



ABSTRACT

Financial distress or financial difficulty is a condition where the company cannot fulfill its long-term and short-term obligations. If this condition is allowed to drag on, the company will either go bankrupt or be liquidated. Financial distress is measured using the Springate. The initial sample was 25 companies listed on the Indonesia Stock Exchange before 2018, of which only 22 companies were found eligible. Among them, nine companies are considered outliers. Therefore, only 13 firms were considered the effective sample. Since the study context is three years, we arrive at 39 data units finally used as the sample. The data source was obtained from the official website of the Indonesia Stock Exchange. Multiple linear regression shows that liquidity positively influences the Springate value, indicating decreased financial distress. Business diversification and leverage have no significant effect on financial distress. The conclusions may be different if different methods are used. Further research can use the Zmijewski or Grover models.

Keywords:

Financial Distress, Liquidity, Business Diversification, Leverage, Covid-19, Springate

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Research Article

Determinants of company bankruptcy before and during the Covid 19 Pandemic

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INTRODUCTION

The phenomenon of the Covid-19 virus, which initially occurred at the end of 2019, has had a significant impact on the entire order of life, especially in the economic sector. According to the World Health Organization (2020) as of October 24, 2020, there were 41,809,078 confirmed cases worldwide, while in Indonesia alone there were 385,890 cases. The pandemic had a negative impact on the Indonesian economy, which declined by 5.32% according to BPS data. This decline was due to the decline in people's purchasing power due to concerns and also the Large-Scale Social Restriction (PSBB) policy imposed by the government which ultimately resulted in many companies experiencing bankruptcy. In the structure of the national economy, the sectors most affected by this condition are the hotel, restaurant and tourism sectors.

In April this year the tourism sector recorded a loss of 85.7 trillion rupiah, with details of the hotel sector of 30 trillion, restaurants of 40 trillion, airlines of 11.7 trillion and tour operators of 4 trillion. In addition, as stated by Haryadi Sukamdani, general chairman of the Indonesian Hotel and Restaurant Association, there are 2,000 hotels and 8,000 restaurants that have declared operational closures (Setiawan, 2020, July 14).

The condition of stocks related to hotels, restaurants, tourism also jumped down. For example, the shares of PT Citra Putra Realty Tbk, which owns The Stone hotel in Legian in Bali, decreased 0.43 percent to Rp 2,330 per share. Since the beginning of the month, Citra Putra Realty's shares plunged 41.90 percent. Similarly, the shares of PT Hotel Sahid Jaya International Tbk also remained at Rp3,980 per share. Since the beginning of the month, the stock with the SHID code has decreased by 13.85 percent. Unlike other issuers, the shares of PT Nusantara Properti International Tbk are still shining brightly. At the close, the company with the NATO stock code was able to rise by 4.13 percent to Rp1,135 per share. Since the beginning of the month, Nusantara Properti's shares have actually been able to increase by 3.18 percent. (CNN, 2020).

The decline in stock prices indicates the occurrence of financial distress in the company. Financial distress can be measured through several indicators such as Working Capital to Total Assets, Earning Before Interest and Tax to Total Assets, Earning Before Tax to Current Liabilities, and Sales to Total assets. This analysis of financial distress is important because it describes the financial condition of the company affected by the pandemic, is able to mitigate and predict the company's going concern in the future, which can be used as consideration in making company policies. There are various methods of measuring financial distress, including the Altman Z-score, Zmijewski, Grover, and Springgate.

If not followed up, financial distress can lead to bankruptcy, which is a condition in which a company cannot settle financial obligations, both long-term and short-term. Financial distress is a decline in the company's financial condition, which occurred before the company went bankrupt. Information about financial distress can be used as a warning for bankruptcy so that management can take action quickly in order to prevent problems before bankruptcy occurs.

Factors that can affect financial distress include liquidity. Liquidity is the company's ability to fund the company's operations and meet its short-term obligations (Yustika et al., 2015). If the company has a high liquidity value, it will be less likely that the company will experience financial distress. A company is said to be liquid if it has a high level of liquidity, which is if the company's assets are greater than its liabilities. On the other hand, a company can be said to be illiquid if it cannot meet its operational costs and pay off its obligations. In such conditions, the potential for companies to experience financial distress increases.

Fadlillah and Susilowati (2019) found that this liquidity has a significant negative effect on financial distress in manufacturing companies in Indonesia. That is, the higher the level of liquidity value. The lower the possibility of the company experiencing financial distress. This finding is in line with Yustika et al. (2015), Masdupi et al. (2018) and Chrissentia and Syarief (2018), who found that liquidity had a negative effect on financial distress.

