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The Influence of Liquidity, Profitability and Leverage on Financial Distress Conditions in State-Owned Banks Listed on the Indonesia Stock Exchange for the 2019-2023 Period

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Abstract – *Financial distress is a stage of decline in a company's financial condition that occurs before bankruptcy. This research aims to determine the effect of liquidity, profitability, and leverage on financial distress conditions in state-owned banks listed on the IDX for the 2019-2023 period. This research used a sample of 4 companies with a total of 80 financial reports researched. The sampling technique uses a saturated sample technique or uses the entire existing population. The data analysis method in this research uses the multiple linear regression analysis method. The data was processed using SPSS version 27. The results show that partial Liquidity (CR) has a positive and significant effect, Profitability (ROA) has a positive and significant effect, and Leverage (DAR) has no effect and is not significant on Financial Distress conditions. Simultaneously Liquidity, Profitability, and Leverage have a significant effect on Financial Distress conditions.*

Keywords – *Liquidity, Profitability, Leverage, Financial Distress.*

INTRODUCTION

State-Owned Commercial Enterprises are banks that play a role in generating profits and development for the nation. As a result, state banks must be able to manage their finances effectively. In Indonesia's banking sector, state-owned banks hold the most power. This is shown by the achievements of four state-owned banks, namely Bank BRI, Mandiri, BNI, and BTN, which have established themselves as market leaders among 118 banks in Indonesia. The performance of state-owned banks has a significant influence on the performance of national banks because of their position as a market leader with a large market share. This means that the banking industry as a whole will also benefit if state-owned banks have good performance.

Therefore, state-owned banks must maintain financial performance, and financial stability and know the level of company health and how much financial risk they face to continue to operate optimally. Financial statements produced each period are one of the tools that can be used to evaluate their condition. The company can compare the financial statements for the current period with the previous period to be able to understand more clearly the company's current condition, to prevent financial distress. Because many companies experience bankruptcy due to financial distress caused by improper financial management. For companies to maintain their business continuity, the importance of financial management is one of the aspects that must be really considered and managed properly.

Financial Distress is a period of deterioration in financial conditions that occurs before bankruptcy or liquidation (Christine *et al.*, 2019). Financial distress occurs when a company's financial condition deteriorates and is unable to pay its debts to creditors (Lienanda and Ekadjaja, 2019. There is a way to classify whether a company is in a state of financial difficulty. Bankruptcy in state-owned banking companies can occur, one of which is due to revenue and net profit factors. Revenue and net profit are one of the financial sources for the company. The lack of revenue and net profit will provide

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an overview for investors to invest in the company. The fewer people who want to invest, the less capital there is in the company. Research on financial distress has been carried out a lot, resulting in various bankruptcy prediction models that are used as a tool to improve company conditions. The research of Simanjuntak *et al. ai*. (2017) shows that the factors that affect financial distress are liquidity ratio, debt ratio, activity ratio, profitability ratio, and growth rate.

Based on the discussion of factors that affect financial distress, the researcher is interested in conducting research with 3 variables, namely Liquidity, Profitability, and Leverage (debt). Liquidity ratio is a ratio that represents a company's obligations in meeting short-term obligations (debt). This means that even though the company has a burden, the company can pay off its debts, especially those that are due. Research on the impact of liquidity on financial crises continues to show contradictory findings. Based on research by Asmarani and Lestari (2019), Tyas (2019), and Lienanda and Ekadjaja (2019), it shows that liquidity affects financial distress. This is different from the research of Ayuningtiyas and Suryono (2019) and Srimayanti and Efriyenti (2019) which stated that liquidity does not affect financial distress.

The second variable that is suspected to affect financial distress is profitability. Profitability is the ability of a company to generate revenue over the calculated costs, or in other words, the way the company manages costs. Research on the impact of profitability on financial hardship continues to show conflicting findings. From the results of Angraini and Arishahidin's research (2020), Dewi *et al*. (2019) and Ayuningtiyas and Suryono (2019), Basrowi and Utami (2019) found that profitability affects financial distress. These results are different from the findings of Asmarani and Lestari (2019) and Srimayanti and Efriyenti (2019) who found that profitability does not affect financial distress.

