

THE EFFECT OF LEVERAGE, LIQUIDITY, AND PROFITABILITY ON THE VALUE OF COMPANIES IN THE MARINE TRANSPORTATION SUB-SECTOR ON THE IDX FOR THE 2019–2022 PERIOD

Aldista Lito Jawa Kelen

¹ Management Study Program, Faculty of Economics and Business, University of PGRI Madiun
Email: aldistalito086@gmail.com

Abstract

Firm value reflects shareholder wealth and investor expectations. This study aims to examine the effect of leverage, liquidity, and profitability on firm value of shipping subsector companies listed on the Indonesia Stock Exchange for the 2019–2022 period. The research employed a quantitative method with multiple linear regression analysis. The population comprised shipping companies listed on the IDX, and purposive sampling yielded 68 observations. The results show that leverage, liquidity, and profitability each have a significant positive effect on firm value. Thus, sound financial performance serves as a positive signal to investors and enhances firm value.

Keywords: *Leverage, Liquidity, Profitability, Firm Value*

A. INTRODUCTION

Sea transportation is one of the strategic sectors in supporting the distribution of goods and trade mobility, especially in Indonesia as an archipelagic country. The role of sea transportation is vital in maintaining a smooth supply chain, inter-regional connectivity, and national economic competitiveness. However, the performance of companies in the marine transportation subsector in Indonesia still faces fluctuations in the company's value as reflected in the share price and Price to Book Value (PBV) ratio. During the 2019–2022 period, the value of this sub-sector company had experienced a decline due to the pressure of the COVID-19 pandemic and global uncertainty, before finally showing signs of recovery. This condition raises questions about financial factors that can affect the value of companies in this subsector.

Company value is one of the important indicators in the assessment of company performance and investor expectations. The higher the value of the company, the greater the level of investor confidence in the future business prospects. Internal factors that are believed to affect

the company's value include leverage, liquidity, and profitability. Leverage describes the extent to which a company uses debt-based funding in its operations. Liquidity reflects a company's ability to meet short-term liabilities, while profitability refers to a company's ability to generate profits from the assets it owns. A number of previous studies have found mixed results regarding the influence of these three variables on company value.

Some studies have shown that leverage and profitability have a positive effect on a company's value, while other studies have found a negative or insignificant influence. Similarly, liquidity is sometimes found to have a positive effect, but in certain contexts it does not affect the value of the company. The difference in findings indicates that there is a research gap that is important to be researched further, especially in the marine transportation subsector which has different characteristics from other sectors. Based on this description, this study aims to analyze the influence of leverage, liquidity, and profitability on the value of companies in the marine transportation subsector listed on the Indonesia Stock Exchange (IDX) in the 2019–2022 period. The results of this study are expected to make an academic contribution in enriching the company's financial literature, as well as provide practical implications for company management and investors in strategic decision-making.

B. METHOD

This study uses a quantitative approach with a causal associative design to determine the influence of leverage, liquidity, and profitability on the value of companies in the marine transportation subsector. The research population is all companies in the marine transportation subsector listed on the Indonesia Stock Exchange (IDX) in the 2019–2022 period. The sampling technique was carried out by *purposive sampling* based on the following criteria: (1) companies in the marine transportation subsector that are consistently listed on the IDX during the study period, (2) publish complete annual financial statements, and (3) have the required variable data. Based on these criteria, 68 observations of company data were obtained. The variables in this study

consist of: Leverage (X1) measured by *Debt to Equity Ratio (DER)*, Liquidity (X2) measured by *Current Ratio (CR)*, Profitability (X3) measured by *Return on Assets (ROA)*, Company Value (Y) measured by *Price to Book Value (PBV)*.