Business diversification is another aspect that may have an impact on financial difficulties. Using a diversity approach is one technique to increase market size (Harto, 2005). The process of diversification involves creating a wide range of products, as well as more commercial and geographic sectors. Opening new business lines, increasing product lines, expanding marketing areas, building branch offices, and carrying out mergers and acquisitions to better and develop the company are examples of diversification. Diversification had no discernible impact in lowering financial distress, according to Febriyan and Prasetyo's 2019 research. The diversification strategy's inability to lower the likelihood of financial difficulty is the cause.

Leverage is another element that may contribute to financial disaster. Leverage, often known as the debt ratio, is a ratio that displays how much debt the company uses to finance its operations (Horne et al., 2012). Leverage reveals the extent to which a corporation depends on other parties to operate. The substantial leverage figure demonstrates that debt represents a significant portion of the company's financing. The debt of the corporation increases as the leverage value increases. When a corporation has a high level of leverage, it means that it depends heavily on outside parties to meet its demands. Conversely, if the level of leverage is low, the companies is able to self-financing its operations.

Previous research shows the inconsistency of results regarding the effect of leverage on financial distress. Khoiriyah (2018) proves that leverage affects financial distress. According to Fadlillah and Susilowati (2019) and Larasati and Wahyudin (2019), the company has higher financial difficulties following the increase in leverage level.

This study aims to verify the factors that cause financial distress that leads to bankruptcy. The original contribution of this study is expected to come from its specific context, i.e., before and during Covid 19 Pandemic.

LITERATURE REVIEW

Bankruptcy Theory

Bankruptcy in general can be understood as the failure of a company's business in managing the company's business to make a profit. Bankruptcy is a very serious liquidity problem so that companies cannot run their operations properly. According to Hanafi (2004, Bankruptcy is a condition that every company must be aware of. Bankruptcy is a form of failure that usually occurs in companies defined in several senses, namely:

Economic Failure (Economy Distressed)

Economic failure typically entails a corporation losing money or having insufficient sales to cover its own expenses. This failure indicates that the company's cash flow is insufficient to pay its debts since the income level is below the present cost or value. This failure happens when the business's real cash flow is significantly lower than its anticipated cash flow. Failure can also refer to a situation in which the amount of revenue based on the historical cost of return on investment is lower than the investment-related expenses made by the business.

Financial Failure (Financial Distressed)

In general, determining financial failure is challenging. This is the result of the corporation falling through a number of stages amid difficult financial times. The list of events that lead to a firm's demise as a result of financial difficulty is nearly endless and includes things like decreasing dividends, corporate closures, losses, terminations, resignations of directors, and plummeting stock prices.

Financial distress demonstrates the company's incapacity to fulfill both its immediate and long-term obligations. If this condition is permitted to persist, the business may file for bankruptcy or be liquidated. According to Platt and Platt (2002), there are two reasons why knowledge of a company's financial crisis is useful: (1) It helps hasten management efforts to address issues before bankruptcy happens. (2) The management can take over or merge actions to improve the company's ability to pay its debts and operate the business more effectively. (3) be an early indicator of impending insolvency

Financial distress is a broad term that refers to several circumstances in which a company encounters financial difficulties (Altman et al., 2017). The scenario is frequently referred to using the phrases failure, insolvency, default, and bankruptcy. A company's stakeholders, including creditors and shareholders, may lose faith in it if its financial health is inadequate. As a result, these stakeholders will stop working with the business. If a solution cannot be found, the business is in financial hardship and will file for bankruptcy.

Liquidity

According to Munawir (2014), a company's liquidity demonstrates its capacity to meet its immediate financial commitments as well as its ability to do so when billed. According to Ningsih and Sari (2019), "liquidity" refers to a company's capacity to pay short-term obligations. Typically, short term agreements have terms of up to one year. Hery (2017:149) asserts that the lack of a cash reserve and the time required for the company to transform its present assets into cash are the two factors that prevent it from meeting its obligations.

Business Diversification

Diversification is an effort to expand the range of goods to be sold and is the company's strategy to increase market penetration. Diversification in this economy is the diversification of products (business fields) or even business locations by a company in order to maximize profits so that the company's cash flow can be more stable.