The third variable that seems to affect financial distress is leverage. Leverage is an important number that measures the extent to which a company is financed by debt. Leverage measures the extent to which a company is financed by debt. Based on the research of Tyas (2019), Masita, and Purwohandoko (2020), Christine (2019) stated that leverage influences financial distress. In contrast to the findings of Dewi *et al. ai*. (2019), Ayuningtiyas and Suryono (2019), as well as Srimayanti and Efriyenti (2019) stated that leverage does not affect financial distress.

OBJECTIVES OF THE STUDY

Liquidity

Liquidity is the ability of a company to fulfill its short-term debt obligations to be fulfilled immediately at maturity with available current assets.

Profitability

Profitability is the ability of the company to obtain profits obtained from the company's ability within a certain period from all existing resources such as sales activities, cash, capital, number of employees, number of branches, and so on so that it can affect increasing the value of the Company, this is used by an investor so that investors do not choose the wrong Company to be invested in.

Leverage

Leverage is a ratio that shows how much of an asset is financed by debt. This means how much debt the company has compared to its assets. The debt ratio is generally used to measure a company's ability to repay all of its short-term and long-term debts in the event of liquidation.

Financial distress

Financial distress is a stage of decline in the financial condition of a company that occurs before bankruptcy. The occurrence of *financial distress* begins with the company's inability to fulfill its obligations, including short-term liabilities and liabilities in the solvency category.

MATERIALS AND METHODS

This research uses a quantitative approach, according to the quantitative research method, it is research that is based on facts or reality and uses many numbers in it. The data collection method in this study uses documentation methods and literature studies. The documentation method is a method that is carried out by collecting the data needed for research. Meanwhile, the literature study method is carried out by studying, collecting, and reading literature from journals, articles, books, and the results of previous research that have a relationship with this research. The data obtained in this study comes from the Indonesia Stock Exchange (IDX). The population in this study is all state-owned bank companies listed on the IDX in 2019-2023 consisting of 4 companies. This study uses a sampling technique with Ali et al. (2022) a saturated sample technique or uses all

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existing populations so that as many as 4 state-owned bank companies are obtained as a sample with predetermined criteria.

RESULTS AND DISCUSSION

Descriptive Statistical Analysis.

Table 1. Results of Descriptive Statistical Analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Liquidity(X1)	125	,10	41,63	9,4966	6,34801
Profitability(X2)	125	73,19	1330,91	303,6666	255,51008
Leverage(X3)	125	10,28	491,03	79,3172	66,95464
Financial Distress(Y)	125	27,23	32,86	29,4825	1,45287
Valid N (listwise)	125	,00	28,50	2,9138	3,58541
Descriptive Statistics	125				

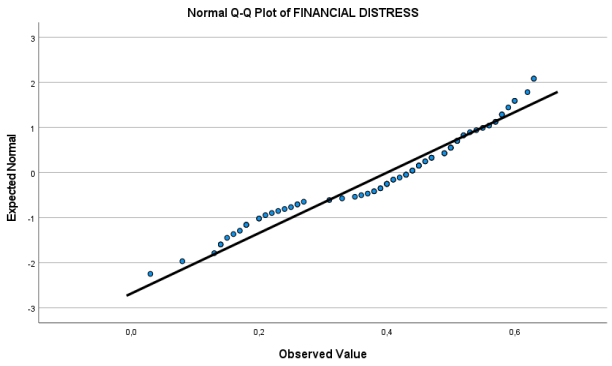
Sources: SPSS 27 Data Processing, processed in 2024

From the results of Table 1.1 above, it can be seen that the Liquidity variable has a minimum value of 78.85 and a maximum of 124.56 with a mean value of 112.8822 and a standard deviation of 6.48475. The Profitability variable has a minimum value of .00 and a maximum of .04 with a mean value of .0229 and a standard deviation of .01150. The Leverage variable has a minimum value of 76.37 and a maximum of 94.56 with a mean value of 84.1948 and a standard deviation of 3.93880. The variable has a minimum Financial Distress value of .03 and a maximum of .63 with a mean value of .4000 and a standard deviation of .14916.