Research data is secondary data in the form of financial statements obtained from the IDX's official website and other supporting sources. Data analysis was carried out with the help of the SPSS version 23 program through multiple linear regression tests. Before hypothesis testing, classical assumption tests were carried out which included normality, multicollinearity, heteroscedasticity, and autocorrelation tests. Furthermore, hypothesis testing was carried out by partial test (*t-test*), simultaneous test (*F-test*), and determination coefficient test (R^2) to determine the magnitude of the influence of independent variables on dependent variables.

C. RESULTS AND DISCUSSION

RESULT

Multiple Linear Regression Analysis

Based on the results of the analysis that has been carried out, it can be found that the regression equation in this study can be seen in the following table:

Table 1. Results of Multiple Linear Regression Analysis Test

		Coefficient				
Type		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	30.067	12.129		2.479	.000
	ROA	.352	.032	.733	2.053	.009
	DER	.224	.010	.751	3.402	.000
	CR	.392	.008	.428	2.241	.008

Source: : Data processed by researchers (2024)

Based on the results of the multiple linear regression test presented in Table 4.6 above, the regression equation is obtained as follows:

$$Y = 30.067 + 0.352X_1 + 0.224X_2 + 0.392X_3 + e$$

This regression equation can be explained as follows:

- a. A constant value of 30.067 indicates that when all independent variables, namely leverage (DER), liquidity (ROA), and profitability (CR), are zero, then the company value (PBV) is estimated at 30.067. This means that under conditions where there is no contribution from these three variables, the company's value remains at a base level of 30.067, which reflects other components outside the model that also affect the market valuation of the company.
- b. A leverage coefficient (DER) of 0.224 indicates a positive relationship between leverage and company value (PBV). This means that if there is an increase of one unit in the value of the DER, the company's value is expected to increase by 0.224, noting that other variables such as liquidity (CR) and profitability (ROA) are in a fixed condition. This indicates that in the context of this study, the increase in the use of debt in the capital structure can be responded positively by the market as long as it is still within optimal limits, because it is considered to be able to increase the performance or value of the company.
- c. The liquidity coefficient measured by CR (X₂) of 0.392 indicates a positive relationship with company value (PBV). This means that every single unit increase in CR will increase the company's value by 0.392, assuming the other variables remain constant. This positive relationship indicates that the greater the company's ability to generate profits from its assets, the higher the market appreciation of the company.
- d. Profitability coefficient / ROA (X₃) of 0.352: The value of this coefficient is negative, so every increase of one unit in the ROA will result in an increase in company value (PBV) of 0.352, assuming the other variables remain constant.
- e. The profitability coefficient represented by ROA of 0.352 indicates a positive relationship with company value (PBV). This means that every one unit increase in the ROA will increase the company's value by 0.352, assuming the other variables remain constant. This indicates that the higher the company's ability to meet its short-term obligations, the greater the market's

confidence in the company's financial stability, which ultimately has a positive impact on the company's valuation in the eyes of investors.

Partial Test (Test t)

The t-test was carried out by comparing the significance value of t to the significance level (α) of 0.05. The results of this t-test are presented in the table below:

Table 1.2 Partial Test Results (t-test)

Model	Coefficients ^a			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
1 (Constant)	30.067	12.129		2.479	.000
ROA	.352	.032	.733	2.053	.009
DER	.224	.010	.751	3.402	.000
CR	.392	.008	.428	2.241	.008

Sumber: Data diolah peneliti (2024)

Based on the test results presented in Table 1.2 above, conclusions can be drawn about the influence of each variable as follows.

Leverage variable / DER (X1): This variable has a positive and significant influence on the company's value (PBV), as indicated by a coefficient value of 0.010 and a significance value of 0.000, which is smaller than the threshold of 0.05. In addition, the t-calculated value of 3.402 is greater than the t-table value of 1.675, so it can be statistically concluded that *leverage* contributes significantly to increasing the value of the company. This shows that in the context of this study, the proportionate use of debt can be accepted by the market as a strategy that supports the growth of the company's value.

