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THE EFFECT OF LIQUIDITY, LEVERAGE AND COMPANY VALUE ON Z-SCORE VALUE AS A PREDICTION OF FINANCIAL DISTRESS

(Case Study of Companies in the Hotel Restaurant and Tourism Sector Listed on the Indonesia Stock Exchange for the 2016-2020 Period)

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ABSTRACT

This study aims to determine the effect of liquidity, leverage and firm value on the Z-score as a predictor of financial distress. The pollution in this study is that there are 9 companies in the hotel, restaurant and tourism sectors listed on the Indonesia Stock Exchange in 2016-2020 according to the characteristics determined by the researchers. Sample selection using saturated sample method and obtained 9 companies. The data collection method uses data triagulation, using the company's annual financial report data obtained from the Indonesia Stock Exchange (IDX) website and each company's website. This research method is causality with data analysis method using panel data regression analysis. The selected model is the fixed effect model. The results show that liquidity has a positive and significant effect on the Z-score value as a predictor of financial distress, while leverage and firm value have no effect on the Z-score as a predictor of financial distress in companies in the hotel, restaurant and tourism sectors listed on the Indonesia Stock Exchange in 2016 -2020.

KEYWORDS: ***liquidity, leverage, firm value, Z-score, financial distress***

INTRODUCTION

Indonesia as an archipelagic country that is blessed with thousands of natural beauties can certainly be used as a tourist destination for both foreign and domestic tourists. Companies in Indonesia engaged in the hotel, restaurant and tourism sector are sectors that have great potential to support the country's economy. At the end of 2019, when the COVID-19 outbreak began to appear in China, companies in the hotel, restaurant and tourism sector received a serious impact, as well as in Indonesia. On January 30 2020, COVID-19 was declared a Public Health Emergency of International Concern (PHEIC). On March 11, 2020 in Indonesia, COVID-19 was declared a pandemic. The Chamber of Commerce and Industry (Kadin) noted that in 2020 this sector experienced losses of up to IDR 10 trillion (Bisnis.com 2021).

From a financial management point of view, of course the impact of losses on the hotel, restaurant and tourism sector in Indonesia can cause financial losses and companies can experience symptoms of financial distress. This can be seen from the movement of the average Z-score (as a predictor of financial distress) of companies in the hotel, restaurant and tourism sectors in Indonesia which were listed on the Indonesia Stock Exchange for 2016-2020 which is presented in Figure 1.1 below.

Figure 1.2 The average value of the Z-Score for the hotel, restaurant and tourism sector listed on the Indonesia Stock Exchange in 2016-2020
Source: IDX processed data, 2021

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Based on figure 1.2, the average Z-score appears to have decreased from 2016 to 2020. The sharpest decline occurred in 2019 to 2020, this was due to the COVID-19 pandemic case. Financial distress is at least able to give an idea of the condition of a company that is in a healthy condition or is experiencing potential bankruptcy. The reason for choosing the Y variable is based on the average Z-score as a predictor of financial distress in the hotel, restaurant and tourism sector on the Indonesia Stock Exchange in 2016-2020 which has decreased from 2016 to 2020 which is a problem in this study. The independent variables in this study are liquidity, leverage and firm value, which correspond to the factors that affect financial distress and are also reinforced by several research results that have not been consistent so that research gaps emerge from each research variable.

The research results for the variable liquidity on financial distress have been carried out by several previous researchers, with inconsistent results, liquidity has a significant positive effect on financial distress, carried out by; ginting (2017) and liquidity has no effect on financial distress examined by; Erayati (2019)., Indriani (2019) and Pulungan (2017). The effect of leverage on financial distress has been carried out by several previous researchers, along with leverage having a significant positive effect on financial distress, carried out by; Fadilla and dillak (2019)., Asfali (2019)., Pulungan, et al (2017). Furthermore, leverage has a significant negative effect on financial distress, carried out by; Makkulau (2020)., Indriani and Mildawati (2019)., Zannati and Dewi (2019)., Murni (2018)., Ginting (2017). Lastly, leverage has no effect on financial distress examined by; Erayanti (2019). The effect of company value on financial distress until this research was conducted, researchers had not found articles related to this matter.

