FACTORS AFFECTING FIRM VALUE ON TRANSPORTATION COMPANIES LISTED ON THE IDX

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ABSTRACT

This research was conducted with the aim of determining the effect of profitability, liquidity, capital structure and company size on the value of companies with the transportation sector listed on the Indonesia Stock Exchange (IDX) for the 2020-2022 period. Totals of 75 observational data originated from 25 transportation companies. The technique used in this study is purposive sampling. The hypothesis testing method in this research uses the multiple regression analysis testing was performed using IBM Statistic's SPSS 29 program. This research uses Tobin's Q as a parameter to measure a firm value. For profitability uses Return on Asset (ROA) as a proxy, liquidity uses Current Ratio (CR) as a proxy, capital structure us Debt on Equity Ratio (DER), and Company Size uses Size as a proxy. Based on the outcome of the processed data, profitability has a significant positive effect on the value of the company, liquidity has a significant negative effect on the value of the company, capital structure has a significant negative effect on the value of the company and company size has a significant negative effect on the value of the company. This research is expected to help potential investor in making decisions to invest or not.

Keywords: Firm Value, Profitability, Liquidity, Capital Structure, Company Size.

1. INTRODUCTION

The rapid development of the times requires every company to continue to innovate so that the company can run as effectively and efficiently as possible. In running a business, capital is an important aspect. The company's capital can come from its own capital, bank loans, or capital invested by investors. To get capital from investors, there is a goal to increase the value of the company which is the main factor in influencing investors' decisions to invest or not. The main goal of a company is to maximize corporate value (Brigham &; Houston, 2015) [1]. Company value refers to a state in which a company attains success by gaining the confidence of the public following years of undergoing a certain progression (Muchtar, 2021) [2]. Company values have an important role in showing the prosperity of shareholders in a company. The value of the company reflects the assets owned by the company. If the company has a good performance, it can be said that the company has a good corporate value. The higher the value of the company, the greater the value of the shares. Every company must want a large company value because it shows the welfare of shareholders is high, and investors usually only invest in companies that have good performance so that they have high company value. Many factors are considered to affect the value of a company, such as profitability, liquidity, capital structure and firm size.

The purpose of this research is to analyze how profitability, liquidity, capital structure and firm size impact the firm's value. In addition, it is hoped that this research can be used as a reference in determining financial management strategies so that the decisions taken can have a good impact on the value of the Company. In addition, this research is expected to help investors and potential investors in making investment decisions

Firm Value

Firm value is a state in which a company attains accomplishments over several years, instilling public confidence in the company (Muchtar, 2021) [2]. When a company performs well, it can be considered to possess a strong company value. The higher the stock value, the greater the overall company worth. Company owner aspire to achieve a substantial corporate value as it signifies elevated shareholder well-being. Furthermore, investors often gravitate towards companies with impressive performance and a high corporate value.

Profitability

Profitability is defined as a company's capacity to secure funding from investor and creditors (Dewi, Dermawan, & Susanti, 2017) [3]. The firm's value is directly proportional to its profitability; the higher the profitability, the greater the firm's worth, and vice versa. A high level of profitability and corporate value enables the company to easily attract investment partners. A company can enhance its profitability by optimizing its assets to maximize returns with the capital and funds employed in its business operations. One method to assess and compute a company's profitability involves using the Return on Assets (ROA) indicator, which entails dividing net income by the total assets of the company.

Liquidity

Liquidity refers to a company's ability to promptly meet its short-term financial obligations and handle unexpected cash requirements. A higher level of liquidity is preferable for a business (Yuniarwati, Santioso, Ekadjaja, &; Rasyid, 2018) [4]. Conversely, a low liquidity level is unfavorable for a company. The degree of liquidity significantly impacts the company's overall value, as optimal liquidity ensures smooth operations and production processes, potentially leading to an increase in the company's value. Conversely, insufficient liquidity can hinder these processes. One method for gauging a company's liquidity level involves utilizing the Current Ratio (CR), which entails dividing current assets by the company's current liabilities.

Capital structure

Capital structure refers to the blend of debt and equity within a company (Miglo, 2016) [5]. A larger capital structure in a company tends to deter potential investors, whereas a smaller capital structure tends to pique their interest. The level of company's capital structure wields significant influence over its overall value. When a company's debt surpasses its equity, it can deter investors from committing their capital due to concerns about the company's substantial debt load. One approach to assessing a company's capital structure involves using the Debt to Equity Ratio (DER), which is computed by dividing total liabilities by total equity.

