

Determination of Financial Performance on Prediction Financial Distress

Mia Laksmiwati ^a, Agoestina Mappadang ^{a*}, Amir Indrabudiman ^a
and Vindari Gita Riza ^a

^a *Fakultas Ekonomi dan Bisnis, Universitas Budi Luhur, Jakarta, Indonesia.*

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJEBA/2021/v21i2230523

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/82372>

Original Research Article

Received 18 October 2021
Accepted 20 December 2021
Published 22 December 2021

ABSTRACT

Aims: This study aims to empirically test the effect of Current Ratio (CR), Debt to Equity Ratio (DER), Total Assets Turnover (TATO) and Return on Assets (ROA) on Financial Distress using the Altman Z-Score method. This analysis uses independent variables, there are CR, DER, TATO and ROA with dependent variable is Financial Distress (FD).

Study Design: Design study is quantitative research and using statistical analysis.

Place and duration of Study: The research population and sample used is a public company in the property and real estate sub sector on the Indonesia Stock Exchange for the 2016-2020 period which was taken through the iwebsite www.idx.co.id

Methodology: The sample was conducted using purposive sampling method, amount 38 companies. The statistical method used is multiple linear regression analysis with its test hypothesis testing.

Result: The results of this study indicate that the total asset turnover ratio and return on asset have a positive, current ratio has a negative effect on financial distress and significant effect and debt equity ratio has no effect on Financial distress (FD).

Contribution: This study contributes for investors can find out information about the company's financial condition as a consideration in making investment decisions and bankruptcy theory analysis helps companies to be better prepared and more quickly detect potential financial difficulties that they may face. In this way, a solution can be found immediately.

*Corresponding author: E-mail: agustina.mappadang@budiluhur.ac.id;

Keywords: Current ratio; debt to equity ratio; total assets turnover; return on assets; financial distress.

1. INTRODUCTION

The Covid-19 pandemic, which is currently engulfing almost the entire world, has stopped a number of industrial, manufacturing and service sectors in Indonesia. It has hit Indonesia for almost 2 years since the government confirmed the first corona infection in Indonesia on March 2, 2020. Not only did but, pandemic covid-19 create a public health crisis, it had a real impact on national economic activity. Operational activities in almost all companies, both manufacturing and non-industrial, manufacturing and services, are reduced or minimized in order to break the chain of the spread of Covid-19. The Government's decision to implement Large-Scale Social Restrictions (PSBB) since April 2020 has had a broad impact on the production process, distribution and other operational activities which ultimately disrupted economic performance. The PSBB policy to prevent the spread of the Covid-19 pandemic causes limited mobility and community activities which have an impact on decreasing domestic demand. People's purchasing power fell mainly due to reduced income as well as limited activities. In the midst of all the uncertainty, people, especially the upper middle class, put the brakes on buying goods that are considered non-essential. The declining income of the people due to the pandemic caused most of the business sectors to reduce their activities or close completely, and the unemployment rate increased. The Indonesian economy in 2020 is estimated to grow negatively. Unemployment and poverty rates are increasing [1].

The Central Statistics Agency (BPS) report that Indonesia's economic growth in the second quarter of 2020 was minus 5.32 percent. Previously, in the first quarter of 2020, BPS reported that Indonesia's economic growth only grew by 2.97 percent, down far from growth of 5.02 percent in the same period in 2019. The inhibition of economic activity automatically makes business factors perform inefficiency to reduce losses. As a result, many workers are laid off or even laid off (PHK). Based on data from the Ministry of Manpower (Kemnaker) as of April 7, 2020, due to the Covid-19 pandemic, there were 39,977 companies in the formal sector that chose to lay off and lay off their workers [2].

Almost all sectors are affected, not only health. The economic sector has also been seriously affected by the coronavirus pandemic. Restrictions on community activities affect business activities which then have an impact on the economy. One of the companies that suffered the worst impact was a company in the property and real estate sector. The property industry is said to be one of the most affected by the COVID-19 outbreak. Not only sales are expected to stagnate, but also the risk of bad credit from debtors [3]. Based on an article in www.kontan.co.id that took data from the Central Statistics Agency (BPS), in the last 5 years, the real estate sector contributed an average of 2.82% to economic growth. In detail, in 2016, the field real estate business contributed to the economic growth of 2.83%. This business field also managed to grow 4.69% yoy or higher than the growth in 2015 which was 4.11%. Then, in 2017, this business field contributed to growth of 2.81% with a record sector growth of 3.6% yoy or decreased from growth in 2016. Meanwhile in 2018, real estate contributed 2.74% with growth slumping again to 3.48% yoy. Only, in 2019, this sector managed to grow up to 5.76% yoy with a contribution to economic growth of 2.78%. Unfortunately, this growth had to stop and even real estate business growth fell to 2.32% yoy due to the Covid-19 pandemic that hit. With this growth, its contribution to economic growth in 2020 is 2.94%.

Although still showing positive and better performance than several other industrial sectors that experienced negative performance, the growth of the real estate industry in 2020 was still smaller than the growth in 2019 and previous years. Apart from the spread of Covid-19 cases in the world which has caused the world economy to weaken, the profit level of the property and real estate sub-sector companies has decreased quite drastically in the last two years. The phenomenon of declining profits can cause symptoms of financial distress in the future. Fitch Ratings has revised the ratings of a number of companies operating in the property and real estate sector that have been impacted by the COVID-19 outbreak [3]. The rating downgrade is based on high liquidity pressures and difficulties in paying debts that have the potential for bankruptcy.