Based on the background above, the formulation of the problem in this study is whether partially liquidity, leverage and firm value affect the Z-score as a predictor of financial distress in companies in the hotel, restaurant and tourism sectors listed on the Indonesia Stock Exchange in 2016-2020 ? Furthermore, the purpose of this study was to determine and partially analyze the effect of liquidity, leverage and firm value on the Z-score as a predictor of financial distress in companies in the hotel, restaurant and tourism subsectors listed on the Indonesia Stock Exchange in the 2016-2020 period.

The contribution of this research is that it can be useful both practically and theoretically. Practical contribution to companies in the hotel, restaurant and tourism sector, this research can be used as material for consideration by management in making decisions so that the company's financial performance avoids financial distress. For investors, the hotel, restaurant and tourism sector, this research can be used as information in analyzing their investments. Theoretical contributions are intended for future researchers, the results of this study can be used as reference material for future researchers.

THEORY REVIEW

Signaling Theory

Signaling theory emphasizes the importance of the information disclosed by the company when presented as a consideration for external party investment decisions. According to Spence (1973) in Brigham and Houston (2019), signaling theory or signaling theory is an action taken by company management that provides signals or instructions for investors regarding how management views the company's performance and prospects. This theory explains how companies give signals to users of financial statements. Information obtained from a company's financial statements is used as a signal to investors and is used to make investment decisions. If related to this research, the signal theory explains that if the financial condition and prospects of the company are good, the manager gives a signal by holding liberal accounting. Conversely, if the company is in a state of financial distress and has poor prospects, the manager gives a signal, which is used to provide signals to managers about good and bad information for the company so that a manager can take action or quick steps in solving problems, especially financial difficulties. financial distress) that arise in a company.

Financial Distress

Financial distress or financial difficulties is the company's inability to pay off its financial obligations at maturity which results in company bankruptcy (Beaver, 2011). The occurrence of symptoms of financial distress in companies can be caused by internal and external factors. From the company's internal factors include; Inefficient management will cause continuous losses which in the end cause the company to be unable to pay off its obligations. Imbalance in the capital owned by the amount of debt owned. Very large debt causes large interest payments so that it reduces profits and can cause losses. Very large debts can also be detrimental because idle assets do not generate income. The presence of fraud committed by company management can lead to bankruptcy. This dishonesty can take the form of corrupt management or sharing wrong data with shareholders or investors.

Furthermore, from the company's external factors that can give rise to symptoms of financial distress for the company, among others; Changing replacement financial capabilities can lead to reduced or even lost

customers. The existence of raw materials is increasingly difficult due to the scarcity of raw materials from suppliers. The debtor factor must also be anticipated in order to protect the debtor from committing fraud by avoiding debt. Disharmonious relationship with debt collectors. The condition of increasingly stringent business competition requires companies to be better so that they can compete with other companies in fulfilling customer desires. Increasingly advanced economic growth must be anticipated by the company.

Z-Score analysis

There has been a lot of research that explains the phenomenon of bankruptcy. Edward I Altman (1968) was one of the early researchers who carried out the research. The research that Altman tried gave birth to a method called the Z-Score. Z-Score analysis is a method for calculating the bankruptcy of a company by combining several common financial ratios and giving different weights to one another. In this study using a modified Altman model (III). The Z-Score formula of the modified Altman model (III) is considered a very flexible formula because it can be applied in various types of company business fields and can be used in developing countries such as Indonesia:

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

Where capital X1 is net working capital obtained from current assets minus current liabilities, X2 is retained earnings to total retained earnings assets, namely profits that are not distributed to shareholders. The greater this ratio, the greater the unhealthy share of the company's finances. X3 is earnings before interest and tax on total assets and X4 is the book value of Equity to the book value of total debt. The markers for a healthy and bankrupt company are based on the Z-Score. If the Z index value is <1.1, the company is predicted to go bankrupt. If the index value is $1.1 < Z'' < 2.6$ then it is included in the gray area (the company is predicted to face financial problems and has the potential to go bankrupt). If the index value Z "> 2.6, it is a company that is not bankrupt.