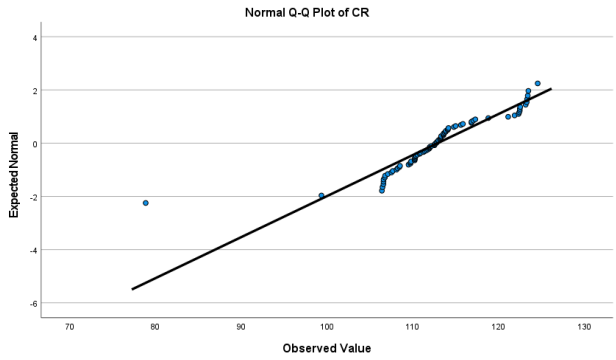
Classical Assumption Test

Normality Test.

Financial Distress (Y)



Liquidity (X1)



Profitability (X2)

Leverage (X3)

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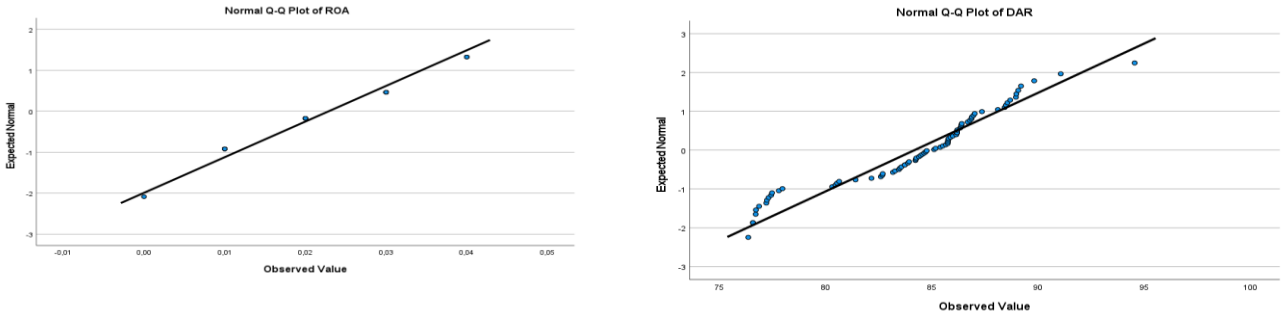


Fig. 1. P Plot Normality

Based on Figure 1 above the variables of liquidity, profitability, leverage, and financial distress, it can be seen that the points spread around the diagonal line and follow the direction of the diagonal line (following the linear direction area). This shows that the data in this study is distributed normally or the model has been distributed normally, because the data is close to normal, the analysis can be continued.

Multicollinearity Test

Table 2. Multicollinearity Test Results

Coefficients[a]

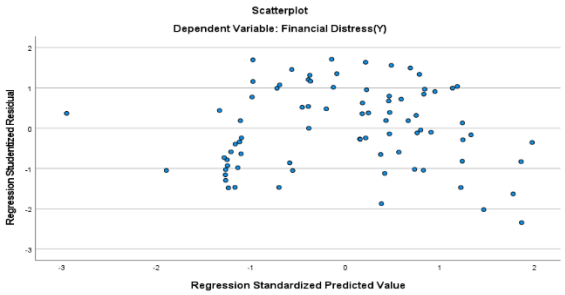
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-1,359	,565		-2,405	,019		
Likuiditas(X1)	,013	,002	,555	5,877	,000	,364	2,744
Profitabilitas(X2)	7,076	,929	,545	7,620	,000	,635	1,574
Leverage(X3)	,002	,004	,049	,449	,655	,277	3,612

a. Dependent Variable: Financial Distress(Y)

Sources: SPSS 27 Data Processing, processed in 2024

Based on the results of the multi-coloniality test in Table 2 above, in the liquidity variable, a tolerance value of 0.364 and a VIF value of 2.744 were obtained, in the profitability variable a tolerance value of 0.635 and a VIF value of 1.574, and in the leverage variable, a tolerance value of 0.277 and a VIF value of 3.612 were obtained. Because the tolerance value of each variable is more than 0.1 and the VIF value is less than 10, it can be concluded that in this study there is no multicollinearity between independent variables in the regression model.