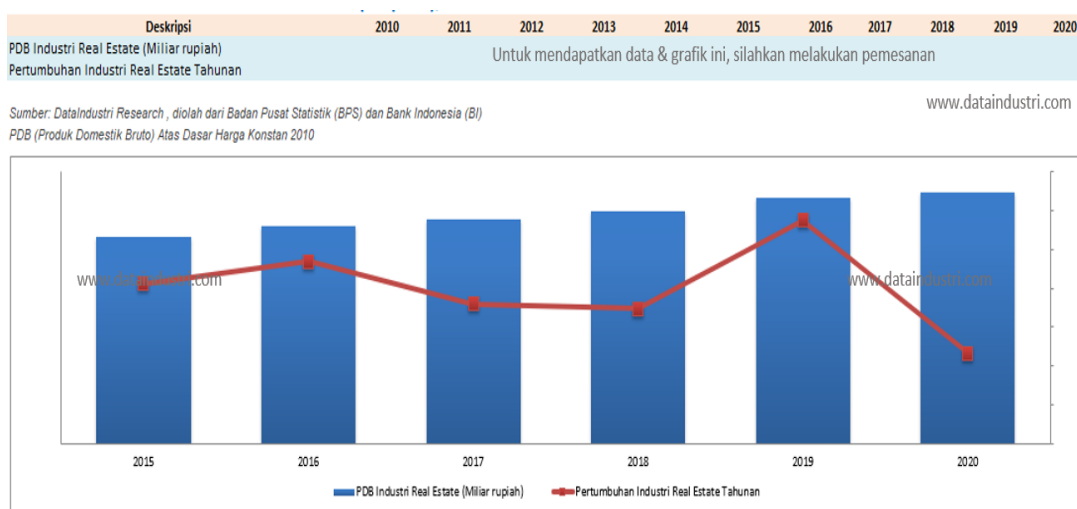


Fig. 1. Contribution economic growth

Source: Data industry

Financial distress is a condition in which a company experiences a crisis or a decline in financial condition prior to bankruptcy which causes difficulties in fulfilling its obligations. It can occur if the company's liquidity is small or low so it is unable to meet its debts. Financial Distress can be predicted using various methods, one of which is Altman Z-Score, measures or predicts potential bankruptcy of a company in the future, which will come.

The Altman Z-score model, measuring bankruptcy from its financial statements, was first proposed by Edward I in 1968. This method is often used to measure the performance of a company because it is very easy to implement, namely by analyzing financial ratios and can provide a level of accuracy, predictions up to 95 percent [4].

The ratios used in predicting the company's financial condition are ratio of liquidity, solvency, activity and profitability. The liquidity ratio shows the company's ability to pay its short-term debts, formulated by CR. The solvency ratio is proxied by DER to measure the ability of equity to guarantee all its obligations at maturity. Syuhada et al [5] in their research said CR has positive effect, DAR, NPM, cash flow and company size have a negative effect, TATO has no effect in determining the possibility of FD conditions. Hidayat et al. [6] research show that CR and DER have positive effect, ROA have a negative effect, while operating cash flow has no effect on FD conditions. However, Ardi [7] show that there is no effect between DTA and ROA on FD, but there is a negative effect of CR.

The third financial ratio, the activity ratio with the TATO proxy, measures the effectiveness of managing assets owned in order to generate income. The last financial ratio is the profitability ratio, proxied by ROA, in order to measure the ability to generate profits through assets owned by the company. Putri and Ardini [8] show that ROE and DTA have a significant effect, while CR and firm size do not have a significant effect on FD. Yuliani and Sulpadli [9] ROA and DTA have a significant negative effect, CR has no effect on FD. Simanjuntak et al. [10] states that leverage ratio has a positive effect and TATO has a negative effect, while CR, ROA and growth ratio have no effect on prediction of FD.

The inconsistency of these results encourages research related to the effect of financial performance on FD conditions. Next, to find out whether there is and how much influence CR, DER, TATO and ROA have on FD. The subject of research on public companies in the property and real estate sub-sector on IDX, which is currently experiencing a decline in performance, is feared to experience financial difficulties. With the bankruptcy analysis, it is hoped that there will be an early warning system, so that a solution can be immediately found to overcome it so that the company does not go bankrupt.

1.1 Signal Theory

Signal theory is a theory used to provide signals or cues of management's success or failure to investors or shareholders and creditors in a company. According to Conelly et al. [12] signal

theory is a theory that brings together the party who conveys the information to be shown to the party receiving the information in determining and knowing the purpose of the information obtained. Wolk et al. [13] explain the reasons why companies have the urge to provide signals or information on the company's financial statements to outsiders. The reason is because there is information asymmetry between companies that have more information than outsiders.