According to Endri (2009) based on the Z Score method, to improve a company's financial performance, management must be able to increase networking capital by increasing current assets which can simultaneously increase company liquidity. Increasing the company's profit apart from increasing the company's income, can be done through the efficiency of the company's operational costs.

Hypothesis Development and Conceptual Framework

Hipotesis merupakan dugaan sementara terhadap kasus yang akan diuji kebenarannya melalui analisis data yang relevan dan kebenarannya akan diketahui sesudah dilakukan penelitian, maka hipotesis dalam penelitian sebagai berikut:

The Effect Of Liquidity on the value of the Z-Score as a predictor of financial distress

The liquidity variable that is proxied by the current ratio is a ratio that measures a company's ability to pay short-term or prepaid obligations. The higher the value of the current ratio, the more capable the company is of meeting its short-term obligations. (Kasmir, 2016). A high current ratio indicates that the company is in a liquid state, liquid companies are more attractive to investors. If more and more investors are interested in buying company shares, the company's stock price will rise and the return on company shares will also increase. In accordance with the results of Ginting's research (2019) that liquidity has a positive and significant effect on the Z-Score value as a predictor of financial distress, hypothesis 1 of this study is:
H1: liquidity has a positive effect on the value of the Z-Score as a predictor of financial distress

The effect of leverage on the value of the Z-Score as a predictor of financial distress

The leverage variable proxied by the Debt to equity ratio according to Kasmir (2016) is the ratio used to assess debt to equity. This ratio is useful for knowing the amount of funds provided by borrowers (creditors) with company owners or to find out the amount of rupiah own capital used as collateral for debt. This ratio also provides a general indication of a company's financial viability and risk. According to the results of research from Fadilla and dillak (2019)., Asfali (2019)., Pulungan, et al (2017) that leverage has a positive and significant effect on the Z-Score value as a predictor of financial distress, then hypothesis 2 of this study is:
H2: leverage has a positive effect on the value of the Z-Score as a predictor of financial distress

The effect of firm value on the value of the Z-Score as a predictor of financial distress

The company value variable is proxied by the stock return ratio where according to Samsul (2016), stock return is income expressed as a percentage of the initial investment capital. The goal of investors in

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investing is to maximize returns, without forgetting the factors. According to (Jogiyanto, 2014) quoted from Mufid (2020) high stock returns indicate good financial performance. So the rate of return invested by investors will be higher. High stock returns can show that the company is safe or avoids symptoms of financial distress. Based on the description above, hypothesis 3 of this study is:
H3: Firm value has a positive effect on the Z-Score value as a predictor of financial distress.

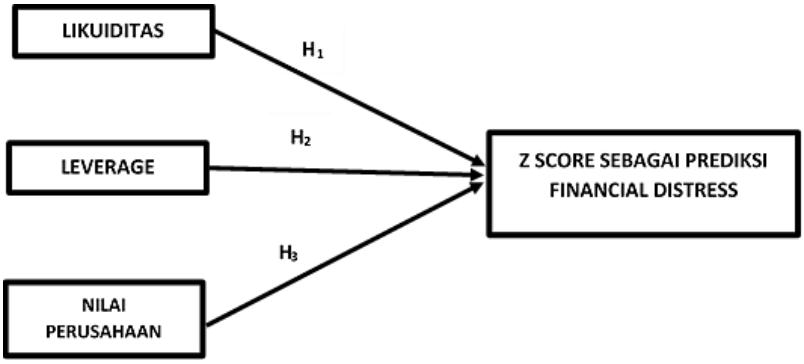

Figure 2.1 Conceptual Framework

RESEARCH METHODS

Research Design

This research is a quantitative research with a causality research design that aims to test hypotheses about the impact of one or more independent (free) variables on the dependent (bound) variable.

