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ANALYSIS OF THE EFFECT OF CORPORATE GOVERNANCE AND MACROECONOMIC FACTORS ON FINANCIAL DISTRESS IN PROPERTY & REAL ESTATE SUB-SECTOR COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE FOR THE 2010-2019 PERIOD

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Abstract: Financial distress is a phase when there is a decline in the financial condition of an entity before the onset of bankruptcy. This study aims to analyze the level of financial distress; analyze the impact of inflation, exchange rates, interest rates and gross domestic product on financial distress. This study uses secondary data based on the financial statements of issuers of the Property & Real Estate sub-sector on the IDX (Indonesian Stock Exchange) for the 2010-2019 periods. Using purposive sampling method in determining the sample according to the criteria used, and obtained a sample of 29 issuers. This study uses the Altman Z-score method as a proxy for the level of financial distress and analyzed using panel data regression with the selection of the best model Fixed Effect Model.

Keywords: : Financial distress, Inflation, Exchange rate, Interest rate, GDP, Panel data regression, Fixed Effect Model.

1. INTRODUCTION

The Property & Real Estate sector is a large sector that has succeeded in absorbing large numbers of workers and providing a multiplier effect on the development of other economic sectors, especially financial products (Hairani, 2020). However, the Property & Real Estate sector is the most vulnerable business sector to changes in economic condi-tions (Marzuki, 2002).

This situation occurs because this sector is the first to feel the impact of fluctuations in interest rates and inflation. This is because this sector has a high leverage ratio because it still relies on conventional funding, namely banking as capital.

Table 1. Banking credit and NPL to the property sector

Year	NPL value (billion rupiah)	Credit (billion rupiah)	NPL Ratio
2011	1,767	116,201	1.52%
2012	2.856	174.709	1.63%
2013	3.477	193.182	1.80%
2014	3,391	165.466	2.05%
2015	4,817	184.755	2.61%
2016	5,470	209,999	2.60%
2017	5,473	221,923	2.47%

2018	4,606	248,218	1.86%
2019	6,190	269,360	2.30%

Based on the Indonesian Banking Statistics data in table 1 shows that the credit position of the property & real estate sub-sector has increased every year which shows the pro-portion of debt as working capital is also increasing. How-ever, this increase is also accompanied by an increase in the value of the NPL which also increases every year. NPL is credit with substandard, doubtful and bad quality. So that if the upward trend is followed by high interest rates, it is cer-tain that the cost of funds will be even greater. This shows that more and more entities are experiencing liquidity prob-lems in this sector.

Plat and Plat (2006) suggest financial distress as a stage of declining financial conditions where this stage occurs before bankruptcy or liquidation. Indications of financial distress in an entity occur when the entity is unable to meet the payment schedule or when cash flow projections predict that the entity will soon be unable to meet its obligations (Brigham and Daves, 2014). Financial distress is an early warning for the entity that the entity's condition is not healthy so that with an early indication, the entity is ex-pected to avoid bankruptcy. Indications of financial distress can also be seen from the declining Earnings Per Share (EPS) value and has a negative value (Whidiari & Merkusiwati; 2015). The following is the average EPS growth of the Property & Real Estate subsector during the 2010-2019 periods.

