The Effect of Financial Ratios and Macro- Economic on Financial Distress of Property, Real Estate, and Building Construction Companies Listed on the Indonesian Stock Exchange 2015-2019

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ABSTRACT: This study examines the effect of financial ratios and macroeconomics on financial distress. Financial ratios are assessed using the ROE, DER, CR, SG, CFFO proxies, and macroeconomic proxies are inflation, exchange rates, BI rate, GDP, and financial distress measured by the Springate Model. The data used in this study is secondary data in the form of annual reports from 2015-2019 obtained from the Indonesian Stock Exchange website or www.idx.co.id and Bank Indonesia or www.bi.go.id and the Central Bureau of Statistics or www.bps.go.id. The population in this study amounted to 53 property, real estate, and building construction companies listed on the Indonesian Stock Exchange with a sampling technique using purposive sampling obtained as many as 40 companies. Hypothesis testing in this study used logistic regression analysis with the help of the SPSS application. The results obtained indicate that ROE, CR, SG, CFFO, and Inflation have a significant adverse effect on financial distress. DER, BI rate, and exchange rate have a significant positive impact on financial distress. At the same time, GDP has no significant effect on financial distress.

Keywords: ROE, DER, CR, SG, CFFO, Inflation, BI Rate, Exchange Rate, GDP, Financial Distress.

INTRODUCTION

Based on data from the United Nations in the World Economic Situation and Prospects, in 2015, there was a decline in the global economic growth rate, which was estimated to be around 2.8% to 2.4%. This economic slowdown occurred due to the emergence of a series of continuous economic crises from outside, such as the effect of the issue of the increase in interest rates of The FED (US Central Bank), the Greek crisis, and the weakening of China's economic growth rate (Setiawan, 2015).

In 2019, China's economy grew at a 6.1% year-over-year pace, the lowest in 30 years. The slowdown in economic expansion in China impacts Indonesia because these two countries are important trading partners. Where China contributes almost one-tenth of Indonesia's total exports, it is estimated that for every 1% decrease in China's GDP

growth, the expansion of the Indonesian economy is reduced by 0.3% (Indonesia Investments, 2020). This condition has caused concerns about the economy's future performance, especially in Indonesia. Indonesia's property companies are no exception.

Property companies are one of the crucial sectors in national economic development. Evident from the statistical data center (BPS) shows that the contribution of the property industry sector in Indonesia in 2019 reached 13.52%. Compared to the previous year, this contribution increased by 13.27% in 2018 and 13.19% in 2017 (BPS, 2020).

Table 1. Growth (y-on-y) of Property Industry GDP and Its Contribution to National GDP at Constant Prices (%)

Description	2015	2016	2017		2018	2019
National GDP	4.88	5.03	5.07		5.17	5.02
Property Industry GDP	10.47	9.91	10,40		9.57	11.75
Construction Industry Contribution	10.21	10.38	10.38		10.53	10.75
Real Estate Industry Contribution	2.84	2.83	2.81		2.74	2.77
Total Property Industry Contribution	13.05	13.21	13.19		13.27	13.52

Source: Central Bureau of Statistics, 2020

The data in table 1 shows that the contribution of the property industry sector to the national GDP from 2015 to 2019 tends to increase by 13.52%. This condition indicates that the property industry still has an essential role in forming national GDP, both for the property industry sector itself and its relationship with other sectors in the Indonesian economy. According to BPS data, in 2018, it was noted that growth in the economic sector of the property industry experienced negative growth. Namely, the real estate industry sector decreased by 7%.

Based on Bank Indonesia data from 2015 to 2019, the property and real estate sector was experiencing a slump in its development. In 2015 the Property Price Index decelerated by 4.62% (YoY). Then, in 2016 there was also a slowdown in the Property Price Index by 2.75% (YoY). Moreover, in 2017, there was a decline in home sales growth in the third quarter of 2017 due to limited demand. Furthermore, property sales also decreased in the fourth quarter of 2018 and the second quarter of 2019.

The decline that occurred in this sector was caused by mortgage interest rates (20.36%), advances (16.57%), taxes (16.13%), licensing (14.45%), and rising prices of building materials (11,68%) (Finance.com). In addition, the decline was also caused by the high BI interest rate at the level of 7.5%, which also increased the mortgage interest rate, then the existence of an indent mortgage system and changes to the uncertain PPnBM, which also caused the decline in property sales (Nabila, 2019).