Liquidity variable / CR (X2): This variable shows a positive and significant influence on the company's value (PBV), as indicated by a coefficient of 0.008. A significance value of

0.0008 which is smaller than the significance level of 0.05, as well as a t-calculated value of 2.241 which exceeds the t-table value of 1.675, reinforce the conclusion that ROA contributes significantly to the increase in the value of the company. This indicates that the higher the company's ability to generate profits from its assets, the higher the market valuation of the company.

Profitability variable / ROA (X3): This variable has a positive and significant influence on the company's value (PBV), which is indicated by a coefficient value of 0.032. A significance value of 0.009 which is below the threshold of 0.05, as well as a t-calculated value of 2, which is greater than the t-table of 1.675, indicates that the influence of this variable on PBV is statistically significant. This finding indicates that the higher the company's liquidity level, which is reflected in the *Current Ratio*, the greater the company's value in the eyes of investors, because the company is considered to be able to fulfill its short-term obligations well

Simultaneous Test (F Test)

If the significance value (sig) is less than 0.05, then it can be concluded that all independent variables simultaneously affect the dependent variables. The results of the simultaneous test (F test) can be seen in the table below.

Table 1.3 Simultaneous Test Results (F Test)

NEW ERA						
Type		Sum of	Df	Mean	F	Sig.
		Squares		Square		
1	Regressi	1559.754	3	519.918	6.535	.000b
	on					
	Residual	606369.755	64	9474.527		
	Total	607929.509	67			

a. Dependent Variable: PBV

b. Predictors: (Constant), CR, ROA, DER

Source: Data processed by researchers (2024)

Based on Table 1.3, the results of the statistical test F show that the calculated F value obtained is 6.535, with a significance level (sig) of 0.000. This significance value is well below the predetermined significance level limit, which is alpha (α) of 0.05, which means that the test results are in the region of null hypothesis rejection (H_0). In addition, the F-value of the calculation (6.535) was also greater than the F-value of the table (3.183), which further strengthens the conclusion that the regression model used in this study has simultaneous significance. Thus, it can be concluded that together independent variables consisting of *Leverage* (DER), *Liquidity* (ROA), and *Profitability* (CR) have a significant influence on the dependent variable, namely *Company Value* as measured using *Price to Book Value* (PBV). These findings suggest that the three financial indicators collectively play an important role in explaining the variation in corporate values in the marine transportation sector that is the focus of the study.

Coefficient Determination Test

The smaller *value of the Adjusted R Square* indicates that the ability of independent variables to explain the variation of dependent variables is increasingly limited. Conversely, if the *value of the Adjusted R Square* is close to one, it indicates that the independent variable provides almost all the information needed to predict the variation of the dependent variable. The results of the simultaneous test (test) can be seen in the table below. R^2

Table 1.4 Determination Coefficient Test Results

Model Summary				
Mod el	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.851 ^a	.543	.544	97.33718

a. Predictors: (Constant), CR, ROA, DER

Sumber: Data diolah peneliti (2024)

Based on the SPSS output shown in Table 1.4, it is known that the *value of R Square* (coefficient of determination) is 0.543. This value shows that 54.3% of the variation that occurs in the dependent variable, namely the company's value as measured through *Price to Book Value* (PBV), can be explained by the three independent variables in the model, namely *leverage* (DER), liquidity (ROA), and profitability (CR). In other words, more than half of the variation in PBV can be explained by the company's financial performance reflected in the three ratios. The rest, which is 45.7%, is explained by other variables that are not included in this research model.

DISCUSSION

The results of the study show that leverage has a positive and significant effect on the value of the company. These findings indicate that the proportionate use of debt can be an effective strategy for companies in the marine transportation subsector. By utilizing debt-based funding, companies can benefit from tax shields from interest expenses that reduce taxes payable, thereby having an impact on increasing net profit and positive perceptions from investors. These results are in line with research by Andini (2023), Felicia & Sofia (2021), and Ilham et al. (2021) which proves that leverage can increase company value. However, this result is different from the findings of Lestari & Sihono (2023) which states that leverage has no effect, thus confirming that the influence of leverage is highly dependent on the context of the

industrial sector. In the capital-intensive marine transportation subsector, the use of debt tends to provide added value when managed carefully.