Firm Size

The company size is determined by the annual average net sales over the upcoming years (Ichwan, 2015) [6]. This factor holds significant sway over the company's value, as a larger company size typically corresponds to a higher company value. Larger companies tend to attract investors more easily, as investors are generally more confident about allocating their funds to these larger enterprises, anticipating greater returns. Firm size can be quantified by computing the natural logarithm of the firm's total assets.

2. RESEARCH METHOD

In this study, a quantitative research approach was employed. The research population consisted of all transportation companies listed on the Indonesia Stock Exchange (IDX) during the 2020-

2022 timeframe. To select the sample from this population, a purposive sampling technique was utilized. Sugiyono (2015) described purposive sampling as the selection of samples as the selection of samples based on predetermined criteria. The criteria used for sample selection in this study are outlined as follows:

1. Transportation Companies listed on the Indonesia Stock Exchange (IDX) during the 2020-2022 period.
2. Transportation Companies that report financial statements on the IDX in 2020-2022.
3. Transportation companies that have the required data as needed in this study.

Based on the purposive sampling method, 32 transportation companies listed in IDX fulfill these three criteria, thereby becoming a research sample. The data that became the sample was processed through IMB SPSS 29 software.

Variables and Instrumental Operations
The research variables used in this study are dependent and independent variables. This study measures the dependent variable by Company Value and the independent variables by ROA, CR, DER and SIZE.

Table 1. Variables of This Study

Variable	Formula	Scale	Sources
	Dependent Value		
Firm Value	$Tobin's\ Q = \dfrac{Total\ Market\ Value + Total\ Book\ Value\ of\ Liabilities}{Total\ Book\ value\ of\ Assets}$	Ratio	[7]
	Independent Value		
Profitability	$Return\ on\ Asset = \dfrac{Net\ Income}{Total\ Assets}$	Ratio	[8]
Liquidity	$Current\ Ratio = \dfrac{Current\ Assets}{Current\ Liabilities}$	Ratio	[7]
Capital Structure	$Debt\ to\ Equity\ Ratio = \dfrac{Total\ Liability}{Total\ Equity}$	Ratio	[9]
Firm Size	$Size = Ln\ (Total\ Assets)$	Ratio	[10]

Empirical Model
The following is the multiple regression equation used for research:

$$Y = \alpha + \beta 1 ROA + \beta 2 CR + \beta 3 DER + \beta 4 SIZE + \varepsilon$$

Description:

Y	: Company Value
α	: Constant
$\beta 1 - \beta 4$	: Regression Coefficient
X1	: Return On Asset (ROA)
X2	: Current Ratio (CR)
X3	: Debt to Equity Ratio (DER)
X4	: Size
ε	: error term

Data Analysis
In this study, the research method used is quantitative. The data was processed by IBM SPSS 29 program through multiple linear regression analysis, F statistical tests, T-test and coefficient of determination.

3. RESULTS AND DISCUSSIONS

The following are data testing results

Descriptive Test

Table 2. Descriptive Statistics
Source: SPSS 29 Output

	N	Range	Min.	Max.	Mean	Std. Deviation
ROA	75	1.43	0.01	1.44	0.2930	0.22452
CR	75	2.65	0.16	2.80	1.1241	0.61596
DER	75	9.46	0.04	9.50	1.3058	1.37847
SIZE	75	1.67	3.89	5.56	4.9505	0.42420
TOBINS'Q	75	1.72	0.05	1.77	0.7451	0.35765
Valid N (listwise)	75					

Normality Test
A test for normality was conducted to ascertain if the research data followed a normal distribution. When research data adheres to the normality assumption, it is seen as a reflection of the overall population, underscoring the importance of data normality [13].

Table 3. Normality Test
Source: SPSS 29 Output
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N N		75
Normal Parameters[a,b]	Mean	0.0000000
	Std. Deviation	0.25801135
Most Extreme Differences	Absolute	0.096
	Positive	0. 096
	Negative	-0.089
Test Statistics		0.096
Asymp. Sig. (2-tailed)		0.086[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

The normality test result is indicated with a significance value of 0.086. The regression model is said to satisfy the normality assumption if the significance value exceeds 0.05 [19]. Thus, it can be concluded that the regression model satisfies the assumption of normality with a confidence level of 95%.

Multicollinearity Test
A multicollinearity test was performed to examine whether a strong or nearly perfect linear connection exists among independent variables within a regression model [14].

Table 4. Multicollinearity Test
Source: SPSS 29 Output

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	2.666	0.402		6.629	0.000		
	ROA	-0.024	0.140	-0.015	-0.173	0.863	0.961	1.040
	CR	-0.289	0.055	-0.497	-5.238	0.000	0.826	1.211
	DER	0.073	0.024	0.282	2.996	0.004	0.840	1.191
	SIZE	-0.340	0.076	-0.404	-4.481	0.000	0.916	1.091

a. Dependent Variable: Tobins'Q

The tolerance value of the four independent variables is more than 0.10, and the VIF value of the four independent variables is less than 10. Thus, it can be concluded that regression modeldoes not have multicollinearity with a 95% confidence level.

