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Determinants of Financial Distress of Transportation Companies Listed on the Indonesia Stock Exchange (2015-2021)

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ABSTRACT
This study aims to determine and analyse the effect of return on equity, current ratio, total asset turnover, dividend payout ratio and sales growth on financial distress. The population in the study were transportation companies listed on the Indonesia Stock Exchange from 2015 to 2021, totalling 54 companies. The sample in this study was determined using the criterian purposive sampling approach, and obtained a sample size of 13 companies. The data used in this study are secondary timeseries cross section data. The data was collected using the documentation study method. The data collected in this study were analysed using quantitative methods, which include: descriptive statistical analysis, classical assumption test, and multiple linear regression analysis. This study concluded that: return on equity and current ratio have a significant negative effect on financial distress, while total asset turnover, divident payout ratio and sales growth have a significant positive effect on financial distress.

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INTRODUCTION

Along with the development of companies in Indonesia and the amount of competition that increasingly competitive in the minst of economic conditions that are always changing, companies are expected to compete in maintaining the survival and growth of their business survival. The tight competition that occurs causes financial difficulties to liquidation if the company is unable to survive. Protracted and increasingly severe financial difficulties will cause banckruptcy/financial distress.

There are many companies experiencing financial distress that are declared bankrupt and delisted from the Indonesia Stock Exchange. Throughout 2014 to 2017 there were 4 (four) companies that were delisted and forcibly removed from the Indonesia Stock Exchange, including: Ciputra Property, Ciputra Surya Tbk, Davomas Tbk, and Berau Coal Energy.

Apart from looking at the delisting of companies on the Stock Exchange, financial distress can also be measured by several methods, such as the Altman Z-Score method. (Anjum, 2022) revealed that the Altman Z-Score method is a statistical method that combines five financial ratios to produce a Z-Score which is proven to predict the bankruptcy of a company or business entity. The five ratios used in the Altman Z-Score method or also known as multiple discriminant analysis are Net Working Capital to Total Assets, Retained Earnings

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to Total Assets, Earning Before Interest and Taxes to Total Assets, Market Value of Equity to Book Value of Debt, and Sales to Total Assets. The five ratios will reflect the level of liquidity of each variable against total assets and book value of debt.

Research conducted by (Altman, 1968) examines the factors that influence financial distress entitled Financial Ratio, Discriminant Anlysis, and the Prediction of Corporate Bankruptcy using multivariate discriminant analysis techniques and produces a model with five financial ratios. In his research, Altman used a sample of 33 pairs of companies that were declared bankrupt and not bankrupt and the model used could correctly identify 90% of the company's bankruptcy cases.

In addition to the five ratios used by Altman Z-Score, there are other ratios that can be used to analyze the company's financial condition, namely profitability ratios, liquidity ratios, asset structure ratios, and dividend policy ratios. These ratios are used by stakeholders as a tool for making decisions so that the purpose of making a financial report is achieved, namely to provide information about the company's financial position and financial performance to the parties concerned in order to facilitate them in making economic decisions. Researchers use these financial ratios because previous studies still show inconsistencies.

Nella (2011), (Andre & Hamka Kampus Air Tawar Padang, t.t.) and Nurmayanti (2017) show that profitability ratios affect financial distress, while research by Almilia (2003), (Norfian Alifiah et al., 2013), (Atika et al., 2008) and (Hanifah, 2013) show that profitability ratios have no effect on financial distress. (Norfian Alifiah et al., 2013)A, (Atika et al., 2008) and (Khaliq et al., 2014) show that the liquidity ratio affects financial distress, while research (Khaliq et al., 2014), Nella (2011), (Hanifah, 2013), (Andre & Hamka Air Tawar Campus Padang, t.t.), (Rahayu et al., 2016), and Nurmayanti (2017) show that the liquidity ratio has no effect on financial distress. (Norfian Alifiah et al., 2013) shows that the asset structure ratio affects financial distress, while research by Nella (2011) and (Atika et al., 2008) shows that the asset structure ratio has no effect on financial distress. Widhiari and Merkusiwati (2015) state that sales growth has a significant negative effect on the possibility of financial distress. Merkusiwati (2015); (Rokhim et al., 2018), Merkusiwati (2015) and (Altman, 1968) in their research provide empirical evidence that sales growth has a negative effect on financial distress. Furthermore, this study adds the dividend policy ratio as the last research variable.

