no significant relationship between DER and profitability among transportation and logistics firms.

The Effect of Good Corporate Governance (DKI) on Profitability (ROA)

The DKI variable has a coefficient of 0.012026 with a probability value of 0.9280 (> 0.05), indicating that Good Corporate Governance has no significant effect on profitability (H3 rejected). Although the positive coefficient is consistent with the prediction of agency theory Jensen & Meckling (1976), the probability value approaching 1.00 suggests the absence of statistical significance. This finding may be explained by the limited variation in DKI across the sample firms (standard deviation of only 0.1040), as most companies maintained the minimum proportion of independent commissioners at 33.33%, in accordance with POJK No. 57/POJK.04/2017. Furthermore, in the shipping industry, the effectiveness of independent commissioners depends more on the quality of oversight and understanding of maritime dynamics than merely on board composition (Islami & Wulandari, 2023). These findings are consistent with Sutarti et al. (2025) and Herzani & Ekadjaja (2025). This aligns with (Sirait et al., 2025), who found that independent commissioners do not significantly affect ROA in IDX transportation and logistics

companies during 2020–2023. Conversely, Andika & Istanti (2024), reported a significant negative effect in the food and beverage sector, indicating that GCG's impact varies by industry. Meanwhile, Balqis & Ansori (2025) observed a positive and significant effect within the transportation and logistics sector, highlighting how sample composition and observation periods can alter results

The Effect of Firm Size on Profitability (ROA)

The SIZE variable has a coefficient of 0.054997 with a probability value of 0.2324 (> 0.05), indicating that firm size has no significant effect on profitability (H4 rejected). Although the positive coefficient aligns with the general expectation that larger firms benefit from economies of scale and broader access to financing, this expectation is not empirically supported in the present sample. The limited variation in firm size among the sample companies (standard deviation of 0.9077) restricts the model's ability to detect a meaningful effect. Moreover, large shipping companies face higher fleet depreciation costs and greater operational complexity, meaning that economies of scale do not necessarily translate into higher profitability. This aligns with Estiasih et al., 2024), who observed that firm size has no significant effect on the financial performance of companies in the food and beverage manufacturing sector, and also these findings support (Ngantung & Handoyo, 2023), but differ from (Fahmi & Sawukir, 2025), who found a significant positive effect, possibly due to differences in sectoral characteristics.

Simultaneous Effect on Profitability (ROA)

The F-statistic value of 6.067373 with a probability value of 0.000003 (< 0.05) demonstrates that CR, DER, DKI, and SIZE jointly have a significant effect on the profitability of maritime transportation companies listed on the Indonesia Stock Exchange during the 2020–2024 period (H5 accepted). The adjusted R-squared value of 0.5678 indicates that these four variables explain 56.78% of the variation in profitability, suggesting satisfactory explanatory power, while the remaining variation may be attributable to external factors beyond the scope of the model.

Although this study provides robust empirical insights, several limitations must be acknowledged. First, the research sample is restricted only to public maritime transportation companies listed on the IDX, excluding private shipping lines that might exhibit different financial dynamics. Second, Good Corporate Governance is proxied solely by the proportion of independent commissioners, which may not capture the broader, qualitative spectrum of

corporate oversight mechanisms. Lastly, this model focuses entirely on internal financial ratios, leaving out macroeconomic control variables such as fuel price fluctuations, inflation, and global freight rate indices that heavily impact the maritime logistics industry.

CONCLUSION

Based on the Fixed Effect Model estimation results, liquidity (CR) positively and significantly affects profitability, indicating that stronger short-term solvency supports operational continuity and enhances returns. In contrast, leverage (DER) negatively and significantly affects profitability, suggesting that higher debt burdens reduce profitability in the capital-intensive maritime transportation industry. Meanwhile, Good Corporate Governance, proxied by the proportion of independent commissioners, and firm size do not significantly affect profitability, implying that governance structure and asset scale alone are insufficient to improve financial performance. Simultaneously, liquidity, leverage, Good Corporate Governance, and firm size significantly influence profitability and jointly explain 56.78% of its variation.

These findings extend the application of signaling theory Ross (1977) and agency theory Jensen & Meckling (1976) to the Indonesian maritime transportation context, demonstrating that the signaling value of liquidity and leverage decisions is empirically robust even within a capital-intensive, emerging-market sub-sector characterized by regulatory constraints (POJK No. 57/POJK.04/2017) and significant firm-level heterogeneity. The non-significant effects of Good Corporate Governance and firm size further suggest that context-specific institutional and operational factors moderate the theoretical predictions of these frameworks in the maritime industry. From a practical perspective, maritime transportation companies should prioritize effective liquidity management and maintain prudent debt policies to improve financial performance. This study is limited by its focus on listed maritime transportation firms and the use of a single GCG proxy. Therefore, future research is encouraged to employ broader governance measures, incorporate macroeconomic control variables, and expand the sample to enhance the robustness and generalizability of the findings.

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