1.2 Financial Distress

Financial Distress is a condition in which the company experiences financial difficulties so that the company experiences a crisis which results in the company being unable to fulfill its obligations. A crisis or a decline in financial conditions prior to bankruptcy, makes it difficult for the company to fulfill its obligations, Prihadi [14]. Many company get a corporate failure risk nowadays [15]. Financial distress can occur if the company's liquidity is low or low so that the company is unable to meet its obligations. Several factors of FD can occur, both general factors, internal factors and external factors. Internal factors can trigger FD are the amount of the company's debt burden and current assets that are not sufficient to pay off debts, losses in operational activities and the inaccuracy of decisions and policies taken by company leaders in the past. Meanwhile, the external factor is one of the factors with a much wider scope. External factors that cause FD can be in the form of government policies, can increase operating burden. One of the government policies in question is the policy of increasing credit interest rates and will cause an increase in the company's interest expense. Financial distress can occur because management unable to manage and maintain the stability of financial performance. A negative growth of sales, it will have an impact on declining profits, even a decrease in sales can allow the icompany to experience ioperating losses and net losses in the current year period.

1.3 Altman Z-Score Bankruptcy Prediction Model

In analyzing the level of corporate bankruptcy, Altman Z-Score is one method that is often used in predicting the level of bankruptcy, is developed by Dr. Edward I. Altman in 1968 which is a multivariate analysis that is quite well known and became a pioneer in its era [16]. This

research using a Altman method than another method such as Springate because Altman method is quite precision to measure the financial distress.

The Altman Z-Score formula used is a formula that is considered very flexible because it can be used for various types of company business fields and is suitable for use in developing countries such as Indonesia [17]. According to Prihadi [14] this model is a Modified Altman model consisting of:

$$iZ\text{-Score} = 6,56 \text{ WC to TA} + 3,26 \text{ RE to TA} + 6,72 \text{ EBIT to TA} + 1,05 \text{ MVE to BVD}$$

With the discrimination zones as follows:

- 1) If the Z-Score > 2.60: a healthy condition.
- 2) If $1.10 < \text{Z-Score} < 2.60$: is in the igrey area
- 3) If the Z-Score < 1.10: an unhealthy condition.

1.4 Current Ratio

CR, measure the ability to pay off short-term debt using current assets. The better ability to pay can be seen from the higher CR. Waitherero et al. [18] show that on the other hand, the smaller the CR, the worse the company's ability to pay its obligations. Shidiq and Khairunnisa [19] Stephanie et al. [20] Fitri and Syamwil [21,22], show a positive influence between CR and FD. This means that the higher the CR, the more funds that settle in current assets so that they do not generate income. This can result in the company experiencing financial difficulties. Gunawan et al. [23] shows a negative effect between the CR and FD. Two studies above, it can be explained that the lower CR, the greater possibility will experience FD.

1.5 Debt to Equity Ratio

DER, is a measure to meet obligations using company equity. This ratio predicts how much of each company's equity is used as collateral for its debts, both short-term debt and long-term debt. A high DER level indicates the greater the potential risk that will be faced by the company due to the increasing fixed burden. This ratio provides information about the credit wealth and financial risk of the company to investors, Liviani and Rachman [24]. In the research Damajanti et al. [25] and Asfali [26] prove that the DER has a positive effect on FD, every time there is an increase in company's DER, it will cause FD. Dillak [27] stated that in partial testing, DER had a significant effect, meanwhile, operating cash flow, sales growth partially have no significant effect on the occurrence of FD.

1.6 Total Assets Turnover

TATO is used to measure the effectiveness and ability of companies to turn over their assets. This ratio is an overall measure of the TATO in order to generate income. Higher TATO, is better because it shows the more effective and efficient management assets. This is reflected in the higher level of company revenue or sales. Wardani et al. [28] suggests that TATO has a negative effect on FD. This means that higher TATO, smaller risk of FD. Meanwhile, Oktariyani's research [29] shows that TATO, EBIT, Depreciation, and Amortization partially affect FD.

1.7 Return On Assets

iROA measure the effectiveness and ability in generating net income from the company's total assets, Tosin and Otonne [30]. This ratio is to see the extent to which the investment that has been invested is able to provide a return of profit as expected. The company will try to make this ratio bigger so that the company avoids potential financial difficulties, Tharu and Shrestha [31]. In research conducted by Rizaky and Dillak [27] it shows that ROA partially has a positive effect on FD. The higher ROA, the possibility of FD as well, will increase. While As Sidiq and Amanah [19] suggest that ROA partially has a negative effect on FD. That is, higher ROA, the lower the possibility of FD.

1.8 Framework Research

The framework aims to make it easier to understand the purpose of the research. The research subjects are property and real estate sub-sector public companies listed on the IDX for the 2016-2020 period. Independent variables : CR, DER, TATO and ROA, dependent variable (bound) Altman Z-Score to detect FD.

1.9 Hypothesis Development

CR shows the ability to fund operations and pay off the company's short-term obligations. The higher the CR, the better the company's ability to pay its obligations with current assets. Conversely, the smaller the CR, the company's ability to pay its obligations with current assets is getting worse. If the company is able to finance and pay off its short-term obligations properly, the potential for the company to experience FD will be smaller. This is in line with research

conducted by Stephanie et al. [20] which states that the CR has a positive effect on FD.