Furthermore, liquidity has been proven to have a positive and significant effect on the value of the company. This condition shows that companies with high ability to meet short-term obligations are seen as more financially healthy. Investors tend to positively value companies that have adequate cash reserves and current assets, as this reflects a low risk of default. These findings support the research of Andreas (2023) and Kharisma (2023), who stated that liquidity provides a positive signal to investors. However, this study is different from the results of Jenny Ambarwati & Mineva (2021) who found that liquidity has no effect on the value of the company. This difference can be explained by the condition of the marine transportation subsector which is facing liquidity pressures due to the COVID-19 pandemic. Companies with high liquidity are better able to survive and recover quickly, thus increasing market confidence in the recovery period.

Meanwhile, profitability has a positive and significant effect on the company's value. High profitability reflects a company's ability to generate profits through effective asset management, thereby increasing its attractiveness in the eyes of investors. In the context of the marine transportation subsector, the increase in Return on Assets (ROA) in the 2021–2022 period shows an improvement in post-pandemic operational efficiency, which has an impact on increasing the stock market value. These results are consistent with research by Jenny (2021), Wisnu (2020), and Meidy et al. (2023) who found that profitability is the main determinant of company value. However, this result is contrary to the findings of Febryanti (2023) which states that profitability has no effect, thus showing differences between sectors. In the marine transportation subsector, profitability is a major factor because this industry is directly related to logistics efficiency and global trade.

Simultaneously, leverage, liquidity, and profitability have a significant effect on the value of companies in the marine transportation subsector. This shows that good financial

performance in these three aspects is able to increase investor confidence, strengthen stock prices, and ultimately increase the company's value. For investors, these results are an important consideration in investment decision-making, especially in subsectors that are heavily influenced by global economic conditions and national logistics policies. For company management, these findings imply that managing a balanced capital structure, maintaining healthy liquidity, and increasing profitability are key strategies in maximizing company value.

D. CONCLUSION

This study aims to analyze the influence of leverage, liquidity, and profitability on the value of companies in the marine transportation subsector listed on the Indonesia Stock Exchange for the 2019–2022 period. Based on the results of the analysis, the following conclusions were obtained:

1. Leverage has a positive and significant effect on the value of the company. This shows that the use of debt proportionally is able to increase the company's value through tax benefits and provide positive signals to investors regarding the company's capital structure.
2. Liquidity has a positive and significant effect on the value of the company. Companies that are able to meet their short-term obligations are considered to have good financial health so that they are more trusted by investors.
3. Profitability has a positive and significant effect on the company's value. The company's high ability to generate profits from its assets signals positive growth prospects and increases market confidence.

Simultaneously, leverage, liquidity, and profitability have a significant effect on the value of companies in the marine transportation subsector. This means that these three financial aspects are important determinants in increasing company value and investment attractiveness.

Thus, the results of this study confirm that good financial performance in the aspects of capital structure, liquidity capability, and profitability contribute significantly to increasing the value

of companies in the marine transportation subsector. The practical implications of this study are the need for company management to maintain a balance in the use of debt, increase the effectiveness of current asset management, and optimize profitability to maximize the company's value in the eyes of investors.

E. SUGGESTION

Based on the results of the research and conclusions, the suggestions that can be given are as follows:

1. For companies in the marine transportation subsector

Companies need to manage their capital structure in a balanced manner so that debt utilization remains productive without causing excessive financial burden. In addition, maintaining healthy liquidity and improving operational efficiency to strengthen profitability will increase investor confidence and the company's competitiveness in the capital market.