This ratio has not been used by previous studies to predict financial distress. Researchers chose this ratio because dividend policy cannot be separated from corporate funding decisions. Dividend policy is a policy to determine how much profit should be distributed to shareholders and how much profit should be reinvested (retained earnings). Dividends are profits that are distributed to shareholders at the end of each period according to the percentage. The percentage of profit that will be distributed as dividends to shareholders is referred to as the Divident Payout Ratio (DPR). If the dividend policy distributed by the company is not appropriate, it will cause financial distress for the company. Based on the background description above, the problems that will be studied in this study are formulated into quantitative questions as follows:

a. Is there an effect of return on equity (ROE) on financial distress?
b. Is there an effect of current ratio (CR) on financial distress?

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c. Is there an effect of total asset turn over (TATO) on financial distress?
d. Is there an effect of dividend payout ratio (DPR) on financial distress?
e. Is there an effect of sales growth (SG) on financial distress?

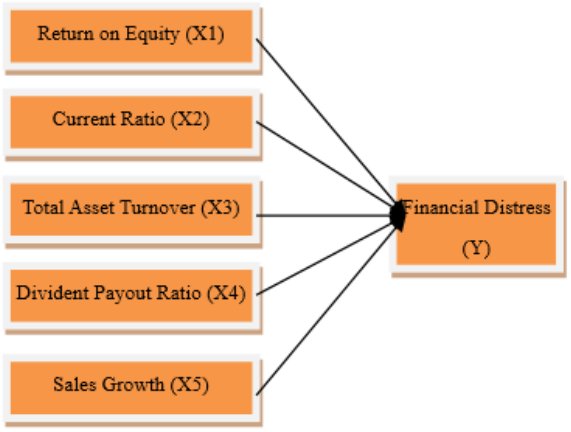
This study aims to determine and analyze the effect of return on equity, current ratio, total asset turnover, dividend payout ratio and sales growth on financial distress in transportation companies listed on the Indonesia Stock Exchange.

METHODS

The research method in this study is causative research, namely: is research using problem characteristics in the form of a causal relationship between two or more variables. The causative variables are: return on equity (X1), current ratio (X2), total asset turn over (X3), divident payout ratio (X4) and sales growth (SG). While the effect variable is financial distress (Y).

The population in this study are transportation companies listed on the Indonesia Stock Exchange from 2015 to 2021, totaling 54 companies. The sample in this study was taken using a purposive sampling criteria approach as follows:

a. Listing consecutively throughout the observation year
b. Presenting audited financial statements consecutively throughout the observation year.



Variable Relationship Conceptual Framework

RESULTS AND DISCUSSION

Descriptive Statistic

The result of descriptive statistical analysis in this study are shown in Table 1 below:

Tabel 1. Descriptive Statistical Analysys

	Mean	Std. Deviation
Financial Distress	,0753	1,06650
Return on Equity	-1,3363	92,38248
Current Ratio	142,2797	168,70110
Total Asset Turn OVer	-,0264	,72834
Devident Payout Ratio	7,8341	44,66675
Sales Growth	9,0404	146,00298

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Table 1. above describes that the financial distress of transportation companies listed on the Indonesia Stock Exchange is on average 0.753 with a standard deviation of 1.06650, return on equity is -1.3363 with a standard deviation of 92.38248, current ratio is on average 142. 2797 with a standard deviation of 168.70110, total asset turnover on average of -0.0264 with a standard deviation of 0.72834, divident payout ratio on average of 7.8341 with a standard deviation of 44.66675 and sales growth of 9.0404 with a standard deviation of 146.00298.

Classical Assumption Test

The Classical asumption tests carried out in this study: data normality test, heteroscedasticity test, multicolinarity test and autocorrelation test. The result of the classical assumption test in this study are shown in Tables 2,3,4, and 5

Table 2 Data Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		AbsUt
N		91
Normal Parameters[a,b]	Mean	,2831
	Std. Deviation	,39734
Most Extreme Differences	Absolute	,245
	Positive	,214
	Negative	-1,245
Test Statistic		1,245
Asymp. Sig. (2-tailed)		,060[c]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Table 3 Heteroscedasticity Test Result

Coefficients[a]			
Model	B	t	SSig.
(Constant)	,121	2,375	,020
Return on Equity	,000	,577	,566
Current Ratio	,001	4,804	,000
Total Asset Turn OVer	,079	1,457	,149
Devident Payout Ratio	,001	,705	,483
Pertumbuhan Penjualan	-5,820E-5	-,225	,822

a. Dependent Varable: AbsUt

Ghozali (2017) says to detect the presence or absence of the heteroscedasticity in this study is done with the Glejser test. A data is said to be free from heteroscedasiticity deviations if statistically the independent variable has no significant effect on the dependent variable Absolute Ut (AbsUt). The result of the heteroscedasticity test as shown in Table 3 show that all independent variables have an insignificant effect on financial distress. Thus it can be

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concluded that all variables used in this study are free from the assumption of heteroscedasticity.