H1: CR has an effect on FD

DER is used to measure the company's ability to pay short-term and long-term debt. If the composition of the capital structure uses debt, there is a risk that payment difficulties will occur in the future. If this situation cannot be handled properly, the potential for FD will be even greater. Conversely, the smaller the DER, the smaller the risk of loss that will be faced by the company. This is in line with research conducted by Rizaky and Dillak [27] suggesting that the DER has a positive and significant effect on FD.

H2: DER has an effect on FD.

TATO to measure the effectiveness and ability of the company in managing its assets. If the assets are not managed optimally, it will increase the operating costs and reduce the profit generated by the company. On the other hand, if assets are managed efficiently and effectively, they will generate sales that are able to provide maximum profit. This is in line with the research of Damajanti et al. ([25] resulted in TATO significantly affect FD.

H3 : TATO has an effect on FD.

ROA measures the effectiveness and ability of the company in generating net income from the assets owned by the company. The higher ROA, the better the company's ability to earn profits, the lower the possibility of FD in the company. Meanwhile, the smaller the ROA value, the worse the company's ability, unable to optimize its assets to generate profits so that profitability decreases and the possibility of FD is greater. This is in line with Asfali's research which states [32] that ROA has a positive and significant effect on FD.

H4 : ROA has an effect on FD.

2. MATERIALS AND METHODS

This research is a descriptive and quantitative research using secondary data, namely the company's financial statements. This research method describes a symptom, an event that occurs at the present time or an actual problem, and seeks to describe the solution to existing problems based on the data, by presenting, analyzing and interpreting it.

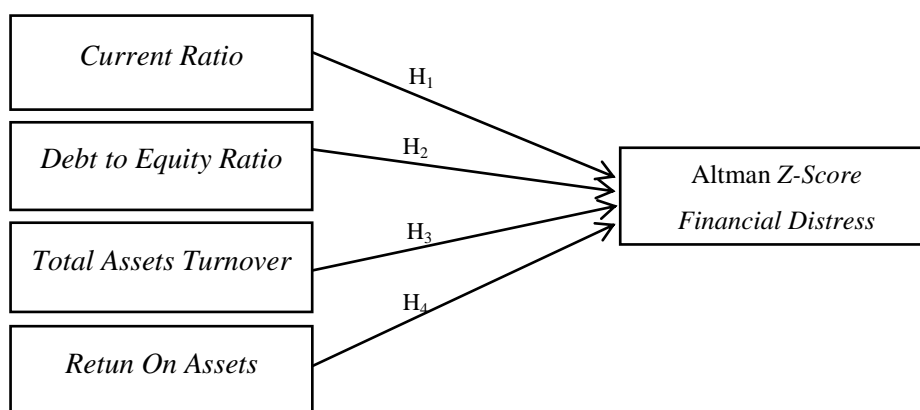


Image 1. Framework Research

2.1 Population and Sample

The research population is 65 public companies in the property and real estate sub-sector on IDX for the 2016-2020 period. The sampling technique is purposive sampling, with the criteria of companies that regularly publish annual financial reports in the 2016-2020 period and have conducted IPOs before 2016, found 38 companies.

2.2 Data Analysis Methods

The research uses quantitative data analysis methods. Processing of data with statistical methods based on secondary data from financial statements. The advantages of this method can provide more measurable and comprehensive conclusions. Statistical processed data using a SPSS software.

2.3 Research Model

The analysis tools are classical assumption test and multiple linear regression equation model to test the relationship between the independent variables CR, DER, TATO and ROA on dependent variable Altman Z Score - FD. The research model is formulated:

$$\text{Altman Z Score (FD)} = a + b_1 \text{ CR} + b_2 \text{ DER} + b_3 \text{ TATO} + b_4 \text{ ROA} + e$$

3. RESULT AND DISCUSSION

3.1 Classic Assumption Test

3.1.1 Linearity test

Linearity test, sig. > 0.05, namely CR of 0.586, DER, TATO of 0.194 and ROA of 0.256, then the

relationship between CR, TATO and ROA with Altman Z-Score is linear. While the value of the sig DER is 0.000, the relationship is not linear.

3.1.2 Normality test

Test of Normality with Kolmogorov Smirnov, sig. > 0.05 at CR of 0.056, DER of 0.106, TATO of 0.200 and ROA of 0.200, the data is normally distributed.

3.1.3 Multicollinearity test

The tolerance value for each variable > 0.01 is CR of 0.842, DER of 0.856, TATO of 0.617 and ROA of 0.625. While the VIF value for each variable < 10, namely the CR of 1.187, DER of 1.169, TATO of 1.622 and ROA of 1.600, then the data is free from problems. multicollinearity.

3.1.4 Heteroscedasticity test

The white test has an r square value of 0.369 > 0.05. If measured by comparing the calculated Chi Square value with the Chi Square table value, it is 36.9 < 123.2252, so that the data in the model does not occur heteroscedasticity.

3.1.5 Autocorrelation test

The autocorrelation test using the Cochrane Orcutt method resulted in a DW value of 1.886. By looking at the DW criteria, the values obtained are: $0 < dL < DW < dU < 4dU < 4dL$ or $0 < 1.61306 < 1.73643 < 1.886 < 2.26357 < 2.38694$. This means that there is no autocorrelation either positive or negative, the model is free from autocorrelation.