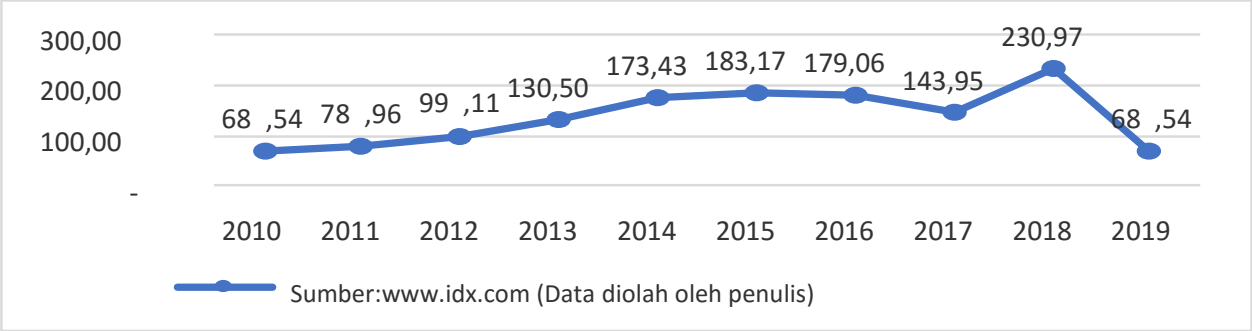

Figure 1. Average EPS growth for the period 2010-2019

The picture above shows that there was a very significant decline in EPS for issuers of the Property & Real Estate sub-sector in 2019. According to cnbc Indonesia (2019), the de-cline was caused by the weakening of people's purchasing power as a result of rising mortgage interest rates. The de-cline resulted in the sales performance of the Property & Re-al Estate sub-sector also declining while the level of financ-ing increased because they had to continue to carry out de-velopment. So that the cash flow that is owned cannot be sufficient for financing and triggers financial distress.

Various approaches are used to predict financial distress, including Altman (1968) predicting financial distress using financial ratios. Rezende et al (2017), mentions that financial distress can also be predicted from the entity's external fac-tors, namely macroeconomic conditions. The external fac-tors referred to are inflation, interest rates, and the deprecia-tion of the rupiah against the dollar (exchange rate). The re-search of Dhiwi Rasa, et al (2021) found that inflation had an effect on financial distress, then the results of Rohiman and Damayanti's (2019) research found that the exchange rate had an effect on financial distress. Afriyeni and Jumyetti (2015) in their research found that inflation has an effect on financial distress. While Santoso,

This study selects the Property & Real Estate sub-sector listed on the Indonesia Stock Exchange as the object to be observed by using the Altman z-score as a proxy to predict financial distress. The observation period was carried out for 10 years from 2010 to 2019. The purpose of this study was to analyze macroeconomic factors that influence the occur-rence of financial distress in property & real estate entities.

2. LITERATUR REVIEW

2.1 Theory Study

Financial distress

Platt & Platt (2006) define financial distress as a condition in which an entity's finances are in an unhealthy state or are in crisis.

Altman Z-score model

The Z-Score method (Altman) (1968) is a method by calcu-lating and combining several entity's financial ratios into a discriminant equation that will produce a certain score that will indicate the level of probability of the entity's bankrupt-cy.

In 1995, the Model B Z-score was developed to predict the occurrence of bankruptcy in a wider type of entity, namely manufacturing, non-manufacturing and bond issuing enti-ties. In this B Z-Score model, the X5 value or the value of sales to total assets is not calculated because this ratio varies greatly in industries with various asset sizes. According to Sihombing (2018) the formula is as follows:

$Z = 6.56\ X1 + 3.26\ X2 + 6.72\ X3 + 1.05\ X4$

Information:

X1= Working Capital / Total assets

X2= Retained earnings / Total assets

X3= EBIT/Total asset ratio

X4= Book Value of equity / Book Value of Total Debt

The classification of healthy and bankrupt entities based on the Z-Score is:

- If the Z value > 2.6, then the entity will not experience failure within one year
- If the value is 2.6 Z 1.1, then the gray area. It is difficult to determine whether the entity will fail or not within one year
- If the Z value < 1.1, the entity will fail within one year.

The higher the Z-score, the smaller the probability of bank-ruptcy

Inflation

Inflation is defined as a condition of rising prices of goods and services in general and continuously in connection with market mechanisms that are influenced by various factors increasing the level of public consumption, excess liquidity in the market that triggers consumption to speculation in-cluding stagnation in the distribution of goods (Sukirno, 2012).