Table 2. Data on Companies Experiencing Negative EPS (Financial Distress)

No	Company Code	Negative EPS/Financial Distress				
		2015	2016	2017	2018	2019
1	BKDP	(4,13)	(4,24)	(6.32)	(5.36)	(4,11)
2	ELTY	(16.69)	(12.59)	(6,12)	62.66	(18.81)
3	LCGP	(1.29)	1.17	(0.49)	(0.94)	(1,27)
4	MTSM	(20.01)	(10,15)	(20.61)	(29.79)	(34.62)
5	NIRO	(0.87)	(1.68)	(0.35)	(2.41)	(0.92)

Source: Indonesia Stock Exchange, 2020

Table 2 shows that property, real estate, and building construction sector companies experience negative EPS from year to year. A company with a negative EPS for two consecutive years indicates that the company has experienced financial distress. The condition experienced by the company regarding financial difficulties that continues to worsen will become the basis for the Indonesia Stock Exchange to conduct delisting. In addition, there are several causes for the company to be delisted. Namely, the company is always late in submitting its financial statements. The company is entangled in large long-term debt, inadequate corporate governance, the company continues to record losses, no longer operates, does not have adequate operating income.

Table 3. Development of Delisting Companies on the Indonesia Stock Exchange in 2015 – 2019

Year	Number of Companies Delisting
2015	3 Companies
2016	-
2017	8 Companies
2018	4 Companies
2019	6 Companies

Source: OK Stock, 2020

Based on table 1.3 data, it can be seen that the development of companies that were delisted or indicated bankrupt from 2015 to 2019 continued to fluctuate. In 2015 there were three companies delisted. In 2016, no companies were delisted by the Indonesia Stock Exchange, and in 2017 eight companies were delisted. In 2018, the delisted companies experienced a decline where there were four companies, but in 2019 the number of delisted companies again increased to 6.

Hall (2002) defines financial distress as the stage of decreasing the company's financial condition before bankruptcy or liquidation occurs. Financial difficulties that arise in various companies in Indonesia can be a signal of bankruptcy that the company may experience. The risk of bankruptcy for the company can be seen and measured by analyzing its performance, which can be seen from its financial statements. By analyzing the company's financial statements, the company's leaders can find out the state and development of the company's finances and the results that have been achieved in the

past and current time.

Financial statements are a source of information regarding the performance and position of changes in the company's finances that are useful for making the right decisions. In financial statements, financial ratios can predict the condition of a company's financial difficulties so that bankruptcy can be suppressed. In this study, the financial ratios used to measure financial distress are profitability, leverage, liquidity, growth, and cash flow ratios. Besides financial ratios, financial distress can also be caused by external factors of the company, namely macroeconomic conditions. These factors are inflation, BI rate, exchange rate, and gross domestic product.

Distress. Based on the above background, as well as the differences in research results, it is essential to predict the company's financial distress, especially for investors who want to invest in a company and the company's internal parties in managing the company to find out the current and future condition of the company so that the company can prevent the possibility of financial distress. Therefore, researchers are interested in conducting this study under "The Effect of Financial Ratios and Macroeconomics on Financial Distress in Property, Real Estate and Building Construction Companies Listed on the Indonesia Stock Exchange in 2015- 2019".

LITERATURE REVIEW

Agency Theory

According to Wahyuningtyas (2010), agency theory describes a relationship in which the principal appoints the agent to manage the company, which includes the delegation of authority from the principal and agent in making company decisions on behalf of the owner.

Signaling Theory

Signaling theory reveals that the company provides signals to users of financial statements in information about the company's finances, both positive signals (good news) and negative signals (bad news). The signal theory states that companies with good quality will intentionally give signals to the market, so it is hoped that the market will be able to distinguish the quality of the companies (Hartono, 2005).

Trade-Off Theory

This theory is called trade-off because it assumes that the optimal capital structure is determined by the trade-off between the tax shield of leverage and the cost of financial distress and agency cost of leverage (Myers, 1984). According to the trade-off theory, the optimal capital structure is achieved by balancing the benefits and costs borne by debt (Brigham & Houston, 2001).

Fisher Effect Theory

According to Fisher, changes in the money supply cause equally rapid price changes. If the money supply increases by five percent, the price level will increase by five percent (Sukirno, 1998). According to Fisher's equation, a one percent increase in the inflation rate, in turn, causes a one percent increase in the nominal interest rate.

International Fisher Effect Theory

The International Fisher Effect theory shows that changes in the exchange rates of two currencies are correlated with differences in nominal interest rates between two countries. The International Fisher Effect theory uses interest rates instead of differences in inflation rates to explain why exchange rates change over time. However, this theory is closely related to the Purchasing Power Parity theory because interest rates are often closely correlated with the inflation rate (Madura, 2000).

Springate models

Gorgon LV Springate developed the Springate Model in 1978. Springate found four ratios that can predict a company's bankruptcy potential. This model has an accuracy rate of 92.5% in predicting financial distress (Ghodrati & Moghaddam, 2012). The Springate Model is formulated as follows (Sondakh, 2014):

$$S = 1.03\ X1 + 3.07\ X2 + 0.66\ X3 + 0.4\ X4$$

Information:

X1 = Working Capital to Total Assets

X2 = Earning Before Interest and Tax to Total Assets

X3 = Earning Before Taxes to Current Liabilities.

