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THE INFLUENCE OF PROBABILITY OF FINANCIAL DISTRESS AND LEVERAGE ON THE COST OF FINANCIAL DISTRESS IN TRANSPORTATION COMPANIES LISTED ON THE INDONESIAN STOCK EXCHANGE

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Abstract:

This research aims to determine the effect of probability of financial distress and leverage on the cost of financial distress. The object of this research is companies in the transportation sector listed on the Indonesia Stock Exchange (BEI). Data analysis uses Panel Data Regression, and secondary data obtained from the company's annual financial reports for the 2019-2021 period. Based on the results of the research conducted, it shows that the probability of financial distress and leverage variables have a significant simultaneous and partial effect on the cost of financial distress. This means that the probability of financial distress and leverage are determining factors in the cost of financial distress.

Keywords :*Cost of Financial Distress, Probability of Financial Distress*, Leverage,

I. Introduction

Companies will be faced with a situation where there is a decline in sales, resulting in financial difficulties. Financial distress is a condition where a company does not have the ability to meet liquidity. Financial distress also describes the condition of a company that does not have sufficient funds to pay off all policies that are due, accompanied by the elimination of dividends and showing a negative net profit. If the company does not immediately address this problem, the company may experience operational cessation, or even bankruptcy.

With a company showing negative profits, so that the company experiences difficult financial conditions or financial distress, the company will try to get through this period of difficulty. With the efforts carried out by the company, this results in costs

being borne by the company. These costs are grouped into two, namely direct costs and indirect costs. Direct costs are costs that arise from relatively small overall losses. administration of legal funds related to bankruptcy. Indirect costs are costs borne by a company as a result of being unable to pay its obligations. Indirect costs are also not naturally observable, so these costs are called opportunity costs (Hendi & Jessica, 2021).

II. Legal Materials and Methods

Types and Sources of Research Data

This research is included in quantitative research methods. The data source in this research is using secondary data. Sources of data obtained from audited financial reports and annual reports through existing data sources are on each company's website and the Indonesian Stock Exchange website with the official website https://www.idx.co.id/id. Meanwhile, the sample selection stage uses a purposive sampling technique, in which this method the samples will be taken or selected according to the criteria set by the researcher. Data analysis uses the e-views application and the dependent variable taken in this research is the cost of financial distress, measured using the difference between sector and company sales growth and independent variables including the probability of financial distress and leverage. The objects of this research are companies in the transportation sector listed on the Indonesia Stock Exchange (BEI) that went public in 2019-2021 and have complete reports.

Population and Sample

The population in this study were 42 companies in the transportation sector listed on the Indonesia Stock Exchange. In this study, samples were taken in accordance with the criteria used in purposive sampling registered during the year studied. These criteria are:

1. Transportation sector company listed on the Indonesian Stock Exchange.
2. Companies that publish financial reports in the 2019-2021 period.

Based on the sample criteria to be taken, there are 39 transportation sector companies.

Data collection technique

Data collection techniques in this research were carried out using documentation studies by collecting all secondary data and all other information that can be used to solve the problems in this research including journals, articles, scientific books. The data collected are financial reports and annual reports published in the official publications of each company in the transportation sector for the 2019-2021 period.

Data analysis method

The method used in this research is Descriptive Statistics, the Classic Assumption Test which is carried out includes statistical tests for normality of data, multicollinearity tests, autocorrelation tests, and heteroscedasticity tests, multiple linear

regression analysis, and hypothesis tests including the t test, F test, coefficient of determination test (R2).

Descriptive Statistical Analysis

Table 2.1

Results of Descriptive Statistical Analysis

Descriptive Statistics

Variabel	*Mean*	*Median*	*Maximum*	*Minimum*	*Std. Devaiation*
Cost of Financial Distress	-0.001	0.004	0.733	-1.152	0.332
Probability of Financial Distress	0.710	1.921	24.516	-53.846	9.304
Leverage	0.361	0.872	21.901	-90.298	8.881

Source: Processed data 2023

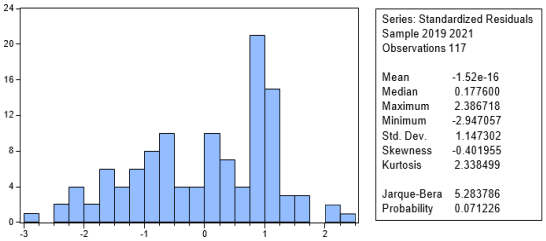
Based on the table above, it shows that the CFD variable has a minimum value of -1.152, a maximum value of 0.733, a mean of -0.001 and a standard deviation of 0.332. The PFD variable has a minimum value of -53.846, a maximum value of 24.516, a mean of 0.710, and a standard deviation of 9.304. Variable*leverage*has a minimum value of-90.298, a maximum value of 21.901, a mean of 0.361, and a standard deviation of 8.881.

Classic assumption test

Normality test

The Normality Test is to test whether dependent variables and independent variables have a normal distribution or not with the condition that the significant value is 0.05 or 5%. Following are the results of the normality test

Table 2.2



Sumber : Eviews (data diolah),2023

Based on the results in the table above, it shows that the Sig. 0.071226 < 0.05, meaning the data is normally distributed.