Heteroscedasticity Test



Source: SPSS 27 Data Processing, processed in 2024

Fig. 2. Heteroscedasticity Test Results

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From Figure 2 above, it can be seen that the distribution of data points is randomly scattered around the number 0 and the y-axis and does not form a certain pattern or line trend, so it can be concluded that the data does not occur heteroskedasticity symptoms and regression analysis can be carried out.

Autocorrelation Test

Table 3. Autocorrelation Test Results

Runs Test	
	Unstandardized Residual
Test Value[a]	-,38020
Cases < Test Value	62
Cases >= Test Value	63
Total Cases	125
Number of Runs	58
With	-,987
Asymp. Sig. (2-tailed)	,324
a. Median	

Source: SPSS 27 Data Processing, processed in 2024

Based on the results of the autocorrelation test in Table 1.5 above, it shows that the test value is -0.38020 with a probability of 0.324 > 0.05 so it can be concluded that there is no autocorrelation.

Multiple Linear Regression Analysis Test

From the results of Table 4 above, it can be seen that the calculation of multiple linear regression analysis can be formulated into the regression equation as follows:

1) The value of the constant coefficient = -1.359 means that if the value of the Liquidity, Profitability, and Leverage variables is equal to Zero (0), then the value of the company (Y) is -1.359.
2) The value of the Liquidity coefficient (X1) = 0.013 means that if Liquidity (X1) increases by one unit, then the financial distress (Y) will increase by 0.013 units, with the other variables considered to be constant.
3) The value of the Profitability coefficient (X2) = 7.076 means that if Profitability (X2) increases by one unit, then financial distress (Y) will increase by 7.076 units, with other variables considered to be fixed/constant.

The value of the Leverage coefficient (X3) = 0.002 means that if the Leverage (X3) increases by one unit, then the financial distress (Y) will increase by 0.002 units, with the other variables considered to be constant.

Table 4. Multiple Linear Regression Analysis Results

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Mr.
1	(Constant)	-1,359	,565		-2,405	,019
	Liquidity(X1)	,013	,002	,555	5,877	,000
	Profitability(X2)	7,076	,929	,545	7,620	,000
	Leverage(X3)	,002	,004	,049	,449	,655
a. Dependent Variable: Financial Distress(Y)						

Source : SPSS 27 Data Processing, processed in 2024

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Based on the literature review conducted, it can be concluded that the implementation of CSR in the four manufacturing sub-sectors that contribute the highest greenhouse gas emissions that have a significant impact on global warming can provide long-term benefits for the company's financial performance.

Hypothesis Testing

Determinant Coefficient Test (R2)

The Coefficient of Determination or R2 is used to determine the influence between all variables X (Profitability, Liquidity, Solvency, and Company Size) with variable Y (Company Value).

Table 5. Determinant Coefficient Test Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,868a	,753	,743	,07563

a. Predictors: (Constant), Leverage(X3), Profitabilitas(X2), Likuiditas(X1)

b. Dependent Variable: Financial Distress(Y)

Source: SPSS 27 Data Processing, processed in 2024

The output of the SPSS determination coefficient in Table 5 shows an Adjusted R2 value of 0.743 which means that 74.3% of the dependent variables (*Financial Distress*) can be explained by independent variables, namely liquidity, profitability, and *leverage*. While the remaining 25.7% of the dependent variables were influenced by other variables.

Test T

1. Liquidity has a positive coefficient value of 0.555. And has $a_{ttable\ count} >$ (5.877 > 1.991) with a significance level of 0.000 (less than 0.05). Based on the t-test table, it can be concluded that liquidity has a significant positive effect on financial distress in state-owned bank companies listed on the Indonesia Stock Exchange for the 2019-2023 period.
2. Profitability has a positive coefficient value of 0.545. And has $t_{calculated} > t_{t\ table}$ (7,620 > 1,991) with a significance level of 0.000 (less than 0.05). Based on the t-test table, it can be concluded that profitability has a significant positive effect on financial distress in state-owned bank companies listed on the Indonesia Stock Exchange for the 2019-2023 period.