Exchange rate

The exchange rate or exchange rate is the price of the domes-tic currency from foreign (foreign) currencies. An increase in the exchange rate is called depreciation or a reduction in the value of the domestic currency in relation to foreign curren-cies (Selamet, 2010).

Interest Rate

The interest rate is the excess price that must be paid by the debtor beyond the principal value to the creditor for the use of resources during a certain time interval (Fabozzy et al., 1999).

Gross domestic product

The income generated by a country for one year comes from the country's domestic production factors and also foreign production factors currently in the country (Sukirno, 2012).

2.2 Research Hypothesis

Inflation on financial distress

Inflation is an important indicator to determine economic conditions, considering that inflation will certainly have an impact on national prices of goods. The impact of inflation depends on the level of inflation that occurs. Lower inflation will encourage the economy to be better. When national in-come increases, people are motivated to save and make long-term investments. On the other hand, high or pro-longed inflation causes the economy to deteriorate. A drastic increase in prices will weaken people's purchasing power while the price of goods will increase. Rising prices with declining purchasing power conditions resulted in de-creased sales volume. The decline in sales ultimately affects the entity's profit which may remain in profit but with a de-creased percentage, In Dewi Rasa's research (2021), inflation has a negative effect on financial distress. Then Raditya's research (2020) states that inflation has an effect on financial distress.

H1 = Inflation is thought to have a negative effect on the z-score (positive effect on financial distress).

Exchange rate against financial distress

The exchange rate reflects the price or value of one coun-try's currency expressed in terms of another country's cur-rency value. Exchange rate fluctuations are the impact of the revaluation of foreign exchange rates on the entity's finan-cial exchange rate within a certain period. Conditions when the foreign economy strengthens will cause the domestic exchange rate to weaken or depreciate in value. The depreci-ation in the value of the rupiah caused the price of imported goods to rise accompanied by an increase in transaction costs which also increased, as well as an increase in the val-ue of foreign debts that must be paid. This condition defi-nitely disturbs the entity's performance because it can re-duce the entity's operating profit margin while the entity is not easy to increase the price of goods to cover losses from the increase in the entity's operating costs.

The results of Sabrina's research (2019), found that the ex-change rate partially had a significant effect on financial distress.

H2 = Exchange rate is thought to have a negative effect on the z-score value (positive effect on financial distress).

Interest rates on financial distress

BI interest rate instability will have an impact on changes in BI interest rates on company finances within a certain period. The increase in interest rates makes the cost of capi-tal higher because the interest expense also increases. The increased cost of capital affects the operating costs of the entity and results in a decrease in profits or losses for the entity. An entity can experience financial distress if it con-tinues to suffer losses to the point of having difficulty paying loan interest.

Dony's research (2020) states that interest rates have a positive effect on financial distress.

H3 = Interest rates are suspected to have a negative effect on the z-score value (a positive effect on financial distress)

Gross Domestic Product on financial distress

Gross domestic product is a measure of the income growth of a country's population as reflected by an increase in people's purchasing power in the form of an increase in the level of consumption of the products produced by the entity. The higher the gross domestic product, the higher the circulation of the entity's business, on the contrary, the low gross domestic product can result in losses and financial distress to the entity.

Research conducted by Dony (2020), that gross domestic product shows a negative influence on financial distress. Likewise, research conducted by Raditya (2020), the results of the study show that Gross Domestic Product has a nega-tive effect on financial distress,

Based on the description above, the authors formulate the following hypothesis:

H4 = Gross Domestic Product has a positive effect on the z-score value (negative effect on financial distress)

3 RESEARCH METHODS

This type of research is quantitative research with a causal approach. The research data is secondary data obtained from the Indonesia Stock Exchange in the form of entity annual reports, and data from Bank Indonesia publications as well as data from the Central Statistics Agency for data on inflation, exchange rates, interest rates, and gross domestic product. The research population is property & real estate issuers listed on the IDX. The sampling method uses a purposive sampling method with the criteria not being registered or not being delisted in the 2010-2019 period, the entity issues a complete financial report during the research period. The numbers of samples that meet the criteria are 29 entities.