2. For investors

Investors should pay attention to leverage, liquidity, and profitability ratios before making investment decisions, as these three factors have been proven to affect the value of companies in the marine transportation subsector. By understanding the company's financial condition, investors can minimize risks while maximizing potential investment profits.

3. For further research

Future research can add other variables such as company size, sales growth, dividend policy, or external factors such as fuel prices and government policies, which also have the potential to affect a company's value. In addition, extending the research period or comparing between transportation subsectors can provide a more comprehensive picture.

REFERENCES

- Adiputra, I. G., & Dewi, M. R. (2020). The effect of profitability, liquidity, and leverage on the company's value. *E-Journal of Management of Udayana University*, 9(7), 2894–2919.
- Agustina, D. (2017). The influence of corporate governance and financial variables on the company's value. *Journal of Accounting Science and Research*, 6(4), 1–16.
- Aisyah, N., Putra, R., & Sari, M. (2022). Analysis of financial performance and its impact on the value of companies in the transportation sector. *Indonesian Journal of Economics and Business*, 15(3), 215–229.
- Andini, R. (2023). The effect of leverage on the value of the company in companies listed on the Indonesia Stock Exchange. *Journal of Multiparadigm Accounting*, 14(2), 102–113.
- Andreas, A. (2023). Liquidity and its effect on the value of the company. *Journal of Management Economics and Accounting*, 8(1), 45–56.
- Aspiati, A., Samiun, S., Abbas, S., & Hadia, F. L. (2022). The effect of profitability, leverage and liquidity on company value (Study on companies listed on the Indonesia Stock Exchange in 2018–2020). *Journal of Science, Social and Humanities (JSSH)*, 2(1), 55–67.
- Cathryn, M. (2023). Profitability and company value in times of global crisis. *Journal of Finance and Business*, 11(2), 144–158.
- Asian Securities Creation. (2020). Shipping outlook: Aframax tanker rates decline. Retrieved from <https://ciptadana-sekuritas-asia.com/news/244>
- Denziana, A., & Monica, R. (2016). Analyze the factors that affect the company's value. *Journal of Economic and Business Research*, 9(1), 54–69.
- Dewantari, M. (2019). The effect of company size, leverage, and profitability on the company's value in food and beverages companies on the IDX. *Journal of Prospects*, 1(2), 102–113.
- Dotulong, V. L., Mandey, S., & Sumual, J. I. (2023). Factors that affect the value of companies in the marine transportation sector in Indonesia. *Journal of Accounting Research Going Concern*, 18(1), 45–56.

Felicia, H., & Dewi, S. P. (2021). The effect of profitability, leverage, liquidity, and company size on the company's value. *Multiparadigm Journal of Accounting*, 3(1), 137–145.

Franita, R. (2016). The influence of profitability, capital structure, and company size on the company's value. *Indonesian Journal of Accounting and Finance*, 13(1), 72–83.

Gz, I. N., & Lisiantara, G. A. (2022). Determinants of company value in the transportation sector on the IDX. *Journal of Accounting and Business Economics*, 15(2), 88–97.

Hartono, J. (2009). *Portfolio Theory and Investment Analysis*. Yogyakarta: BPFE.

Hery. (2015). *Financial Statement Analysis*. Jakarta: Grasindo.

Ilham, R., Siregar, T., & Fadli, A. (2021). Leverage and company value: A study on manufacturing companies on the IDX. *Journal of Economics and Management*, 12(2), 87–99.

Iyonda, D. (2023). The challenges of Indonesian shipping companies in the era of global competition. *Journal of Business and Economics*, 9(1), 22–34.

Jihadi, M. (2021). Leverage analysis of the value of the company with DER as an indicator. *Journal of Multiparadigm Accounting*, 12(3), 210–221.

Jenny, A. (2021). The effect of profitability on the value of the company. *Journal of Accounting and Finance*, 5(2), 77–85.