3.2 Correlation Analysis

Based on Table 1, the significant values of all the independent variables CR, DER, TATO and ROA are less than 0.05, meaning that all variables have a strong relationship significant with FD. CR, TATO and ROA have a positive relationship direction, if the value of these three variables increases, the Altman Z Score also

increases so that the potential for FD is smaller. On the other hand, the more DER, the direction of the relationship is negative, so the higher the DER, the smaller the Altman Z Score, the greater the potential for FD.

3.3 Multiple Linear Regression Analysis

Table 2, there is one eliminated variable: DER

Table 1. Correlations

		Ln_Z-Score	Ln_CR	Ln_DER	Ln_TATO	Ln_ROA
Pearson Correlation	Ln_Z-Score	1.000	.438	-.246	.490	.437
	Ln_CR	.438	1.000	-.341	.199	.170
	Ln_DER	-.246	-.341	1.000	.015	-.126
	Ln_TATO	.490	.199	.015	1.000	.597
	Ln_ROA	.437	.170	-.126	.597	1.000
Sig. (1-tailed)	Ln_Z-Score	.	.000	.007	.000	.000
	Ln_CR	.000	.	.000	.024	.046
	Ln_DER	.007	.000	.	.441	.106
	Ln_TATO	.000	.024	.441	.	.000
	Ln_ROA	.000	.046	.106	.000	.
N	Ln_Z-Score	99	99	99	99	99
	Ln_CR	99	99	99	99	99
	Ln_DER	99	99	99	99	99
	Ln_TATO	99	99	99	99	99
	Ln_ROA	99	99	99	99	99

Source: IBM SPSS Statistics 22 . Output Results

Table 2. Elimination of free variables backward elimination method variables entered/removed^a

Model	Variables Entered	Variables Removed	Method
1	Ln_ROA, Ln_DER, Ln_CR, Ln_TATO ^b	.	Enter
2	.	Ln_DER	Backward (criterion: Probability of F-to-remove >= .100).

Source: IBM SPSS Statistics 22 . Output Results

Table 3. Multiple linear regression analysis test results backward elimination method

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.523	.314		8.046	.000
	Ln_CR	.465	.135	.300	3.450	.001
	Ln_DER	-.155	.106	-.127	-1.466	.146
	Ln_TATO	1.377	.426	.329	3.233	.002
	Ln_ROA	.280	.163	.173	1.715	.090
2	(Constant)	2.526	.315		8.009	.000
	Ln_CR	.533	.127	.344	4.190	.000
	Ln_TATO	1.275	.423	.304	3.015	.003
	Ln_ROA	.317	.162	.196	1.956	.053

Source: IBM SPSS Statistics 22 . Output Results

Altman Z-Score = $2,526 + 0,533 \text{ Ln_CR} + 1,275 \text{ Ln_TATO} + 0,317 \text{ Ln_ROA}$

a. The constant value is 2.526, if CR, TATO and ROA do not change or are constant, then Altman Z-Score value is 2.523. This figure is smaller than 2.60, so it is located in the grey area, there is potential for FD, but tends to be healthy, because > 2.60 is categorized as healthy, in other words, the probability of bankruptcy is small.

b. The regression coefficient value of CR is 0.533, if CR increases by 1 unit, Altman Z-Score will increase by 0.533. Positive coefficient, indicating the greater CR, the greater Altman Z-Score which indicates the possibility of FD conditions will be lower.

c. The regression coefficient value of TATO is 1.275, if TATO increases by 1 unit, Altman Z-Score will increase by 1.275. The positive coefficient indicates that the greater TATO value, greater Altman Z-Score value, so probability of facing FD is lower.

d. The value of the ROA regression coefficient is 0.317, if ROA increases by 1 unit, Altman Z-Score will increase by 0.317. The positive coefficient indicates that the greater ROA, the greater Altman Z-Score value and the lower probability will experience FD.

3.4 Coefficient of Determination Test

Based on model 2 in table 4, the Adjusted R Square value is 0.367, indicating that FD is influenced by the CR, DER, TATO and ROA of 36.7%. The remaining 63.3% is influenced by other variables. The larger the size of the company, the capital structure tends to be funded by debt, which has a fixed burden. This can increase the potential risk of FD if it is not managed optimally.

3.5 F Test (Model Feasibility Test)

It can be seen in model 2 in table 5, the calculated F value is greater than the F table value, which is $19.919 > 2.467$, it can be concluded that CR, DER, TATO and ROA simultaneously affect the Altman Z-Score value.

3.6 T test (Partial)

It can be seen in model 2 in table 6, t-count value $>$ from t-table value, namely: CR $4.190 > 1.66105$, TATO $3.015 > 1.66105$ and ROA 1.956

> 1.66105 , concluded CR, TATO and ROA have a partially significant effect, while DER has no effect on Altman Z-Score.

3.7 Interpretation of Research Results

CR has a negative effect on FD. The higher CR value, Altman Z-Score value increases so that possibility of FD will decrease or be low. The magnitude of the CR indicates that the company's financial position is in a healthy condition because it is able to pay its short-term debt. A healthy company will give trust and positive hope to stakeholders, because optimal company operational activities will promise high profit potential, so that FD conditions will be lower. This is in accordance with the research of Stephanie et al. [20,33] CR has a negative effect on FD. A high current ratio indicates that the company's profitability is in good condition and liquidity is maintained. The statistical data shows that the company has an average ratio of above 100% above current liabilities. With maintained liquidity, the company is able to pay off debts that mature in less than a year. The existence of timely payments will keep the company's operations running well. Companies can move to increase revenue and this has an impact on increasing revenue so that it will minimize losses. If the company is able to make a profit, the possibility of the company being included in the category of financial distress decreases.