Autocorrelation Test

The autocorrelation test is used to ascertain whether there is a correlation between the residual errors in the current period being examined and those in the previous period within the context of a linier regression model [14].

Table 5. Autocorrelation Test
Source: SPSS 29 Output

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson 1
	0.693[a]	0.480	0.450	0.26528	1.447

a. Predictors: (Constant), SIZE, DER, ROA, CR
b. Dependent Variable: Tobins'Q

The Durbin Watson value is 1.4470, and the dU value is 1.7390 with 75 samples (n) and four independent variables (k). Because the Durbin Watson value of 1.4470 is smaller than the lower limit of 1.7390 and smaller than the upper limit of 2.2610 (obtained from 4-1.7390), it can be concluded that there is autocorrelation in regression model with a 95% confidence level.

Heteroscedasticity Test

The heteroscedasticity test is utilized to examine whether there is uneven variance among the residuals of a particular observation when compared to other observations within a regression model [14]. This studyconducted a heteroscedasticity test with the White Test.

Table 6. Heteroscedasticity Test
Source: SPSS 29 Output

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	0.758	0.231		3.275	0.002
	ROA	0.203	0.081	0.253	2.513	0.014

CR	-0.141	0.032	-0.486	-4.463	0.000
DER	-0.004	0.014	-0.028	-0.262	0.794
SIZE	-0.095	0.044	-0.224	-2.169	0.033

a. Dependent Variable: ABS_RES

The significance results of ROA, CR and SIZE have a p-value smaller than 0.05 meaning that the variable has symptoms of heteroscedasticity or there is a similarity in variance from residuals in one observation to another. As for the DER variable greater than 0.05, it means that there are no symptoms of heteroscedasticity variance.
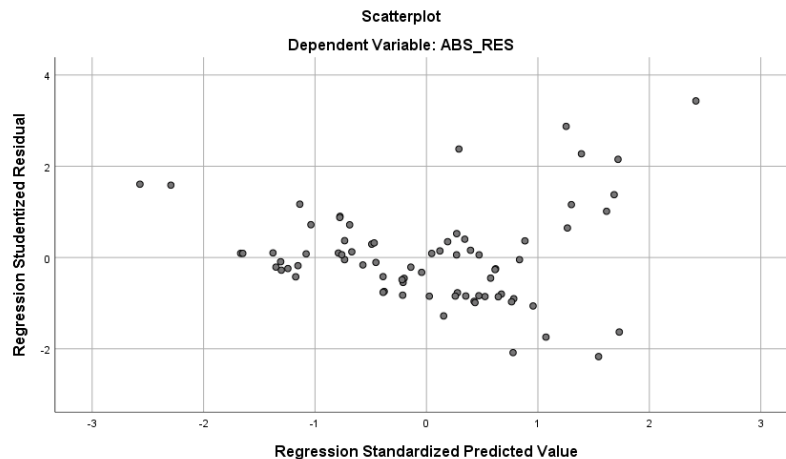

Figure 2. Scatterplot Graph
Source: SPSS 29 Output

Based on *the scatterplot* graph for heteroscedasticity tests reveals the absence of any distinct pattern. Thus, it can be inferred that the research model does not exhibit signs of heteroscedasticity, indicating an equitable distribution of variance in residuals across observations.

Multiple Linear Regression Analysis

Table 7. Multiple Linear Regression Analysis
Source: SPSS 29 Output

Coefficients[a]

Unstandardized Coefficients			Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
1 (Constant)	0.758	0.231		3.275	0.002
ROA	0.203	0.081	0.253	2513	0.014
CR	-0.141	0.032	-0.486	-4.463	0.000
DER	-0.004	0.014	-0.028	-0.262	0.794
SIZE	-0.095	0.044	-0.224	-2.169	0.033

a. Dependent Variable: Tobins'Q

From the table above, the regression equation is obtained as follow:

Tobin's Q = 0.758 + 0.203 ROA – 0.141 CR - 0.004 DER – 0.095 SIZE + ε

The regression equation above shows the constant value (α) obtained at 0.758. That is, when the value of the independent variables ROA, CR, DER and SIZE is equal to zero, the value of the dependent variable of Tobin's Q is 0.758.

F-Statistics Test
The F test was conducted to assess whether all the independent variables in the regression model collectively affected the dependent variable [14]. This study uses a 95% confidence level.