Cashmere. (2019). *Financial Statement Analysis*. Jakarta: RajaGrafindo Persada.

Kharisma, I. (2023). Liquidity analysis of the value of the company on the Indonesia Stock Exchange. *Indonesian Journal of Management Research*, 9(1), 11–21.

Khairunnisa, F., Rahayu, D., & Bella, F. (2024). Liquidity trends and their influence on the value of sea transportation companies in Indonesia. *Journal of Finance and Banking*, 28(1), 66–77.

Lestari, S. (2022). The impact of leverage on company value: An agency theory perspective. *Journal of Contemporary Accounting and Finance*, 4(1), 35–49.

Lestari, S., & Sihono, A. (2023). The effect of liquidity, leverage, profitability, and company size on the company's value. *Scientific Journal of Education*, 6(11), 1550–1562.

Mandey, J., Pusung, R., & Sumual, J. (2017). Analysis of effect of insider ownership, leverage, and profitability on firm value in manufacturing companies sector in Indonesia Stock Exchange period year 2013–2015. *EMBA Journal*, 5(2), 1463–1473.

Meidiawati, I., & Mildawati, T. (2016). The influence of profitability, liquidity, and company size on the company's value. *Journal of Accounting Science and Research*, 5(10), 1–15.

Melissa, S., Putri, N., & Santoso, D. (2021). Analysis of PT Pelni's financial performance during the COVID-19 pandemic. *Journal of Economic and Management Research*, 20(2), 211–225.

Mondher, K. (2011). Leverage and firm value: Evidence from emerging markets. *International Journal of Economics and Finance*, 3(5), 123–131.

Murjiani, A., & Adiyanto, B. (2023). The effect of inflation and liquidity on the value of the company. *Indonesian Journal of Economics and Business*, 8(1), 31–40.

Ni Putu, S. N. D., & Nugroho, M. I. (2023). Analysis of the influence of profitability, liquidity, and solvency on company value before and during the COVID-19 pandemic in pharmaceutical companies. *Journal of Economics*, 6(2), 16–27.

Nurhanif, F., Widyantari, I. A., & Yadnya, I. B. (2024). Factors that determine the value of transportation companies in Indonesia. *E-Journal of Management*, 13(1), 55–70.

Palka, S. (2020). The role of sea transportation in the distribution of national logistics. *Journal of Transportation and Logistics*, 7(1), 15–27.

Hutchinson, I. G. (2019). Current ratio and company value in the transportation sector. *Indonesian Journal of Accounting and Finance*, 6(2), 99–110.

Rahayu, D., & Bella, F. (2023). The capital structure, profitability, and value of a marine transportation company. *Journal of Management and Business Sciences*, 10(2), 134–148.

Sinta, N. (2021). The leverage ratio as a determinant of the company's value. *Indonesian Journal of Accounting Research*, 15(1), 56–67.

Sondakh, C., Langi, J., & Kaunang, R. (2019). The influence of capital structure on the value of the company. *EMBA Journal*, 7(3), 2952–2961.

Stevani, A. (2017). Debt to equity ratio and company value in the transportation sector. *Scientific Journal of Accounting and Business*, 2(2), 45–53.

Sukarya, I. P., & Baskara, I. G. K. (2019). The effect of profitability, leverage, and liquidity on the value of companies in the food and beverages sub-sector. *E-Journal of Management*, 8(1), 7399–7428.

Suyatin, A., & Jonathan, M. (2016). The effect of fuel prices on the performance of the transportation sector. *Journal of Development Economics*, 17(2), 89–100.

Widyantari, I. A., & Yadnya, I. B. (2017). Analysis of factors that affect the value of companies in the transportation subsector on the IDX. *E-Journal of Management*, 6(4), 165–179.

Wisnu, A., & Musdholifah, M. (2020). The effect of liquidity, profitability and leverage on the company's value moderated by the dividend policy. *Journal of Management Science*, 8(4), 997–1008.