DER has no effect on FD. This means financial difficulties are not affected by DER. Stakeholders are more concerned about in generating profits that can provide added value for the company. The level of DER as long as it is managed properly will be able to provide returns as expected by stakeholders. In accordance with Ardi's research the results [34] show no effect between DTA and ROA on FD. However, it is not in line with Rizaky and Dillak [20] who argue that the DER has a positive and effect on FD. Leverage in this case indicates that the company is still in the growing category. So that the debt used by the company for working capital in both large and small nominal amounts, as long as the debt is used for productive debt, it will not affect the company towards financial distress. The company is on an uphill curve and needs debt to expand its business. The debt ratio is still in a controlled position and debt is used to finance businesses, be it investment, strengthen products either through a strong marketing network and distribution and expanded market share.

Table 4. Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.632 ^a	.400	.374	.62115	
2	.621 ^b	.386	.367	.62489	1.214

Source: IBM SPSS Statistics 22 . Output Results

Table 5. ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.163	4	6.041	15.657	.000 ^b
	Residual	36.267	94	.386		
	Total	60.430	98			
2	Regression	23.334	3	7.778	19.919	.000 ^c
	Residual	37.096	95	.390		
	Total	60.430	98			

Source: IBM SPSS Statistics 22 . Output Results

Table 6. T test (Partial)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.523	.314		8.046	.000
	Ln_CR	-.465	.135	-.300	3.450	.001
	Ln_DER	-.155	.106	-.127	-1.466	.146
	Ln_TATO	1.377	.426	.329	3.233	.002
	Ln_ROA	-.280	.163	-.173	1.715	.090
2	(Constant)	2.526	.315		8.009	.000
	Ln_CR	-.533	.127	-.344	4.190	.000
	Ln_TATO	1.275	.423	.304	3.015	.003
	Ln_ROA	-.317	.162	-.196	1.956	.053

Source: IBM SPSS Statistics 22 . Output Results

TATO has a positive effect on FD. An increase in TATO will have an impact on increasing Altman Z Score, so that the potential for financial difficulties will be smaller. TATO fluctuations will result in significant changes to the company's financial condition. The amount of TATO indicates that the company can generate a large level of sales. This shows the company is able to increase efficiency in generating large sales and potentially increasing profits. The increase in profit will reduce the potential for financial difficulties. The results are consistent with Damajanti et al. (2021) which suggests that TATO has a significant effect on FD. The asset turnover carried out by the company in this study if it is not used properly it will lead to financial distress. Assets that are no longer productive as well as productive assets that are used are very material for the company because revolving assets must really be measured when they can become liquid so that the company's liquidity is maintained continuously. Slow asset turnover

will hinder the company in creating income and ultimately have an impact on the risk of financial distress.

ROA has a negative impact on FD. The increase in ROA gives a signal about the ability to earn high profits so that the Z-Score Altman value is also lower, the further away from FD. Conversely, the lower it is, the higher the potential for bankruptcy. This result is in accordance with Asfali's that ROA has a positive [35] effect on FD. The return on assets indicator in this study shows that the better of ROA, then the smaller of financial distress. The company's ability to generate profits by using the existing total assets will make the company stronger and have the resources to maximize profits. The company is able to increase revenue, make efficiency and also invest for business development so that profits increase. A significant increase in profit for several periods will make the company have enough profit and

have an impact on decreasing financial distress risk.

4. CONCLUSION

This research concludes that Total asset on turn over ratio (TATO) has a positive effect on financial distress (FD), current ratio (CR) and return on assets (ROA) have a negative effect on financial distress (FD) but debt to equity ratio (DER) has no effect on financial distress (FD) with the Altman Z-Score method.

Besides for implication consist of First, companies can increase the company's assets and rely more on operational funding from equity than from debt because the potential risk is lower. However, if funding from equity is insufficient so it must be taken from debt sources, it must conduct an analysis of capital structure optimization to determine an efficient composition of funds. Second, this is very important so that it does not become a permanent burden in the future which can lead to financial difficulties. Third, the results of this study can provide an understanding of financial distress conditions for both internal and external parties of the company in order to help make the right decisions. Bankruptcy theory analysis helps companies to be better prepared and more quickly detect potential financial difficulties that they may face. In this way, a solution can be found immediately. Investors can find out information about the company's financial condition as a consideration in making investment decisions. Fourth, financial distress will cause macro effects due to unemployment so that it can increase the inflation

The limitation of this research is that it only uses financial performance variables and does not use macroeconomic variables such as inflation, interest rates and exchange rates. The behavioral variables of consumers who switch to digital are not examined in this study. The limitations of this research are also in terms of the number of samples that only take from the property and real estate sectors.