Table 4 Multicollinearity Test Result

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Return on Equity	,938	1,066
Current Ratio	,901	1,109
Total Asset Turn OVer	,911	1,097
Devident Payout Ratio	,952	1,050
Pertumbuhan Penjualan	,991	1,010

a. Dependent Variable: Financial Distress

According to Ghozali (2003), the presence or absence of multicollinearity can be determined by analyzing the tolerance value and Variance Inflation Factor (VIF). A variable is said to be free from the assumption of multicollinearity if the VIF value> 1.0 and the tolerance value < 1.0. Nugroho (2005) limits the VIF value to no more than 10 and the tolerance value to no less than 0.1. Based on the results of the multicollinearity test conducted in this study as shown in Table 4 above, it shows that all variables used in this study are free from multicollinearity assumptions, because all independent variables have a tolerance value <1.0 and VIF> 1.0.

Table 5

Model	Change Statistics
	Durbin - Watson
1	1,640

a. Predictors: (Constant), Pertumbuhan Penjualan, Total Asset Turn Over, Return on Equity, Devident Payout Ratio, Current Ratio

b. Dependent Variable: Financial Distress

(Ghozali & Ratmono, 2017) said that to determine the presence or absence of extreme correlation between variables is done using Durbin Watson (DW), namely by comparing the DW statistic value with the DW table. If the DW statistic value lies in the no autocorrelation area, it means that it has fulfilled the classic regression assumptions. The results of the autocorrelation test in this study resulted in a DW value of 1,640 which is in the no serial autocorrelation area.

Multiple Linear Regression Analysis

The result of multiple linear regression analysys in this study are shown in table.

Table 6 Multiple Linear Regression Analysis Results

Coefficients[a]	
Model	B
(Constant)	,186
Return on Equity	-,001
Current Ratio	-,001
Total Asset Turn OVer	1,201

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Coefficients[a]	
Model	B
Devident Payout Ratio	,003
Sales Growth	,001

a. Dependend variable: Financial distress

From the table above, the regression equation is formulated as follows:

Zscore = 0.186 – 0.001X1 – 0.001X2 + 1.201X3 + 0.003X4 + 0.001X5 + 0.503

Where:

Zscore : Financial Distress
X1 : Return on Equity
X2 : Current Ratio
X3 : Total Asset Turn Over
X4 : Divident Payout Ratio
X5 : Sales Growth

Determinant Coefficient Analysis

The result of the coefficient of determination analisys in this study are show in table 7.

Table 7 Determinant Coefficient Analysis Result

Model Summary[b]			
Model	RR	R Square	Adjusted R Square
1	,889[a]	,790	,778

a. Predictors: (Constant), Pertumbuhan Penjualan, Total Asset Turn Over, Return on Equity, Devident Payout Ratio, Current Ratio
b. Dependent Variable: Financial Distress

Table 7 above shows the Adjusted R Square value of 0.7780. This means that the variables return on equituy, current ratio, total asset turnover, dividient payout ratio and sales growth have a power of 77.80% in explaining the dependent variable financial distress, while the remaining 21.20% is influenced by other variables that have not been revealed in this study.

Hypothesis Testing

The result of hypothesis testing in this study are shown in Table 8

Table 8 Hypothesis Testing Result

Coefficients[a]			
Model		t	Sig.
1	(Constant)	2,586	,011
	Return on Equity	-2,412	,018
	Current Ratio	-2,288	,025
	Total Asset Turn OVer	15,748	,000
	Devident Payout Ratio	2,103	,038
	Pertumbuhan Penjualan	2,117	,037

a. Dependent Variable: Financial Distress

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CONCLUSION

Based on the results of this study, it is concluded that: 1) return on equity has a significant negative effect on financial distress. The results of this study indicate that with a high level of net profit, the company can increase equity. With high equity, the company will avoid financial distress. 2) Current ratio has a significant negative effect on financial distress. 3) Total asset turnover has a significant positive effect on financial distress. The results of this study indicate that with companies having large total assets and large net income can reduce the risk of companies experiencing financial distress. 4) Divident payout ratio has a significant positive effect on financial distress. The results of this study indicate that dividend policy cannot be separated from corporate funding decisions. If the dividend policy distributed by the company is correct, it will avoid the company from financial distress. 5) Sales growth using sales growth shows a significant positive effect on financial distress. The results of this study indicate that this can happen because sales in the current period are high compared to sales in the previous period, so that the profits generated in the current period will also be higher. High company profits will avoid the company from financial distress.

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