Table 2. Definition of Operational Variables

Variable	Measurement	Data source
Inflation (X1)	monthly average inflation	*www.bi.go.id*
Exchange Rate (X2)	the average BI middle rate against the US Dollar	*www.bi.go.id*
Interest rate (X3)	average monthly interest rate	*www.bi.go.id*
Gross Domestic Product (X4)	quarterly average GDP	www.bps.go.id
Financial Distress(Altman Z-Score) (Y)	Z = 6.56X1 + 3.26X2 + 6.72X3 + 1.05X4 X1 =*Working Capital/ Total Asset* X2= Retained Earnings/Total Asset X3 = EBIT/Total Asset X4 = Book Value of Equity/ Total Debt	Entity audit financial statements

The research model is written as follows:

Yit = + 1INFit + 2ERit + 3IRit + 4GDPit + it.

Data analysis was carried out descriptively and inferentially. Inferential analysis using panel data regression approach. There are three stages to determine the selected model, namely the common effect model, fixed effect model, and random effect model. Selection of the best model using the Chow test, Hausman test, and the Lagrange multiplier test. Furthermore, the selected model will be tested for suitability based on the F test and the value of the coefficient of determination. The effect of the independent variable on the dependent variable is based on the value of the regression coefficient and t test.

4 RESULTS AND DISCUSSION

4.1 Descriptive Analysis

Descriptive analysis describes the value of each variable owned by the entity by taking the mean value from 2010 to 2019. Descriptive analysis is carried out on the dependent and independent variables of 29 property & real estate entities.

Table 3. Descriptive Statistics

Descr.Sta	*score(Y)*	*Inflation (INF)*	*Exchange Rate (ER)*	*Interest Rate (IR)*	*GDP*
Minimum	-14.28	3.03	8,352.91	4.56	6,864.13

Maximum	123.51	6.97	10,703.06	7.54	15,833.94
Mean	5.96	4.81	9,860.80	6.17	11,161.75
Median	4.49	4.71	9,980.20	6.24	11,048.02
Stand.Dev	9.43	1.37	710.29	0.91	3,016.88

In accordance with the descriptive statistics in table 3 that the lowest value of z-score of -14.28 is owned by PT. Bhua-wanalata Indah Permai Tbk (BIPP) in 2011. This means that BIPP has a high potential to experience financial distress. The distress zone condition is because the entity faces signif-icant losses. The main cause of losses comes from interest expense on loans and foreign exchange losses. This condi-tion resulted in short-term liabilities exceeding current as-sets in a significant amount. The viability of the entity is strongly influenced by the entity's ability to manage suffi-cient cash flows to finance future operations.

The highest z-score value of 123.51 was owned by Pikko Land Development Tbk (RODA) in 2010, this means that RODA is in a safe zone condition because the RODA value is 123.51 > 1.1 and has the lowest potential to experience fi-nancial distress. . In 2010 RODA had a higher equity value than total liabilities so that RODA had a high book value of equity to book value of debt (BVEBVD).

The average z-score for all Property & Real Estate entities during the 2010-2019 period is 5.96 with a median of 4.49, standard deviation of 9.43. The mean value is higher than the cut-off value (5.96 >1.1). It can be concluded that the Property & Real Estate sub-sector as a whole is not experi-encing financial distress.

The average inflation in the study period was 4.81% with the highest value of 6.97% in 2013, the lowest value of 3.03% in 2019 and the standard deviation of 1.37%. The average value of inflation shows that during the study period Indo-nesia was considered mild inflation because it was below 10%. This means that inflation occurs because price increases in general can still be controlled and have not disrupted the economy which could end in an economic crisis. Inflation greatly affects the purchasing power of the people. That's because every up and down will have a direct impact on the selling/buying price. Inflation affects the increase in production costs, and labor costs for the entity. Both costs are the main cost components that determine the entity's net income.