DISCLAIMER

The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an

avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

ACKNOWLEDGEMENT

The author would like to thank those who have helped in this research.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Available: <https://kompaspedia.kompas.id>, accessed 27 Januari 2021
2. Available: www.kompas.com accessed 11 Agustus 2020
3. Available: www.market.bisnis.com accessed 10 April 2021
4. Sari NR, Hasbiyadi, Arif MF. Mendeteksi Financial Distress dengan Model Altman Z- Score. *Jurnal Ilmiah Akuntansi dan Humanika*. 2020;10(1) ISSN: 2599-2651, 93–102. DOI: <http://dx.doi.org/10.23887/jiah.v10i1.23102>
5. Syuhada P, Muda I, Rujiman. Pengaruh Kinerja Keuangan dan Ukuran Perusahaan Terhadap Financial Distress pada Perusahaan Property dan Real Estate di Bursa Efek Indonesia, *Jurnal Riset Akuntansi Dan Keuangan*. 2020;8(2):319-336 . Online ISSN: 2541-061X. Print ISSN: 2338-1507 DOI: 10.17509/jrak.v8i2.22684
6. Hidayat T, Permatasari MD, Suhamdeni T. Analisis Pengaruh Rasio Keuangan Terhadap Kondisi Financial Distress Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia , *Jurnal Akuntansi Bisnis Pelita Bangsa*. 2020;5(2):93-108. DOI: <https://doi.org/10.37366/akubis.v5i02.156>
7. Ardi MFS, Desmintari, Yetty F. (Analisis Pengaruh Kinerja Keuangan Terhadap Financial Distress Pada Perusahaan Tekstil dan Garment Di BEI. *Jurnal Ilmiah Akuntansi Kesatuan*. 2020;8(3)L309-318 IBI Kesatuan ISSN 2337 – 7852 E-ISSN 2721 - 3048

8. Putri D, Ardini L. Pengaruh Kinerja Keuangan Dan Ukuran Perusahaan Terhadap Financial Distress, Jurnal Ilmu dan Riset Akuntansi e-ISSN : 2460-0585. 2020;9:6.
9. Yuliani M, Sulpadli. Pengaruh Kinerja Keuangan Terhadap Kondisi Financial Distress Pada Perusahaan Telekomunikasi di Bursa Efek Indonesia. CAM JOURNAL (e-ISSN 2621-0975) (p-ISSN 2622-3856) Change Agent For Management Journal (CAM). 2020;4(2):30-43 30, Available:<http://jurnal.stiemtanjungredeb.ac.id/index.php/camjournal> DOI : 10.35915/cj.v4i2.50
10. Simanjuntak CEB, Krist FT, Aminah W. Pengaruh Rasio Keuangan Terhadap Financial Distress (Studi Pada Perusahaan Transportasi yang Terdaftar di Bursa Efek Indonesia Periode 2011-2015) ISSN : 2355-9357 e-Proceeding of Management. 2017;4(2):1580-1587. Available:<https://openlibrarypublications.telkomuniversity.ac.id>
12. Conelly BI, Certo DT, Ireland RD, Reutzel CR. Signaling Theory: A Review and Assessment. Journal of Management. 2017;37(1):39-67.
13. Wolk HI, Tearney MG, Dodd JL. Accounting Theory: A Conceptual and Institutional Approach. South-Western College Publishing; 2017.
14. Prihadi T. Analisis Laporan Keuangan: Teori dan Aplikasi. Jakarta: PPM; 2020.
15. Tsagkanos GA, Georgopoulos A, Koumanakos D, Koumanakos E. Corporate Failure Risk Assessment of Greek Companies", International Journal of Risk Assessment and Management. 2008;9, Nos. ½:5 – 14.
16. Hanafi M, Halim A. Analisis Laporan Keuangan. Edisi Kelima. Yogyakarta: UPP STIM YKTM; 2016.
17. Setyaningrum KD, Atahau ADR, Sakti IM. Analisis Z-Score Dalam Mengukur Kinerja Keuangan untuk Memprediksi Kebangkrutan Perusahaan Manufaktur Pada Masa Pandemi Covid-19. Jurnal Riset Akuntansi Politala e-ISSN: 2656-7652. 2020;3(2):74-87 p-ISSN: 2715-4610 Available:<http://jra.politala.ac.id/index.php/JRA/index>. DOI: <https://doi.org/10.34128/jra.v3i2.62>
18. Waitherero KF, Muchina S, Macharia, S. The Role of Liquidity Risk in Augmenting Firm Value: Lessons from Savings and Credit Cooperatives in Kenya. International Journal of Financial, Accounting, and Management (IJFAM) ISSN: 2656-3355. 2020;2(4):295-304. Retrieved:<https://doi.org/10.35912/ijfam.v2i4.340>
19. As Sidiq YM, Amanah L. Pengaruh Profitabilitas, Likuiditas Dan Leverage Terhadap Financial Distress. Jurnal Ilmu dan Riset Akuntansi (JIRA). 2019;8 (10):1-19. Available:<http://jurnalmahasiswa.stiesia.ac.id/index.php/jira/article/view/2681/2690>
20. Stephanie, Lindawati, Suyanni, Christine, Oknesta E, Afiezan A. Pengaruh Likuiditas, Leverage dan Ukuran Perusahaan terhadap Financial Distress pada Perusahaan Properti dan Perumahan. Journal of Economic, Business and Accounting. 2020;3 (2):300-310. DOI: <https://doi.org/10.31539/costing.v3i2.1122>
21. Fitri R, Syamwil. Pengaruh Likuiditas, Aktivitas, Profitabilitas dan Leverage Terhadap Financial Distress (Studi Kasus pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2014-2018). Journal Ecogen. 2020;3(1): 134-143. DOI: <http://dx.doi.org/10.24036/jmpe.v3i1.8532>
22. Fitri MA, Dillak VJ. Arus Kas Operasi, Leverage, Sales Growth Terhadap Financial Distress. Jurnal Riset Akuntansi Kontemporer. 2020;12(2):Hal. 60-64 ISSN 2088-5091 (print) 2597-6826 (online) DOI: <http://dx.doi.org/10.23969/jrak.v12i2.3039>
23. Gunawan J, Funny, Marcella C, Evelyn, Sitorus JS. Pengaruh CR. (Current Ratio), DER (Debt to Equity Ratio), EPS (Earning Per Share) dan Financial Distress (Altman Score) Terhadap Harga Saham Pada Perusahaan Sektor Industri Dasar dan Kimia Yang Terdaftar Di Bursa Efek Indonesia. Owner Riset & Jurnal Akuntansi. 2020;4(1):1-15. DOI:<https://doi.org/10.33395/owner.v4i1.176>
24. Liviani R, Rachman YT. The Influence of Leverage, Sales Growth, and Dividend Policy on Company Value, International Journal of Financial, Accounting, and Management (IJFAM) ISSN 2656-3355. 20210;3(2):165-178 .