X4 = Sales to Total Assets

From the results of the S-Score, the company's condition according to Springate is by the cut-off point, which can be classified as follows: (Sondakh, 2014):

S < 0.862 = The company is experiencing financial distress

S > 0.862 = The company does not experience financial distress

Financial statements

According to Deanta (2009), financial statements are the final result of the accounting process. The value of money measures every transaction recorded and processed to present the final report in terms of money.

Financial Ratio

Financial ratio analysis is one way of processing and interpreting accounting information, expressed in a relative or absolute sense, to explain a specific relationship between one number and another number in a financial report (Wardiah & Pradja, 2013).

Macro Economy

The macro-economy is the economy, including income growth, price changes, and the unemployment rate (Gregory, 2006).

The Effect of Return on Equity on Financial Distress

According to signaling theory, an action taken by the company's management provides instructions and information for investors about how management views the company's prospects. In this study, the profitability ratio used is Return on Equity (ROE). The greater the return on equity of a company, the better the financial performance, and the lower the possibility of financial distress in the company. Based on research conducted by Nella (2011) and Antikasari and Djuminah (2017) stated that ROE has a significant negative effect on financial distress.

H1: Return on Equity affects Financial Distress

The Effect of Debt to Equity Ratio on Financial Distress

According to the trade-off theory, the greater the use of debt, the greater the tax savings obtained by the company. However, using more outstanding debt will also impact the company's risk of experiencing financial distress or even bankruptcy. It will reduce the company's value. In this study, the leverage ratio used is the Debt to Equity Ratio (DER). Leverage arises due to the use of company funds from third parties in the form of debt. Using this source of funds will result in an obligation for the company to repay the loan and interest on the loan. If this situation is not balanced with good company income, likely, the company will easily experience financial distress. States that DER has a significant negative effect on financial distress.

H2: Debt to Equity Ratio affects Financial Distress

The Effect of Current Ratio on Financial Distress

According to signaling theory, the higher the value of a company's current ratio (CR) will positively signal investors. Harahap (2013) found that CR negatively relates to financial distress conditions. In this study, the liquidity ratio used is the current ratio which measures the company's ability to meet its short-term debt by using its current assets. The greater the liquidity ratio, the less likely the company will experience financial distress.

H3: Current Ratio affects Financial Distress

The Effect of Sales Growth on Financial Distress

Based on Indriani and Yudiawati's (2016) research, SG has a negative relationship with financial distress conditions. According to agency theory, the company's operational activities are the tasks that are responsible for the agent. If sales growth increases, it shows good agent management in the company. Sales growth or sales growth ratio is a ratio used to predict a company's growth in the future. The greater the value of sales growth, it indicates that the company has succeeded in carrying out its activities (Pamungkas & Fitri, 2019).

H4: Sales Growth affects Financial Distress

The Effect of Cash Flow from Operations on Financial Distress

Profit gains indicaite a healthy company condition for a relatively long period based on signaling theory. This description relates to the distribution of dividends to shareholders. High cash flow over a long period indicates the company can pay its debts to creditors. Companies that experience a decrease in profits or cash flows of small value can be classified into financial distress. Based on research that Pamungkas has done and Fitri (2019) found that CFFO affects financial distress conditions.

H5: *CFFO* affects on *Financial Distress*

The Effect of Inflation on Financial Distress

According to the fisher effect theory, inflation has a significant relationship with interest rates. When there is a one percent increase in the inflation rate, it causes a one percent increase in interest rates. Furthermore, inflation occurs when the money supply in the community increases by five percent. Then the price level will also increase by five percent. It shows that when inflation rises, the price of goods, in general, will increase. High inflation will push up the price of raw materials and increase the company's operating costs. The increasing operating costs of the company will cause the selling price of goods to improve and reduce people's purchasing power. So, this has an impact on the decline in company sales. Thus, the company's profits and financial performance have decreased (financial difficulties).

H6: Inflation affects Financial Distress

The Effect of BI-Rate on Financial Distress

According to the fisher effect theory, interest rates significantly correlate with inflation (one-for-one). It means that the higher the interest rate, the higher the inflation rate. When there is a one-percent change in interest rates, it will be followed by a one-percent change in the inflation rate. High-interest rates will weaken economic conditions because when interest rates rise, it will affect the interest calculation for creditors in determining interest expense. Furthermore, when interest rates increase, it will increase the cost of capital in the form of interest expenses that the company will bear so that the profit earned by the company decreases. Therefore, It can be assumed that the higher the interest rate, the more likely the company is to experience financial distress. Based on Kurniawati & Kholis's (2016) research, the BI rate positively correlates with financial distress conditions.