Leverage has a positive coefficient value of 0.049. And has $t_{calculated} < t_{t\ table}$ (0.449 < 1.991) with a significance level of 0.655 (more than 0.05). Based on the t-test table, it can be concluded that leverage has no effect and is not significant on financial distress in state-owned bank companies listed on the Indonesia Stock Exchange for the 2019-2023 period.

The t-test is used to determine the influence of independent variables in a particular or individual manner on dependent variables which can be seen in the table below:

Table 6. Test Results t

Model	Unstandardized Coefficients		Standardized Coefficients	t	Mr.
	B	Std. Error	Beta		
(Constant)	-1,359	,565		-2,405	,019
Liquidity(X1)	,013	,002	,555	5,877	,000
Profitability(X2)	7,076	,929	,545	7,620	,000
Leverage(X3)	,002	,004	,049	,449	,655

Source: SPSS 27 Data Processing, processed in 2024

Test F

The F (Simultant) test is used to show whether all the independent variables of Liquidity (X1), Profitability (X2), and Leverage (X3) included in the model have a joint effect on the dependent variable Financial Distress (Y).

Table 7. Test Results f

ANOVA

Model	Sum of Squares	df	Mean Square	F	Mr.

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Regression	1,323	3	,441	77,095	,000 b
Residual	,435	76	,006		
Total	1,758	79			

a. Dependent Variable: Financial Distress(Y)

b. Predictors: (Constant), Leverage(X3), Profitability(X2), Liquidity(X1)

Source: SPSS 27 Data Processing, processed in 2024

Based on the results of the Fcal value > F_{table} (77.095 > 2.72) with a significance level of 0.000. By the provisions that have been disclosed in the previous discussion the F Test requirements used are with a significance of 0.05. Therefore, it is concluded that together liquidity, profitability, and leverage have a significant effect on financial distress conditions.

The Influence of Liquidity on Financial Distress Conditions

Based on the results of statistical analysis in this study, it can be seen that the results of the t-test (partial) show t_{count} > t_{table} (5.877 > 1.991) with a significance level of 0.000 (less than 0.05). Based on the t-test table, it can be concluded that liquidity has a significant positive effect on financial distress in state-owned bank companies listed on the Indonesia Stock Exchange for the 2019-2023 period.

The results of this study are not in line with previous research conducted by Dewi et.al. (2019) and Oktavianti et.al. (2020) which states that liquidity has a significant negative effect on financial distress conditions. However, this research is in line with the research conducted by Syuhada et.al. (2020) which states that liquidity has a significant positive effect on financial distress conditions.

The Influence of Profitability on Financial Distress Conditions

Based on the results of statistical analysis in this study, it can be seen that the results of the t-test (partial) show the t-value calculated > t_{table} (7.620 > 1.991) with a significance level of 0.000 (less than 0.05). Based on the t-test table, it can be concluded that profitability has a significant positive effect on financial distress in state-owned bank companies listed on the Indonesia Stock Exchange for the 2019-2023 period.

The results of this study are not in line with previous research conducted by Kurniasanti and Musdholifah (2018) and Nukmaningtyas and Worokinasih (2019) which stated that profitability has a significant negative effect on financial distress. However, this research is in line with research conducted by Siti Badriyah, Hermuningsih, and Agus Dwi (2021) which stated that profitability has a significant positive effect on financial distress.

The Influence of Leverage on Financial Distress Conditions

Based on the results of statistical analysis in this study, it can be seen that the results of the t-test (partial) show $_{the\ t\text{-}value}$ calculated < t_{table} (0.449 < 1.991) with a significance level of 0.655 (more than 0.05). Based on the t-test table, it can be concluded that leverage has no effect and is not significant on financial distress in state-owned bank companies listed on the Indonesia Stock Exchange for the 2019-2023 period.

The results of this study are not in line with Masita and Purwohandoko (2020) who stated that leverage hurts financial distress conditions. However, this study is in line with research conducted by Srimayanti (2021) which states that leverage has no effect and is not significant to financial distress conditions.