Table 8. F-Statistics Test
Source: SPSS 29 Output

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.539	4	1.135	16.126	0.000[b]
	Residual	4.926	70	0.070		
	Total	9.466	74			

a. Dependent Variable: Tobins'Q
b. Predictors: (Constant), SIZE, DER, ROA, CR

The significance value is 0.000, less than 0.05. This shows that all independent variables consisting of SIZE, DER, ROA and CR together significantly affect Tobins'Q with a 95% confidence level.

T-test
The t-test was conducted to evaluate the influence of a sole independent variable when examined individually in clarifying the dependent variable [14].

Table 9. T-test
Source: SPSS 29 Output

Coefficients[a]

		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	2.666	0.402		6.629	0.000		
	ROA	-0.024	0.140	-0.015	-0.173	0.863	0.961	1.040
	CR	-0.289	0.055	-0.497	-5.238	0.000	0.826	1.211
	DER	0.073	0.024	0.282	2.996	0.004	0.840	1.191
	SIZE	-0.340	0.076	-0.404	-4.481	0.000	0.916	1.091

a. Dependent Variable: Tobins'Q

The significance value for the ROA variable is 0.863, greater than 0.05. This shows no significant effect of the ROA variable on Tobins'Q with a 95% confidence level.
The significance value for the CR variable is 0.000, smaller than 0.05. This shows that the CR variable significantly influences Tobins'Q with a 95% confidence level.
The significance value of the DER variable is 0.004, smaller than 0.05. This shows that the DER variable significantly influences Tobins'Q with a 95% confidence level.
The significance value of the SIZE variable is 0.000, smaller than 0.05. This shows that the SIZE variable significantly influences Tobins'Q with a 95% confidence level.

Adjusted R^2

The coefficient of determination (R^2) value gagues the extent to which the model can account for the fluctuations in the independent variable, with values ranging from 0 to 1 [14].

Table 10. Adjusted R^2
Source: SPSS 29 Output

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson1
0.693ᵃ	0.480	0.450	0.26528	1.447	

a. Predictors: (Constant), SIZE, DER, ROA, CR
b. Dependent Variable: Tobins'Q
c. Source: SPSS 29 Output

The adjusted R^2 value is 0.450. Thus, it can be concluded that 45.0% of the company value can be explained by the independent variables SIZE, DER, ROA and CR and the remaining 55.0% are explained by other variables.

The increase and decrease in profitability does not affect the value of the Company. This is because value's company also influenced by other factors, such as management. Not every company with high profitability has a good management. Liquidity has a negative impact on corporate companies because investors generally do not make liquidity the main consideration in investing their capital. This happens because liquidity cannot describe the company's long-term prospects, there are many other factors that investors can consider for investment with long-term prospects in the company. In addition, because a high level of liquidity does not guarantee that the company's value will also increase, it happens because there are assets that are not used properly by the company to get maximum profit and cause a decrease in the value of the company. Capital structure positively affects the value of the company because a high level of capital structure indicates a high company value, because if the company has high debt and uses the debt to finance the company's assets well, then the value of the company will increase. The value of a company is negatively affected by its size, as excessive company size is considered to lead to inefficiencies in supervising operational activities and strategic decisions by management. This, in turn, can reduce the value of the company as a whole.

4. CONCLUSIONS AND SUGGESTIONS

This research employs a quantitative research approach and focuses on transportation companies listed on the Indonesia Stock Exchange (IDX) for the period between 2020-2022 as its target population. To select its sample, the study applied a purposive sampling method. Sugiyono (2015) describes purposive sampling as selecting samples based on predetermined criteria. This study utilizes a quantitative research methodology. The data was processed by IBM SPSS 29 program through multiple linear regression analysis, F statistical tests, T-test and coefficient of determination.

Based on the discussions above, the conclusions that can be drawn for this research are as follows:
1. Return On Assets (ROA) negatively and no significant effect Tobin's Q.
2. Current Ratio (CR) negatively and significantly affect Tobin's Q.
3. Debt to Equity Ratio (DER) positively and significantly affect Tobin's Q.
4. Size negatively and significantly affect Tobin's Q.

This study has several limitations that can still be improved, including (a) Only conducted on transportation companies listed on the Indonesia Stock Exchange (IDX) for the 2020-2022 period; (b) Only using independent variables and not using control variables; (c) The data studied are not normally distributed.

Suggestions for this research are as follows: (a) For further research, it can add other independent variables or add control variables, (b) For the companies studied, it is expected that the firm will be able to maintain or increase DER and CR; (c) For investors, this research is expected to help in making decisions to invest.

ACKNOWLEDGEMENT

Researches extend their gratitude to all those who have contributed to the successful completion of this research.

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