H7: BI-Rate affects Financial Distress

The Effect of Exchange Rates on Financial Distress

According to the international fisher effect theory, changes in the exchange rates of two currencies are correlated with differences in nominal interest rates between two

countries. Differences in inflation rate expectations cause the difference in interest rates between the two countries. A high exchange rate weakens the rupiah (domestic) exchange rate. It is due to the high rate of inflation and rising interest rates. When the rupiah weakens, foreign currencies become more expensive. It pushes up production costs. When companies also experience obstacles in increasing their income, companies may face financial difficulties. Asfali's (2019) research shows that the exchange rate positively relates to financial distress conditions.

H8: Exchange rate affects Financial Distress

The Effect of Gross Domestic Product on Financial Distress

According to the fisher effect theory, when the money supply in the community increases by five percent, the price level will also increase by five percent. The price level, in general, can increase due to inflation which causes an increase in nominal GDP even though the number of goods and services produced does not change. If an economy experiences a decline in terms of negative GDP growth, this will impact the deteriorating quality of banking. This phenomenon is the same as when Indonesia experienced an economic crisis in 1998, resulting in a decline in activities in the real sector (partially financed by bank loans), resulting in non-performing loans. This condition can trigger financial distress. Based on Nurhidayah and Rizqiyah's (2017) research, they found that GDP affected financial distress conditions.

H9: GDP affects Financial Distress

METHOD

This research was conducted on the Indonesia Stock Exchange (IDX). This study uses a period of five years, from 2015 to 2019. The population used in this study are property, real estate, and building construction sector companies listed on the Indonesia Stock Exchange from 2015 to 2019. The research sample was determined based on the purposive sampling technique. Property, Real Estate, and Building Construction Companies were consecutively listed on the IDX from 2015 to 2019.

1. Property, Real Estate, and Building Construction Company publish complete financial reports for 2015-2019.
2. Property, Real Estate, and Building Construction Company publish complete financial reports for 2015-2019.

Financial Distress

Financial distress is a stage of declining financial conditions before bankruptcy or liquidation (Hall, 2002). A company is said to be experiencing financial distress or financial difficulty if the company is experiencing difficulties and problems in paying debts that are due (Nurcahyanti, 2015).

Return on Equity

Return on Equity (ROE) is a profitability ratio that describes the company's ability to use its capital to earn profits. The ROE formula used is as follows (Almilia et al., 2003):

$$ROE = \frac{Earning\ after}{-tax/total\ equity}$$

Debt to Equity Ratio

Debt to Equity Ratio (DER) is a leverage ratio that describes the company's ability to meet current debt and long-term debt if the company is in a liquid state using debt. The DER formula used is as follows (Haq, 2013):

$$DER = \frac{Total\ debts}{,total\ equity}$$

Current Ratio

The Current Ratio (CR) is a liquidity ratio that describes the company's ability to meet its short-term obligations that have matured. The CR formula used is as follows (Widati, 2015):

$$CR = \frac{Current\ assets}{/\ current\ liabilities}$$

Sales Growth

Sales Growth is a growth ratio used to predict the company's growth in the future from the revenue generated from products and services and revenue generated by sales. The sales growth formula is as follows (Widarjo & Setiawan, 2009):

$$Sale\ growth = \frac{Sales_{t+1} - Sales_t}{Sales_t}$$

Information:

Sales growth   = Sales Growth

Sales   = Sales in year t+1

Sales   = Sales in year t

Operating Cash Flow

Cash Flow from Operations (CFFO) is an operating cash flow ratio that calculates the ability to operate cash flows to pay current liabilities. The cash flow from operations formula used is as follows (Darsono & Ashari, 2005):

Operating Cash Flow = Operating Income + Depreciation – Taxes + Change in

Working Capital

Inflation

Inflation is an increase in prices in general, or inflation can also decrease the purchasing power of money. The higher the price increase, the lower the value of money. In this study, inflation was measured using an inflation sensitivity approach. Where the data used is in the form of monthly inflation, which is inflation this month minus the calculation formula for inflation sensitivity as follows (Riesta, 2014):

$$Yrs = a + b1\ X1 + e$$

Where:

Yrs = *Return* company's monthly share in period t

a = Constant

b1 = Inflation sensitivity to companies

X1 = Inflation

e = Confounding variables outside the model

BI Rate

BI Rates the policy interest rate that reflects the monetary policy stance or stance set by Bank Indonesia and announced to the public. This study measured the BI rate using the BI rate sensitivity approach. The formula for calculating the BI rate sensitivity is as follows (Riesta, 2014):

$$\mathbf{Yrs = a + b2\ X2 + e}$$

Where:

Yrs = *Return* company's monthly share in period t

a = Constant

b2 = BI rate sensitivity to companies

X2 = BI rate

e = Confounding variables outside the model

Exchange rate

An exchange rate compares the value of one country's currency with other countries. For example, the rupiah exchange rate against the US dollar shows how many rupiahs must be exchanged for one US dollar. This study measured the exchange rate

using a rate sensitivity approach. The formula for calculating exchange rate sensitivity is as follows (Riesta, 2014):

$$Yrs = a + b3\ X3 + e$$

Where:

Yrs   = *Return* company's monthly share in period t

a   = Constant

b3   = Exchange rate sensitivity to companies

X3   = Exchange rate (rupiah exchange rate)

e   = Confounding variables outside the model

Gross Domestic Product

Gross Domestic Product (GDP) is the added value generated by all business units in a country. GDP is also called the growth in value of goods and services produced or produced by a country in a certain period by adding up all the output of the citizens concerned plus foreign nationals working in the country concerned (Putong, 2002). In this study, GDP was measured using the GDP sensitivity approach. The formula for calculating GDP sensitivity is as follows (Riesta, 2014):

$$Yrs = a + b4\ X4 + e$$

Where:

Yrs   = *Return* company's quarterly shares in period t

a   = Constant

b4   = GDP sensitivity to companies

X4   = GDP

e = Confounding variables outside the model

Data Analysis Method

Data analysis in this study used descriptive statistics and logistic regression analysis. Logistic regression analysis is used to know the probability that the dependent variable can be predicted or influenced by the independent variable. This study uses logistic regression analysis because it has a dummy variable on the dependent variable. If the company experiences financial distress, the category will be assessed with a nominal scale of 1. In contrast, the company that does not share financial distress will be set with a nominal scale of 0.

RESULTS AND DISCUSSION

Descriptive Statistics Test Results

Table 4. Descriptive Statistics Test Results

	N	Minimum	Maximum	mean	Std. Deviation
ROE	200	-4,600	3.920	.34494	.864045
DER	200	.020	10,890	1.07095	1.295933

	N	Minimum	Maximum	mean	Std. Deviation
CR	200	.010	40,520	3.39795	5.219210
SG	200	-1,330	12,500	.81267	1.985546
CFFO	200	-2.890	2,130	.06190	.558915
INF	200	-8.180	1,600	.00961	.635916
BI_RATE	200	-8,390	6.320	-.04429	1.641751
EXCHANGE RATE	200	-61960	10.550	-1.56735	6.553650
GDP	200	-30,700	25,660	-.67059	4.773130
Valid N (listwise)	200				

Source: Processed Data, 2021

Regression Model Feasibility

The feasibility of the regression model was assessed using Hosmer and Lemeshow's Goodness of Fit Test, the Negalgarke R-Square, and the Classification Table. According to Santoso (2017), this model is used to test whether or not the binary regression model is appropriate for further analysis.

Table 5. Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	3,883	8	.868

Source: Processed Data, 2021

The basis for decision-making is to compare the probability value with a significance level (0.05). If the probability value is > 0.05, H0 is accepted; otherwise, if the probability is < 0.05, H0 is rejected. Table 5 shows that the probability value of 0.868 is greater than the significance level (0.05), so H0 is accepted. The model is suitable for further analysis because there is no significant difference between the predicted and observed classifications.

Table 6. Model Summary

Step	-2 Logs likelihood	Cox & Snell R Square	Nagelkerke R Square
1	125,767a	.398	.586

Source: processed data, 2021

Based on table 6, it is known that the coefficient of determination is 0.586. This number means that the percentage of the effect of return on equity, debt to equity ratio, current ratio, sales growth, cash flow from operations, inflation, BI rate, exchange rate, and gross domestic product variables on financial distress is 58.6%. At the same time, the remaining 41.4% is influenced by other variables that are not included in this model.

Table 7. Classification Table

Observed			Predicted		
			FD		Percentage Correct
			NON-FD	FD	
Step 1	FD	NON-FD	140	9	94.0
		FD	18	33	64.7
	Overall Percentage				86.5

Table 7 of the classification matrix above shows that the predictive power of the regression model to predict the possibility of financial distress companies is 64.7%. This research includes 33 company data (64.7%) expected to be in financial distress from 51 data on companies experiencing financial distress. Meanwhile, the predictive power of the model for companies that are not in financial distress is 94%, which means that with the regression model used, there are as many as 140 company data (94%) that are predicted not to experience financial distress from a total of 149 company data. Based on this explanation, the overall percentage is 86.5%, which means that the accuracy of this research model is 86.5%.