The Influence of Profitability, Liquidity, Solvency, and Company Size on Company Value

Simultaneous testing, the value of Fcal > F_{table} (77.095 > 2.72) was obtained with a significance level of 0.000. By the provisions that have been disclosed in the previous discussion the F Test requirements used are with a significance of 0.05. Therefore, it is concluded that together liquidity, profitability, and leverage have a significant effect on the condition of financial distress in state-owned banks listed on the IDX for the 2019-2023 period.

Based on the research that has been conducted, it can be concluded that the influence between Liquidity, Profitability, and Leverage on Financial Distress conditions in state-owned banks listed on the IDX for the 2019-2023 period has a fairly good influence. This is shown from the results of the R 2 determinant coefficient test of 0.743 which means that the dependent variable *Financial Distress* in SOEs listed on the IDX for the 2019-2023 period can be influenced by the dependent variables, namely Liquidity, Profitability, and *Leverage* by 74.3%, while

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the remaining 25.7% can be influenced by other factors that are not studied in this study.

CONCLUSION AND RECOMMENDATION

Based on the results of the analysis of research data that has been presented previously, conclusions can be drawn from the research on the influence of Liquidity, Profitability, and *Leverage* on *Financial Distress* conditions in State-Owned Banks listed on the IDX for the 2019-2023 Period with a sample of 4 companies as follows:

1. From the results of this study, the liquidity variable partially has a significant positive effect on the condition of *financial distress*. This is shown by the calculation result of 5.877 and the t table is the Degree of Freedom (dk) = n-k (80-3=77), then the t table of 1.991 is obtained from the t table > t table (5.887 > 1.991) with a significance level of 0.00 < 0.05 (5%). Therefore, it can be concluded that liquidity has a significant positive effect on State-Owned Enterprises (SOEs) listed on the Indonesia Stock Exchange (IDX) for the 2019-2023 period.
2. From the results of this study, the profitability variable partially has a significant positive effect on *financial distress* conditions. This is shown by the calculation result of 7.620 and the t table is the Degree of Freedom (dk) = n-k (80-3=77), then the t table of 1.991 is obtained from the t table > t table (7.620 > 1.991) with a significance level of 0.00 < 0.05 (5%). Therefore, it can be concluded that profitability has a significant positive effect on State-Owned Enterprises (SOEs) listed on the Indonesia Stock Exchange (IDX) for the 2019-2023 period.
3. From the results of this study, it is partially true that the leverage variable has no effect and is not significant to the condition of financial distress. This is shown by the result of $t_{calculation}$ of 0.449 and t_{table} is Degree of Freedom (dk) = n-k (80-3=77), then t_{table} of 1.991 is obtained, the result of $t_{calculation} <_{t\ table}$ (0.449 < 1.991) with a significance level of 0.655 (more than 0.05). Therefore, it can be concluded that *leverage* has no effect and is not significant on *the condition of financial distress* in State-Owned Enterprises (SOEs) listed on the Indonesia Stock Exchange (IDX) for the 2019-2023 period.
4. From the results of this study, simultaneously the variables of liquidity, profitability, and *leverage* have a significant effect on the condition of the financial distress. This is shown by the result of a f table value of 2.72. The value of f count is greater than that of f table (77.095 > 2.72) and the significance level is smaller than 0.05 (0.000 < 0.05). Therefore, it can be concluded that the variables of liquidity, profitability, and leverage simultaneously have a significant effect on the condition of financial distress in State-Owned Enterprises (SOEs) Bank companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2023 period.

Based on the conclusions and implications above, several suggestions can be put forward as follows:

1. For the next researcher, it is hoped that all companies listed on the Indonesia Stock Exchange can be considered as the population in the study to compare with the results of this study.
2. For the next researcher, it is expected to use another model in measuring *financial distress*. Such as Springate, Grover, and Ohlson.
3. The next researcher is expected to add other variables that are appropriate and suspected to affect financial distress. So that the results can be better and more accurate.
4. For companies, it is better to further improve their financial performance to generate profits that increase every period, so that they can attract the attention of investors.

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