The average exchange rate of the rupiah against the dollar during the study period was at 9,860.80 rupiah per US dol-lar, the highest exchange rate was at 10,703 per US dollar which occurred in 2014, then the lowest exchange rate was at 8,353 rupiah per US dollar in 2010 The standard deviation of 710.89 describes fluctuations in the rupiah exchange rate against the US dollar, including low during the study period.

The conversion value of the rupiah to the US dollar shows fluctuations throughout the 2010-2019 period. A weakening exchange rate will have a negative impact on entities, especially entities with imported raw materials. In this case, the value of rupiah needed as a conversion of payments in US dollars becomes higher. In addition, it will have an impact on the entity's rate of return, especially for entities with for-eign bank loans in dollars (Suyati, 2015). Foreign bank loans are still one of the main sources of working capital for prop-erty and real estate issuers. If the rupiah shows high volatili-ty and depreciates sharply, property and real estate issuers are likely to suffer losses. This happens because the income received is denominated in rupiah,

The higher the exchange rate of the rupiah against the dollar, the less efficient the entity is in operating its business. The negative impact due to exchange rate fluctuations can trigger financial distress.

The highest BI interest rate occurred in 2014 reaching 7.54%. The lowest BI interest rate reached 4.56% in 2017. The average BI interest rate during the study period was 6.17% with a standard deviation of 0.91%.

The condition of the high BI interest rate in 2014 was the impact of China's economic slowdown crisis which resulted in a global economic slowdown. Then in 2016-2017, Bank Indonesia carried out a gradual reduction in the BI interest rate to trigger economic growth and the real sector due to the global economic slowdown. In 20182019, BI's interest rate increased again due to conditions of uncertainty in the glob-al economy that were still high. The increase in the BI inter-est rate has a negative impact on entities because the finan-cial sector is becoming more careful in extending its credit, as a result, in addition to having difficulty obtaining funding, high interest rates result in higher loan interest expenses.

The average gross domestic product during the period of this study was 11,161.75 with the highest GDP level of 15,833.94 in 2019, the lowest value of the GDP level was 6,864.13 in 2010. The standard deviation of the GDP level was 3,016.88.

During the period 2010-2019, the level of GDP moved up every year. An increase in the level of GDP means that the Indonesian economy is experiencing growth, on the other hand, a decrease in the level of GDP indicates that consump-tion, investment, government spending, and net exports have decreased, accompanied by a decrease in the produc-tion of goods and services. Conditions when Gross Domestic Product (GDP) moves downward or when real economic growth is negative for two or more quarters in one year, eco-nomic instability will occur. Economic instability can trigger financial distress conditions for the entity.

4.2 Results of selecting the best model

Table 1 Selected the best model

Best Model Test	Probability Value	Hypothesis Results
Chow test	0.0000 < 0.05	*H_0 is rejected, then FEM*
Hausman test	0.0000 > 0.05	*H_0 is accepted, then FEM*

In determining the chosen model between the Common Effect Model and the Fixed Effect Model, the Chow test is carried out. The results of the Chow test show that F probability < 0.05 then H_0 is rejected, which means that the selected model is the Fixed Effect Model. Furthermore, to determine the selected model between the Fixed Effect Model and the Random Effect Model, the Hausman test was carried out and the results displayed the Hausman statistic set to zero. That is, there is no random effect so that the Hausman test results are declared invalid. Therefore, the determination of the selected model is considered based on the highest R-square adjusted of the three models, so that the Fixed Effect Model is determined as the selected model (Santosa et al, 2020).