Overall Model Fit Test Results

Table 8. Iteration History on Block 0

Iteration		-2 Logs likelihood	Coefficients Constant
Step 0	1	227,432	-.980
	2	227.105	-1.070
	3	227.105	-1.072
	4	227.105	-1.072

Table 9. Iteration History in Block 1

Iteration		-2 Logs likelihood	Coefficients									
			Constant	ROE	DER	CR	SG	CFFO	INF	BI_RATE	EXCHANGE RATE	GDP
Step 1	1	174.590	-.961	-.233	.388	-.046	-.193	.434	-.033	.169	.034	.010
	2	152,731	-.871	-.674	.521	-.118	-.435	.708	-.096	.250	.076	.033
	3	139,591	-.450	-1.561	.564	-.261	-.696	.947	-.251	.289	.103	.057
	4	131.073	.103	-3.035	.599	-.510	-.807	1,294	-.554	.323	.120	.070
	5	127.145	.555	-5.028	.658	-.737	-.814	1,643	-.996	.357	.134	.080
	6	125.889	.813	-7.141	.726	-.858	-.790	1,912	-1.484	.366	.140	.089
	7	125,767	.892	-8.062	.761	-.895	-.783	2,024	-1,708	.366	.141	.093
	8	125,767	.897	-8.133	.765	-.898	-.783	2.033	-1.726	.366	.141	.093
	9	125,767	.897	-8.133	.765	-.898	-.783	2.033	-1.726	.366	.141	.093

Based on table 8, the initial value of -2 Log Likelihood is 227.105, and the final value of -2 Log-Likelihood in table 9 is 125.767. The decrease between the initial -2 Log-

Likelihood and the absolute value of -2 Log-Likelihood indicates that the regression model improves.

Table 10. Omnibus Test of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	101.338	9	.000
	Block	101.338	9	.000
	Model	101.338	9	.000

Source: Processed Data, 2021

Based on table 10, it can be seen that the chi-square is 101.338 with a significance of 0.000. Because the significance value (0.000) < (0.05), it can be interpreted that the variables return on equity, debt to equity ratio, current ratio, sales growth, cash flow from operations, inflation, BI rate, exchange rate, and gross domestic product together -the same has a significant effect on financial distress.

Regression Coefficient Test Results

In Santoso (2017), regression coefficient testing is carried out to test how far all the independent variables included in the model influence the dependent variable. Then the probability value in the Variables in the Equation table is compared. With a significance level value of 0.05. If the probability value > 0.05, H0 is accepted and if the probability value is < 0.05, H0 is rejected.

Table 11. Variables in the Equation

		B	SE	Wald	df	Sig.	Exp(B)	95% CI for EXP(B)	
								Lower	Upper
Step 1a	ROE	-8.133	2,982	7,437	1	.006	.000	.000	.102
	DER	.765	.270	8022	1	.005	2,148	1,266	3.646
	CR	-.898	.310	8,379	1	.004	.407	.222	.748
	SG	-.783	.292	7.184	1	.007	.457	.258	.810
	CFFO	-2.033	.665	9.345	1	.002	7.639	2,074	28,132
	INF	-1.726	.840	4.227	1	.040	.178	.034	.922
	BI_RATE	.366	.178	4.222	1	.040	1.441	1.017	2,042
	EXCHAN GE E RATE	.141	.052	7.319	1	.007	1.152	1.040	1,276
	GDP	.093	.057	2.660	1	.103	1.097	.981	1,227
	Constant	.897	.693	1,677	1	.195	2.453		

Source: Processed Data, 2021

Based on the results of the tests that have been carried out, it can be formulated the equation of the logistic regression model as follows:

$$\text{Ln} = = 0.897 - 8.133 \text{ ROE} + 0.765 \text{ DER} - 0.898 \text{ CR} - 0.783 \text{ SG} - 2.033 \text{ CFFO} -$$
$$1.726 \text{ INF} + 0.366 \text{ BIRATE} + 0.141 \text{ EXCHANGE} + 0.093 \text{ GDP}$$

The Effect of Return on Equity on Financial Distress

Based on table 11, it is known that the return on equity variable with a regression coefficient of -8.133 and a significance value of 0.006. From the results, it is known that

0.006 < 0.05. With these results, it can be concluded that return on equity hurts financial distress. So, the hypothesis is accepted.

This study shows a significant adverse effect which means that the greater the ROE value, the less likely the company is to experience financial distress. The higher the ROE value, the more effective and efficient the company is in managing its capital. The company is successful in marketing its products to increase sales and ultimately increase the profits earned by the company. High yields attract investors to invest in the company, so the company's probability of experiencing financial distress is getting smaller. This condition follows signaling theory; increasing profitability or ROE value will positively signal investors the company's prospects to continue investing its capital in the company.

The Effect of Debt to Equity Ratio on Financial Distress

Based on table 11, it is known that the debt to equity ratio variable with a regression coefficient of 0.765 and a significance value of 0.005. From the results, it is known that 0.005 < 0.05. With these results, it can be concluded that the debt to equity ratio positively affects financial distress. So, the hypothesis is accepted.

This study shows a significant positive effect which means that the greater the company's funding from debt, the greater the possibility that the company will experience financial distress. It is because the more significant the company's obligation to pay off the debt and the interest on the loan. If this situation is not balanced with good company income, then the company's operational activities will be disrupted where the company's sales decline, which causes the company's profit to decrease. Decreased company profits will force the company to experience higher financial distress.