- Available:<https://doi.org/10.35912/ijfam.v3i2.189>
25. Damajanti A, Wulandari H, Rosyati. Pengaruh Rasio Keuangan Terhadap Financial Distress Pada Perusahaan Sektor Perdagangan Eceran Di Bursa Efek Indonesia Tahun 2015-2018. *Majalah Ilmiah Fakultas Ekonommi Universitas Semarang*. 2021;19 (1):29-44. DOI: <http://dx.doi.org/10.26623/slsi.v19i1.2998>
 26. Asfali I. Pengaruh Profitabilitas, Likuiditas, Leverage, Aktivitas, Pertumbuhann Penjualan Terhadap Financial Distress Perusahaan Kimia. *Jurnall Ekonomi dan Manajemen*. 2019;20 (2):56-66. Available:<http://ejournal.unigamalang.ac.id/index.php/JEM/article/view/365>
 27. Rizaky ZA, Dillak VJ. Pengaruh Rasio Likuiditas, Solvabilitas Dan Profitabilitas, dan Umur Perusahaan Terhadap Kondisi Financial Distress (Studi Pada Perusahaan Pertambangan di Sub Sektor Pertambangan Batu Bara yang Terdaftar Di Bursa Efek Indonesia Periode 2015-2018). *eProceedings of Management*. 2020;7(2):3210-3219. Available:<https://openlibrarypublications.telkomuniversity.ac.id/index.php/management/article/view/13379/12947>
 28. Wardani DK, Primastiwi A, Meganingrum AS. Pengaruh Rasio Profitabilitas Dan Rasio Aktivitas Terhadap Financial Distress Dengan Tax Avoidance Sebagai Variabel Moderasi. *Media Akuntansi Perpajakan*. 2020;5(2):48-61. Retrieved from <http://journal.uta45jakarta.ac.id/index.php/ MAP/article/view/4363>
 29. Oktariyani A. Analisis Pengaruh Current Ratio, DER, TATO dan EBITDA Terhadap Kondisi Financial Distress Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia. *Jurnal Akuntansi dan Manajemen*. 2019;14(1):Hal. 111-125. ISSN 2657-1080 ISSN 1858-3687. Retrieved from DOI: <https://doi.org/10.30630/jam.v14i1.89>
 30. Tosin IO, Otonne A. A Comparative Analysis Of The Determinants Of Profitability Of Commercial And Microfinance Banks In Nigeria. *International Journal of Financial Accounting and Management (IJFAM)*, ISSN: 2656-3355. 2020;1(3):173-182. Retrieved:<https://doi.org/10.35912/ijfam.v1i3.135>
 31. Tharu NK, Shrestha YM. The Influence Of Bank Size On Profitability: An Application Of Statistics. *International Journal of Financial, Accounting, and Management (IJFAM)* ISSN: 2656-3355. 2019;1(2):81-89. Retrieved:<https://doi.org/10.35912/ijfam.v1i2.82>
 32. Siddiq JI, Khairunnisa. Analisis Rasio Likuiditas, Rasio Leverage, Rasio Aktivitas, Dan Rasio Pertumbuhan Terhadap Financial Distress Menggunakan Metode Altman Z-Score Pada Sub Sektor Tekstil Dan Garmen Di BEI Periode 2013-2017. *Jurnal Ilmiah Manajemen*. 2019;7 (2): 209-219. DOI:<https://doi.org/10.33884/jimupb.v7i2.1229>
 33. Available: www.idx.co.id , accessed, 21 April 2021
 34. Available: www.kontan.co.id accessed 2 Maret 2021
 35. Available:<https://www.dataindustri.com/produk/tren-data-pertumbuhan-industri-real-estate-properti-2010-2021> accessed 11 April 2021

© 2021 Laksmiwati et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/82372>