Dependent Variable: Y
Method: Panel Least Squares
Date: 05/29/22 Time: 20:14
Sample: 2010 2019
Periods included: 10
Cross-sections included: 29
Total panel (balanced) observations: 290

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	125.9352	70.44785	1.787637	0.0750
INF	-0.047454	0.784838	-0.060463	0.9518
ER	-24.31639	12.78459	-1.902007	0.0583
IR	0.261623	0.906827	0.288504	0.7732
GDP	6.311784	4.098615	1.539980	0.1248

Figure 2. Fixed Effect Model

From the table above, the panel data regression equation is:

Y = 125.9352 + -0.047454INF + - 24.31639ER + 0.261623IR + 6.311784GDP

The panel data regression equation can be concluded that:

1. The constant coefficient value is 125.9352, meaning that if the inflation variable (INF), exchange rate (ER), inter-est rate (IR) and GDP (GDP) are zero, then the z-score (Y) value is 125.9352.
2. The inflation variable regression coefficient (INF) of -0.047454 is negative, meaning that if the inflation variable (INF) decreases by 1 unit, the z-score (Y) value will decrease by -0.047454 units.
3. The regression coefficient value of the exchange rate variable (ER) of -24,31639 is negative, meaning that if the exchange rate variable (ER) decreases by 1 unit, the z-score (Y) value will decrease by -24,31639 units.
4. The regression coefficient value of the BI interest rate variable (IR) of 0.261623 is positive, meaning that if the BI interest rate variable (IR) increases by 1 unit, the z-score (Y) value will increase by 0.261623 units.
5. The regression coefficient value of the GDP (GDP) variable of 6.311784 is positive, meaning that if the GDP (GDP) vari-able increases by 1 unit, the z-score (Y) value will increase by 6.311784 units.

R-squared	0.343155	Mean dependent var	5.957034
Adjusted R-squared	0.261369	S.D. dependent var	9.425433
S.E. of regression	8.100563	Akaike info criterion	7.128525
Sum squared resid	16864.11	Schwarz criterion	7.546133
Log likelihood	-1000.636	Hannan-Quinn criter.	7.295840
F-statistic	4.195757	Durbin-Watson stat	1.122234
Prob(F-statistic)	0.000000		

4.3 Hypothesis Test

Figure.3 Koefisien Determinant

Simultaneous Significance Test (F)

The figure above shows the Fcount value of 4.195757. The Ftable value is obtained using a significance level of 0.05 with a df1 value of 5 – 1 = 4 and a df2 value of 290 – 4 – 1 = 285, so the Ftable value is 2.403431. This shows that the val-ue of Fcount > Ftable is 4.195757 > 2.403431 and the signifi-cance value is less than 0.05. Thus H0 is rejected and H0 is accepted. This means that the variables of inflation, ex-change rates, interest rates and GDP together have an effect on financial distress in the Property & Real Estate sub-sector entities in the 2010-2019 periods.

The Fixed Effect Model was chosen as the best model with an R-squared of 34.31%. That is, this value indicates that the variables of inflation, exchange rates, interest rates, and GDP have an influence of 34.31% on financial distress. The remaining 65.69% is influenced by other variables not tested in this study.

Hypothesis Test (T)

From the result above, it can be seen that the results of hy-pothesis testing (t-test) were obtained by comparing the val-ue of tcount with ttable. Where the df value is 285 (df = nk = 290-5), then the ttable value is 1.650218. From these tests, the following results were obtained:

1. The inflation variable (INF) has a tcount of -0.060463 < 1.650218 and the prob value is obtained. Inflation is 0.9518 > 0.05, then H0 is accepted, which means that the inflation variable partially has no effect

on financial distress in the Property & Real Estate sector throughout 2010 to 2019. So it can be concluded that the H1 hypothesis in this study is re-jected.

2. The exchange rate variable (ER) has tcount -1.902007 < 1.650218 and the prob value is obtained. the exchange rate of 0.0582 = 0.05, then H0 is accepted, which means that the exchange rate variable partially has a negative effect on fi-nancial distress in the Property & Real Estate sub-sector throughout 2010 to 2019, so the hypothesis H2 in this study is accepted.