This condition follows the trade-off theory—the greater the use of debt, the greater the tax savings obtained by the company. However, using more outstanding debt will also impact the company's risk of experiencing financial distress or even bankruptcy. It will reduce the value of the company.

The Effect of Current Ratio on Financial Distress

Based on table 11, it is known that the current ratio variable with a regression coefficient of -0.898 and a significance value of 0.004. From the results, it is known that 0.004 < 0.05. With these results, it can be concluded that the current ratio has a significant negative effect on financial distress. So, the hypothesis is accepted.

This study shows a significant adverse effect which means that the higher the CR value, the less likely the company is to experience financial distress. This result is because the greater the amount of short-term debt of a company that can be repaid by some assets owned by the company, the company's operational activities can run smoothly, and the company's business continuity is not disturbed. So that sales can

increase and company profits also increase. Thus, the possibility of the company experiencing financial distress is getting smaller.

This condition is by signaling theory. The higher the current ratio (CR) value of a company will give a positive signal to investors because the more significant the company's ability to pay off maturing debts with the number of assets owned, the company's operational activities can be run well so that the company's sales increase which has an impact on increasing company profits.

The Effect of Sales Growth on Financial Distress

Based on table 11, it is known that the sales growth variable has a regression coefficient of -0.783 and a significance value of 0.007. From the results, it is known that 0.007 < 0.05. With these results, it can be concluded that sales growth has a significant negative effect on financial distress. So, the hypothesis is accepted.

Companies in good financial condition can reduce the company's potential to experience financial distress. This study shows a significant adverse effect which means that the greater the value of sales growth, it indicates the company has succeeded in carrying out its activities well with the increase in company sales so that the profits earned by the company also increase. The higher the profit earned by the company will impact expanding the company's cash flow, so it will influence the company's sound financial condition.

This condition is by agency theory, and the company's operational activities are the tasks responsible to the agent. If sales growth increases, it shows good agent management in the company that will influence its good financial condition. Thus, the possibility of the company experiencing financial distress will be smaller.

The Effect of Cash Flow from Operations on Financial Distress

Based on table 11, it is known that the cash flow from operations variable with a regression coefficient of -2.033 and a significance value of 0.002. From the results, it is known that 0.002 < 0.05. With these results, it can be concluded that cash flow from operations has a significant negative effect on financial distress. So, the hypothesis is accepted.

This study shows a significant adverse effect. The higher the cash flow from operations (CFFO) value of a company, the smaller the potential for the company to experience financial distress. It means a high operating cash flow. Distress will be minor. Over a long period indicates that the company can pay debts to creditors, which suggests that business continuity in the company will not be disrupted and operational activities run smoothly so that company sales will increase. Company profits will also increase so that the company's potential to experience financial problems will increase.

Financial statements are used to provide confidence to investors that the

company can distribute dividends. This condition follows the signaling theory. A healthy company condition is indicated by an increase in the value of cash flows and profits in a relatively long period. It relates to the distribution of dividends to shareholders.

The Effect of Inflation on Financial Distress

Based on table 11, it is known that the inflation variable with a regression coefficient of -1.726 and a significance value of 0.040. From the results, it is known that 0.040 < 0.05. These results can be concluded that inflation has a significant negative effect on financial distress. So, the hypothesis is accepted.

This study shows a significant adverse effect which means that rising inflation can reduce the company's financial difficulties. Inflation can cause prices to rise; by taking this opportunity, the company must increase the selling price by taking less profit so that the company's production process continues, the company continues to earn profits, and most importantly, when the inflation rate is high, the company does not experience financial distress. In addition, when inflation is high, the company can maintain the stability of its financial performance well so that the company gets profits, and the possibility of the company experiencing financial distress is getting smaller.

This condition does not follow the fisher effect theory, which states that inflation has a significant relationship with interest rates. When there is a one percent increase in the inflation rate, it causes a one percent increase in interest rates. Furthermore, inflation occurs when the money supply in the community increases by five percent. Then the price level will also increase by five percent. This number shows that when inflation rises, the price of goods, in general, will increase. This condition affects the decline in people's purchasing power, which is likely that people prefer to save their money in banks because of high-interest rates. The declining purchasing power of the people impacts the decline in sales and profits obtained by the company. Thus, the possibility of the company experiencing financial distress is higher.

The Effect of BI-Rate on Financial Distress

Based on table 11, it is known that the BI rate variable with a regression coefficient of 0.366 and a significance value of 0.040. From the results, it is known that 0.040 < 0.05. The BI rate has a significant positive effect on financial distress with these results. So, the hypothesis is accepted.