Variable Definitions and Operations

The dependent variable in this study is financial distress which is proxied by the Z-Score using the Altman modified model III, as a predictor of financial distress. The independent variables consist of; the liquidity variable is proxied by the current ratio, which according to Kasmir (2016) is the ratio to measure a company's ability to pay short-term obligations or debts that are due soon. With the current ratio, it can make it easier for investors to see the company's ability to use current assets and see the company's ability to pay all current debts. The second leverage variable proxied by the Debt to equity ratio is the ratio that can be used to assess debt to equity (Kasmir, 2016). This ratio measures the company's ability to pay off its obligations. The higher the debt to equity ratio of a company, the greater the company uses debt for business capital. Vice versa, the smaller the value of the debt to equity ratio, the smaller the use of debt by the company. Furthermore, the third is the company value variable which is proxied by the company's stock return. Stock return is the profit obtained from stock investment. The results of this profit are obtained from the rate of return on shares obtained from the difference between the selling price of shares and the purchase price of shares. According to Bodie (2017) the greater the stock return generated by an investment, the greater the attractiveness of the stock investment for investors..

Table 3.1. Operational Research Variables

Variabel	Operasional Variabel	Source	Skala
Variabel Dependen (Y): *Financial Distress*	Z = 6,56X1 + 3,26X2 + 6,72X3 + 1,05X4	Prihadi (2019)	Rasio
(X1): likuditas	CR = Utang Jangka Pendek/ Asset lancar	Kasmir (2018)	Rasio
(X2): *leverage*	DER= *Total Liabilities/Total Equity*	Kasmir (2018)	Rasio
(X3): Nilai perusahaan	*Return* saham= [Pt – (Pt-1)] / (Pt-1)	Kasmir (2018)	Rasio

Population and Research Sample

The population in this study are companies in the hotel, restaurant and tourism sectors listed on the Indonesia Stock Exchange (IDX) for the 2016-2021 period that meet the population criteria, consisting of IPO years in accordance with the research year period and consistently publishing complete annual financial reports

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so that the total population in this study as many as 9 companies. The selection of the sample in this study was carried out based on the saturated sample method, in which all populations were used as samples.

Data Collection Technique

The data collection technique used in this study was data triangulation, namely collecting data using various existing sources. The data used in this study is secondary data, where the data is in the form of published annual financial reports of companies in the hotel, restaurant and tourism sector for the 2016-2020 period..

RESULTS AND DISCUSSION

Result

Descriptive statistics

The following are the results of the descriptive statistical analysis based on the research sample as follows:

Table 4. 1 Descriptive Statistical Results

Sample: 2016 2020				
	Y-ZSCORE	**X1-CR**	**X2-DER**	**X3-RS**
Mean	2.44452378	3.31748385	0.776088	0.018950
Median	2.67548299	2.002835699	0.770620	-0.120000
Maximum	7.56692878	9.096154001	2.573642	4.236220
Minimum	-2.6154265	0.266754761	0.123600	-0.656489
Std. Dev.	2.36709376	2.663197865	0.531623	0.804996
Observations	45	45	45	45

Source: Data processed with eviews 12 (2022)

Based on table 4.1, it can be seen that the Z-Score variable as a predictor of financial distress has a mean value of 2.44 which means that the average company in the hotel, restaurant and tourism sector is in a gray area of financial distress. The greater the Z-Score, the more the company avoids financial distress. The liquidity variable proxied by CR has a mean (average) value of 3.317. This indicates that the company's ability to pay its short-term debt in this study is 3.317 times the total current assets owned by the company, this is quite good because the company is already able to pay short-term debt from the proceeds of its current assets. The leverage variable proxied by DER has a mean (average) value of 0.776, which means that for companies in the hotel, restaurant and tourism sector, 0.70 times the company's capital adequacy comes more from equity than from debt. The lower the DER ratio, the better the fundamentals of a company. The value of a high debt to equity ratio indicates that the company's capital structure uses debt compared to equity. The variable value of the company proxied by stock returns has a mean value of 0.0189. This means that the average company in the hotel, restaurant and tourism sector is able to provide a stock return of 1.89%.