3. The interest rate variable (IR) has tcount 0.288504 < 1.650218 and the prob value is obtained. interest rate of 0.7732 > 0.05 then H0 is accepted which means that the in-terest rate variable partially has no effect on financial dis-tress in the Property & Real Estate sub-sector throughout 2010 to 2019, so the H3 hypothesis in this study is rejected.

4. The gross domestic product (GDP) variable has a tcount of 1.539980 < 1.650218 and the prob value is obtained. gross domestic product of 0.1247 > 0.05 then H0 is accepted which means that the gross domestic product variable partially has no effect on financial distress in the Property & Real Estate sub-sector throughout 2010 to 2019, so the hypothesis H4 in this study is rejected.

4.3 Discussion

The effect of inflation on financial distress

The initial hypothesis (H1) proposed in this study is that inflation is thought to have a negative effect on the zscore or a positive effect on financial distress in the Property & Real Estate sub-sector in 2010-2019. However, according to the results of the study, it was found that inflation has no effect on the value of financial distress, which means H1 is reject-ed.

The basic reason that inflation has no effect on financial distress in the Property & Real Estate sector in 20102019 is that inflation in Indonesia is categorized as low inflation.

In the 2010-2019 research period, the inflation rate in In-donesia is in the range of 3.03% to 6.97% with an average of 4.81%. This inflation rate includes mild inflation because it is below 10%. Experts agree that the positive impact of infla-tion will be maximized if the achievement of a low inflation rate is achieved. The positive impact is in the form of en-couraging the economy to grow better, thereby increasing national income, and developing public interest in invest-ing. Therefore, not all inflation has a negative impact on the economy but there is also a positive impact on the economy is low inflation.

The movement of the rising inflation rate allows financial distress in the Property & Real Estate sector to increase or vice versa, but the increase in inflation is still not significant, this is because the increase in inflation can still be sup-pressed by the monetary policy issued by Bank Indonesia. One of Bank Indonesia's efforts to reduce inflation is to lower interest rates. In addition, the majority of entities currently have implemented fundamental policies in their manage-ment policies as a form of anticipation in adjusting to eco-nomic conditions.

The results of this study are in line with Alfiah & Musdholi-fah (2018), Sheila & Hartono (2019), Kurniasanti & Musdholifah (2019) which state that inflation has no effect on financial distress of entities.

The effect of exchange rate on financial distress

The hypothesis stated at the beginning (H2) in this study is that the exchange rate has a negative effect on the zscore value or a positive effect on financial distress in the Property & Real Estate sector in 2010-2019. And based on the results of the study, it was found that the exchange rate had a nega-tive effect on the value of financial distress, which means H2 is accepted.

In 2014 became the highest point of depreciation of the rupiah exchange rate. This is due to global uncertainty as a result of fiscal tightening and problems in determining the US debt ceiling as well as uncertainties in

Europe's economic recov-ery in 2013 (Rohiman & Damayanti, 2019). This deprecia-tion then led to an increase in foreign capital outflows on the Indonesian financial market which caused entities in Indo-nesia to be short of capital to expand their business.

On July 1, 2015, Bank Indonesia has enacted Bank Indo-nesia Regulation no. 17/3/PBI/2015 dated March 31, 2015 regarding the obligation to use the rupiah currency in trans-actions in Indonesia. This is intended so that the value of the rupiah will strengthen further with more stable macroeco-nomic conditions. The large use of the US dollar resulted in a high demand for that currency so that the rupiah depreci-ated even more.

However, this policy has a negative impact on the entity, because receivables previously denominated in foreign cur-rencies must depreciate in value upon receipt of payment. Then the receipts must be used again to pay foreign currency debts. As a result, there is a loss on the sale/purchase trans-action of the foreign currency conversion. The depreciation of the rupiah also resulted in an increase in raw material prices where the increase could not be offset by an increase in selling prices. This increase results in higher production costs which can erode the entity's profit and can also cause losses that trigger financial distress conditions.

The results of this study support the results of other research conducted by Rohiman & Damayanti (2019) which states that the exchange rate has an effect on financial distress in entities.