This study shows a significant positive effect which means that the higher the interest rate (BI rate), the greater the possibility that the company will experience financial distress. It means that an increase in interest rates will increase the cost of capital in the form of interest expenses that the company must bear to be greater, so that

company profits can decrease. In this study, the average debt or loan level of a company during the study period was relatively high. Stock returns were more sensitive to changes in interest rates and put the company in a higher financial distress condition. Furthermore, when high-interest rates indicate a high inflation rate which has an impact on increasing production costs and product prices will be more expensive so that people may delay their purchases of housing products and save their funds in banks. This condition follows the fisher effect theory, which states that interest rates significantly correlate with inflation (one-for-one). When there is a one-percent change in interest rates, it will be followed by a one-percent change in the inflation rate. The higher the interest rate indicates a high inflation rate, which impacts increased production costs, and product prices will be more expensive so that people's purchasing power decreases. People may prefer to save their money in banks because of high-interest rates. The declining purchasing power of the people impacts the decline in company sales so that the profits obtained by the company also decrease. Thus, the possibility of the company experiencing financial distress is higher.

The Effect of Exchange Rates on Financial Distress

Based on table 11, it is known that the exchange rate variable with a regression coefficient of 0.141 and a significance value of 0.007. From the results, it is known that 0.007 < 0.05. With these results, the exchange rate has a significant positive effect on financial distress. So, the hypothesis is accepted.

This study shows a significant positive effect which means that the higher the level of exchange rate sensitivity obtained by the company indicates that the company is more sensitive to economic conditions and the more sensitive stock returns are to changes in the exchange rate (exchange rate) which can place the company in financial distress. This result is due to the high exchange rate, indicating the weakening of the rupiah against foreign currencies. The decline of the rupiah exchange rate means that the inflation and interest rates are also high, indicating that the Indonesian economy is unfavorable. Its stability has not been maintained. Investors are not interested in investing in property, real estate, and building construction companies and attract investment so that profits and returns company shares decline.

This condition is in line with the international fisher effect theory, which states that changes in the exchange rates of two currencies are correlated with differences in nominal interest rates between two countries. Differences in inflation rate expectations cause the difference in interest rates between the two countries. This result shows that a high exchange rate weakens the rupiah (domestic) exchange rate. It is due to the high rate of inflation and rising interest rates. When a country's inflation and interest rates increase, the demand for that currency decreases because its exports also fall (due to

higher prices). In addition, consumers and companies in these countries tend to increase their imports.

Therefore, Conditions like this indicate that the Indonesian economy is unfavorable, and its stability has not been maintained. Hence, investors are not interested in investing in property, real estate, and building construction companies, so the company's profits and stock returns decline. Then the possibility of the company experiencing financial distress is higher.

The Effect of Gross Domestic Product on Financial Distress

Based on table 11, it is known that the exchange rate variable with a regression coefficient of 0.093 and a significance value of 0.103. From the results, it is known that 0.103 > 0.05. With these results, it can be concluded that GDP does not affect financial distress. So, the hypothesis is rejected.

The results show that GDP positively affects financial distress, but the effect is insignificant. An insignificant effect may occur because when Indonesia's GDP increases or decreases, it will not affect investors' decisions to invest in property. A positive approach can be interpreted thatThe higher the GDP level of a country, the higher the probability that the company will experience financial distress. Estate and building construction companies. In addition, it is possible that investors are more interested in investing their money in companies that have better prospects in the future and pay higher dividends than property, real estate, and building construction companies.

This condition does not follow the fisher effect theory, which states that when the money supply in the community increases by five percent, the price level will also increase by five percent. The price level, in general, can increase due to inflation which causes an increase in nominal GDP even though the number of goods and services produced does not change. A high level of GDP indicates an increase in people's welfare in the country, which will encourage people to become consumptive. People's purchasing power for goods and services also increases, increasing company sales and impacting company profits. Increased company profits can increase investor confidence to invest in property, real estate, and building construction, increasing share prices and company stock returns. Thus, the potential for companies to experience financial distress is getting smaller.

CONCLUSION

Based on the study results, it can be concluded that ROE, CR, SG, CFFO, and inflation significantly negatively affect financial distress. DER, BI rate, and exchange rate have a significant positive impact on financial distress. Finally, GDP does not have a significant impact on financial distress.

Suggestions from this research are that the company is expected to maximally maintain and increase the company's total assets and good financial condition and improve the company's performance to be in an excellent position to avoid financial distress. Investors are expected to consider the viability of a company before investing and pay attention to management actions to overcome the bad condition of the company by reviewing the steps taken by the company so that investors will not experience losses in the future. Creditors are expected to be more careful and selective in providing credit by considering a company's level of financial distress. The government supervising the company through its regulations is expected to pay more attention to companies experiencing financial difficulties so that bankruptcy does not occur or does not significantly affect the capital market. Further researchers are expected to add other independent variables, develop this research with different models and methods, replace the object of this research with other companies, and add years of investigation to get a clear picture of financial distress.

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