Multicollinearity Test

The multicollinearity test aims to determine whether the regression model found any correlation between independent variables.The results of the multicollinearity test can be seen in the table below.

Table 2.4

	Z_SCORE_X1	DER_X2
Z_SCORE_X1	1.0000	0.7543
DER_X2	0.7543	1.0000

Sumber : Eviews (data diolah), 2023

From the table above, it can be seen that the correlation value of the independent variable is less than 0.8. This means that the variables used in this study do not show symptoms of multicollinearity, which means all variables can be used.

Autocorrelation Test

The autocorrelation test aims to determine whether there is a correlation between variables in the prediction model with changes in time. Autocorrelation test was carried out using the Durbin-Watson method.The results of the autocorrelation test can be seen in the table below.

Table 2.4

DU	DL	DW
1.7332	2.2668	1.8008

Sumber : Eviews (data diolah),2023

From the table above, it can be seen that from the results of the autocorrelation test the Watson Durbin value is 1.800840 > from 4 DU (4-1.7332) = 2.2668 or 1.7332 < 1.8008 < 2.2668, meaning that the data avoids autocorrelation symptoms.

Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. The results of the heteroscedasticity test can be seen in Figure

Uji Heteroskedastisitas

Variable	Prob.
C	0.0000
Z_SCORE_X1	0.1249
DER_X2	0.1465

Sumber : Eviews (data diolah),2023

Figure 2.1

Heteroscedasticity Test Results

Source: Processed data, 2024

From the picture above, the significance value of the prob is known. The Z-score is 0.1249 and the DER (0.1465) is more than 0.05, meaning that the variables in this study are suitable for use.

Multiple Regression Analysis

Table 2.5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.4359	0.1311	-10.9450	0.0000
Z_SCORE_X1	0.2954	0.0544	5.4268	0.0000
DER_X2	0.1445	0.0697	2.0733	0.0404

Sumber : Eviews (data diolah),2023

Based on the table above, it can be seen that the multiple linear regression equation in this analysis is:

$$Y = -1.4359 + 0.2954 \text{ Z-Score} + 0.1445 \text{ DER} + e$$

The meaning of the linear regression equation is:

a. The value a = -1.4359 indicates that if the z-score and DER values are 0 or fixed then the value of the Y variable is -1.4359

b. The value of b1 = 0.2954 indicates that if the value of the z-sore variable is 1, it will cause an increase in the cost of financial distress of 0.2954

c. The value b2 = 0.1445 indicates that if the value of the DER variable increases by 1 unit, the cost of financial distress will increase by 0.1445, assuming the other variables remain constant.

Hypothesis test
t test

The t test aims to test the truth of the hypothesis used in this research. The t test basically shows how far the influence of an independent variable individually is in explaining variations in the dependent

variable. The results of the partial test (t) on the independent variables are as follows:

Table 2.6

Uji – T

Variabel	t-Statistic	Prob.
C	-10.9450	0.0000
Z_SCORE_X1	5.4268	0.0000
DER_X2	2.0733	0.0404

Sumber : Eviews (data diolah),2023

T test

Based on the data presented in the table above, it can be seen that:

Ttable value (nk-1) = 117-2-1 =114 = 1.9809

It is known that the z-score and DER values are 5.42689 and 2.0733 where Tcount > Ttable. This means that the Z-score and DER variables have a significant influence on the cost of financial distress.

F test

The F statistical test basically shows whether all the independent or independent variables included in the model have a joint influence on the dependent/dependent variable.

Table 2.7

Uji – F

F- Statistic	*Prob. F- Statistic*	*S.E. of regression*
58.8484	0.0000	1.1573

Sumber : Eviews (data diolah), 2023

Based on the data presented in the table above, it can be seen that:

The Ftable value = (nk) = 117-2 = 115 = 3.08,

and the Fcount value is the Fcount>Ftable value (58.8484> 3.08). This means that the significance value is 0.0000<0.05, so the z-score and DER variables have a significant influence on the cost of financial distress.

Coefficient of Determination Test

The coefficient of determination test aims to measure how far the model's ability to explain variations in the dependent variable.

Table 2.8

Uji – R- Square

R-squared	Adjusted R-squared
0.5079	0.4993

Sumber : Eviews (data diolah), 2023

Based on the table above, it can be seen that the R-square value is 0.0507978 or 50.80%, indicating the contribution of the z-score and DER variables to the cost of financial distress, while the remaining 49.2% is influenced by other factors outside research or errors.

III. Conclusion and Suggestions

Conclusion

Based on the results of data analysis and discussion in the previous chapter, it can be concluded that:

1. Simultaneously, the probability of financial distress and leverage are known to have a significant influence on the cost of financial distress in transportation companies listed on the Indonesia Stock Exchange.
2. Partially, the probability of financial distress and leverage are known to have a significant influence on the cost of

financial distress in transportation companies listed on the Indonesia Stock Exchange.

Suggestion

1. Companies are advised to pay attention and consider controlling the amount of debt used, so that the company does not experience financial distress.
2. For future researchers, it is hoped that the research results can be used as a useful reference for further research, and it is hoped that the research sample will be expanded so that the sample is not limited to just the transportation sector.

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