Panel Data Regression

Based on the selection of the Hausman test panel data regression, the selected model is the fixed effect model (FEM):

Table 4.2 *Fixed effect model*

Dependent Variable: Y_ZSCORE				
Method: Panel Least Squares				
Date: 01/03/23 Time: 18:36				
Sample: 2016 2020				
Periods included: 5				
Cross-sections included: 9				
Total panel (balanced) observations: 45				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.011134	0.441461	2.290425	0.0285
X1_CR	0.334467	0.082885	4.035314	0.0003
X2_DER	0.420176	0.353049	1.190134	0.2425
X3_RS	-0.120929	0.137958	-0.876564	0.3871

Source: Data processed with eviews 12 (2022)

Based on data management in table 4.2, the panel data regression equation model is obtained as follows:

Y (Z Score) = 1. 011134 + 0.334467CR + 0.420176DER -0.120929RS

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Based on the above equation, it can be concluded that:

1. A constant of 1.01113 with the assumption that if the variables of liquidity, solvency and firm value = 0 then the Z-Score as a predictor of financial distress is 1.01113.
2. The coefficient of the liquidity variable proxied by CR is 0.334467 with a significance value of 0.0003 indicating that liquidity has a positive effect on financial distress, so that if liquidity is increased by one unit it will increase the Z-Score as a prediction of financial distress by 0.334467.
3. The coefficient of the leverage variable proxied by DER is 0.420176 with a significance value of 0.2425 indicating that leverage has no effect on financial distress, so that if leverage is increased by one unit it will not have any effect on the Z-Score as a prediction of financial distress of 0.0000 .
4. The variable coefficient of firm value proxied by RS is -0.120929 with a significance value of 0.3871 indicating that firm value has no effect on financial distress. so that if the company value is increased by one unit, it will not have any effect on the Z-Score as a predictor of financial distress of 0.0000.

Model Accuracy Test

F statistic test

Table 4.3 F test results

F-statistic	54.89648
Prob(F-statistic)	0.000000

Source: Data processed with eviews 12 (2022)

Based on the results of the F test in table 4.3, the results of testing the model using the Fixed Effect Model obtained an F-statistic of 54.89648 and a Prob (F-Statisctic) of 0.000000, which means it is smaller than the significant level of 0.05 or 5%, meaning the panel data regression model used in this study is appropriate and can be continued.

Koefisien Determinasi (R^2)

Table 4.4 Koefisien determinasi (R^2)

R-squared	0.948183
Adjusted R-squared	0.930911

Source: Data processed with eviews 12 (2022)

Based on table 4.4 it is known that the Adjusted R-squared value is 0.930911 or 93.0911%. This means that the dependent variable Z score as a predictor of financial distress can be explained by the independent variables namely liquidity, solvency and firm value of 93.0911%. while the remaining 6.9089% is explained by other factors outside of this study.

Hypothesis testing (Uji t)

The results of the t test in this study are as follows:

Table 4.5 Test Results t

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.011134	0.441461	2.290425	0.0285
X1-CR	0.334467	0.082885	4.035314	0.0003
X2-DER	0.420176	0.353049	1.190134	0.2425
X3-RS	-0.120929	0.137958	-0.876564	0.3871

Source: Data processed with eviews 12 (2022)

Based on table 4.5, the results of hypothesis testing through the t test are as follows:

1. The liquidity variable proxied by CR has a significance value of 0.0285 which is less than 0.05 with a coefficient value for the liquidity variable of 0.334467, which means that the liquidity variable has a positive and significant effect on the Z-Score value as a predictor of financial distress in hotel sector companies restaurants and tourism listed on the Indonesia Stock Exchange in 2016-2020. Thus the first hypothesis (H1) is accepted.
2. The leverage variable proxied by DER has a significance value of 0.2425 greater than 0.05 with a coefficient value for the liquidity variable of 0.420176, which means that the leverage variable does not affect the Z-Score value as a predictor of financial distress in companies in the hotel, restaurant and tourism sector listed on the Indonesia Stock Exchange in 2016-2020. Thus the second hypothesis (H2) is rejected.
3. The firm value variable proxied by RS has a significance value of 0.3871 greater than 0.05 with a coefficient value for the firm value variable of -0.120929, which means that the leverage variable does not affect the Z-Score value as a predictor of financial distress in hotel sector companies restaurants

and tourism listed on the Indonesia Stock Exchange in 2016-2020. Thus the third hypothesis (H3) is rejected.