The effect of interest rates on financial distress

The initial hypothesis (H3) proposed in this study is that interest rates have a negative effect on the z-score value or a positive effect on financial distress in the Property & Real Estate sector in 2010-2019. However, according to the results of the study, it was found that interest rates had no effect on the value of financial distress, which means H3 was reject-ed.

The reason for this hypothetical discrepancy is because interest rates also affect inflation. An increase in inflation will cause an increase in interest rates and the bank will of-fer a higher interest rate to anticipate the inflation risk. As a result, banks will be more selective in lending their funds to entities and entities will find it difficult to obtain funding which can disrupt liquidity.

The average inflation rate in Indonesia in the research range is below 10%, which is categorized as a mild inflation rate. In 2016-2017, Bank Indonesia carried out a gradual re-duction in the BI interest rate to spur economic growth and the real sector due to the global slowdown in China's eco-nomic slowdown that occurred in October 2015.

The conclusion from the results of this study is that interest rates do not have a positive and significant effect because during the study period, the Indonesian economy was in a normal state.

The results of this study are supported by previous research, namely Muwidha, et al (2020) that the level of debt owned by the entity is not at an alarming level so that the interest expense paid has not resulted in entity losses. Likewise, the results of research by Rohiman & Damayanti (2019), Darmawan (2017), Sheila & Hartono (2020) that interest rates have no effect on financial distress in entities.

Effect of GDP on financial distress

The first hypothesis (H4) proposed in this study is that GDP has a positive effect on the z-score value or has a nega-tive effect on financial distress in the Property & Real Estate sector in 2010-2019. And based on the results of the study, it was concluded that GDP has no effect on financial distress, which means H4 is rejected.

The GDP that occurred in Indonesia in 2010 moved up every year until 2019. This means that during 2010 to 2019 the Indonesian economy was in an improving condition every year so as to minimize the occurrence of financial dis-tress conditions in entities. On the other hand, when PBD decreases, it affects the productivity of the entity and triggers payment difficulties, thereby increasing the possibility of financial distress.

The results of this study are in line with the results of previ-ous studies, namely Santosa, et al (2020) that GDP as an in-dicator of community welfare is marked by an increase in purchasing power so that the level of consumption of entity products becomes higher. This has a positive effect on the entity because it will be accompanied by an increase in the entity's profit and avoid financial distress.

5. CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the results of research and discussion in previ-ous chapters, it can be concluded that as follows:

1. Inflation has no effect on financial distress in 2010-2019.
2. The exchange rate has a negative and significant effect on financial distress in 2010-2019.
3. Interest rates have no effect on financial distress in 2010-2019.
4. GDP has no effect on financial distress in 2010-2019.

Theoretical Suggestions

It is recommended for further researchers to be able to add other macroeconomic variables such as the money supply (money supply), world oil prices, or other external factors that are relevant and affect financial distress such as good corporate governance (GCG), entity size, and are expected to use Other research objects are not only limited to the Proper-ty & Real Estate sector listed on the Indonesia Stock Ex-change. So that the results of further research can be used in general and widely.

Practical Advice

1. For Entity Management

It is important for the management to make the z-score or other financial distress calculation proxies as one of the benchmarks to maintain and improve the health condition of the entity. This is an anticipatory measure against the possibility of financial distress and bankruptcy so as to achieve long-term business continuity. Apart from the finan-cial ratio factor, the rupiah exchange rate is also important to take into account because it is a macroeconomic factor that has a significant effect on the possibility of financial distress conditions.

2. For Investors

Based on the results of this study, all entities that were sampled in the study were in a healthy condition (not distressed) so that the results of this study could be used as a material for consideration by investors/potential investors in making decisions to invest in property & real estate sub-sector entities. However, apart from that, investors/potential investors also need to ensure that the economic condition is in a healthy and good condition because fluctuations in the rupiah exchange rate greatly affect the condition of the occurrence of financial distress in the entity.

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