DISCUSSION OF RESEARCH RESULTS.

Based on the results of research that has been carried out on three independent variables, namely liquidity, leverage and firm value on the dependent variable the Z-Score value as a predictor of financial distress, the discussion of the results of this study is as follows:

a) The liquidity variable proxied by CR has a significant positive effect on the Z-Score value as a predictor of financial distress. Signaling theory explains the results of this study so that it will give a positive signal in the form of good information, thus investors are expected to be able to distinguish between companies that are not financially distressed and companies that are experiencing financial distress. The higher the liquidity value, the higher the Z-Score. This provides a decreasing prediction of financial distress. The higher the liquidity value, the more the company avoids the symptoms of financial distress, because the company is able to generate sufficient working capital, sufficient working capital allows the company to be able to cover its short-term obligations, able to finance expenses or daily company operations, besides that it is also possible for company to operate economically or efficiently and the company does not experience financial difficulties because of the availability of sufficient current assets to cover all these expenses. The results of this study are in line with previous research conducted by Ginting (2019) that liquidity has a significant positive effect on the Z-Score value as a predictor of financial distress.

b) The leverage variable proxied by DER has no effect on the Z-Score value as a predictor of financial distress. The results of this study illustrate that debt as corporate leverage does not have any effect on companies in the hotel, restaurant and tourism sector which are listed on the Indonesia Stock Exchange in 2016-2020. This is because the mean value of leverage proxied by DER is only 0.77608, which means that the capital structure of the companies in this study sample is dominated by equity, not debt. The small use of debt in company operations suggests that leverage has no effect on the movement of the Z-score as a predictor of financial distress in this study. The results of this study are in line with previous research conducted by Erayanti (2019) where the leverage variable has no effect on the Z-score value as a predictor of financial distress.

c) The firm value variable proxied by RS has no significant positive effect on the Z-Score value as a predictor of financial distress. The results of this study illustrate that company value does not have any influence on companies in the hotel, restaurant and tourism sector which are listed on the Indonesia Stock Exchange in 2016-2020. This is because the mean value of the company's value proxied by RS is only 1.895% to investors during 5 years of observation with the median value actually giving a loss of -12%. The small mean and median values of the firm value mean that firm value does not affect the movement of the Z-score as a predictor of financial distress in this study.

CONCLUSIONS AND SUGGESTIONS

Based on the results of the research and discussion previously stated, the conclusion of this study is that liquidity has a positive and significant effect on the Z-Score value as a predictor of financial distress in hotel, restaurant and tourism service companies listed on the Indonesia Stock Exchange in 2016-2020, while leverage and company value have no effect on the Z-Score value as a prediction of financial distress in hotel, restaurant and tourism service companies listed on the Indonesia Stock Exchange in 2016-2020.

The advice that can be given based on the results of this study is that companies in the hotel, restaurant and tourism sector must be able to increase the value of liquidity by maintaining the value of current assets and using current debt properly so that the value of company liquidity can always increase properly. An increase in the value of liquidity provides information to the public that the company's ability to pay short-term debt is considered good, this can increase the value of the Z-Score as a prediction of bankruptcy which will also increase. With an increased Z-Score, the company will be safe from symptoms of financial distress. Suggestions for hotel, restaurant and tourism sector investors should choose a company that has a large Z-Score value, namely PT Panorama Sentrawisata Tbk (PANR), because a large Z-score means that the company will avoid financial distress. Suggestions for future researchers who wish to study financial distress are better to use other bankruptcy prediction models, so that they can be used as a comparison in predicting financial distress, or you can also add a mediating variable to the leverage and firm value variables to further refine this research.

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