Business diversification is a strategy for gaining a competitive edge by generating new items that are in line with the market. Business diversification, according to Hariadi (2005), attempts to maximize profit by combining a number of portfolio assets, whether through the production of diverse items, the establishment of numerous enterprises, the creation of new subsidiaries, or even the acquisition of an existing company. Conclusion: A firm that diversifies its business is one that has a number of businesses or subsidiaries, and the owner of the company engages in this business diversification to raise the added value of the company.

Leverage

This leverage ratio, also known as a solvency ratio, is used to calculate how much of a company's assets are financed by debt. This refers to the company's debt load in relation to its assets. Leverage is reportedly used to assess a company's capacity to meet all of its financial obligations, both now and in the future, should it be dissolved. The leverage ratio, according to Hery (2017:162), is a ratio used to gauge how much debt is being utilized to finance a company's assets. In other words, this ratio is utilized to calculate the amount of debt that the business must take on. Financial risk can result from companies with high leverage values or arguably big debts, but also have the ability to generate large opportunities to generate profits.

Hery (2016: 177) stated that total turnover of assets (TATO) owned by the company are used to generate sales. In other words to TATO indicates how many sales will be generated from each value of funds embedded in total assets.

Net Increase in Cash and Cash Equivalents, also known as Delta NIC. The financial flows statement includes information on Delta NIC. The sum of the cash flows realized over a certain period is the delta NIC. Operating, investing, and financing activities all contributed to the sum obtained.

Delta NIC is net increase in cash or cash equivalents. Delta NIC is listed on the statement of cash flows. Delta NIC is the total of cash flows obtained during a certain period. The amount obtained comes from operating activities, investing activities, and financing activities.

METHODS

Liquidity Independent Variable

The capacity to fulfill short-term obligations promptly is known as liquidity. The amount of current assets, or assets that can be quickly turned into cash, such as cash, marketable securities, receivables, and inventory, can be used to determine the company's liquidity. A company liquidity determined by a company capability to fulfill its short-term commitments as specified. The current ratio, which assesses the company's capacity to settle short-term liabilities or upcoming debts, is the liquidity ratio indicator employed in this study. The following formula calculates the current ratio:

$$\text{Current Ratio} = \frac{\text{Curren Asset}}{\text{Current Liability}} \times 100\%$$

Business diversification

The way to increase earnings, business diversification is described as an endeavour to broaden the products (business fields) to be offered. According to Tjiptono (1997), diversification is the pursuit of growth, an increase in sales, profitability, and flexibility through the discovery and development of new goods, markets, or both. A dummy variable will be utilized in this business diversification; if it is 1, it indicates that there is business diversification, and if it is 0, there isn't.

Leverage

The leverage ratio the measurement of the proportion company's assets are financed with debt. That is, how much the company's debt burden must be met compared to its assets. In a broad sense, the leverage ratio indicates the company's capability to fulfill its commitment regarding its obligations, including fixed obligations (Hery, 2017:164). The leverage ratio indicator used in this study is the Debt to Equity Ratio which can be measured by the formula:

$$\text{Debt to Equity} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

Dependent Variable

Financial Distress

The dependent variable in this study is the potential for bankruptcy as measured by the sprigate method. According to Permana et al. (2017) the Springate method is the best predictive method, because it has more components and has an EBIT to current liabilities component, namely how much profit is able to pay debts. This Springate method can be measured by the formula:

$$S = 1.03 A + 3.07 B + 0.66 C + 0.4 D$$

Notes:

A = Working capital/Total assets

B = Earnings before interest and taxes/Total assets

C = Profit before taxes/Current liabilities

D = Sales/Total assets

Because the EBIT data in the income statement of the sample companies is almost non-existent. There is an income statement only profit before tax (EBT), so for this study the EBIT that the author uses is EBT data. Because during the pandemic, many companies experienced losses, so the author also took this company as a sample with its EBIT data.

Control Variable

Total Asset Turnover (TATO)

According to Prastowo (2011), total assets turnover measures asset activity and the company's ability to generate sales through the use of these assets. TATO also measures how efficiently these assets have been used to generate income. The total asset turnover ratio is used to measure the effectiveness of the total assets owned by the company in generating sales or in other words to measure how many sales will be generated from each rupiah of funds embedded in total assets. According to Hery (2016: 187), the formula used to calculate TATO is:

$$TATO = \frac{Net\ Sales}{Total\ Asset}$$

Delta NIC (Net Increase Cash)

The amount of net increase in cash or cash equivalents or what can be called delta NIC is the total of cash paid or received from operating activities, investing activities, and financing activities. The formula used to calculate the NIC delta is:

$$Delta\ NIC = Net\ Cash\ Flow\ from\ Operating\ Activities - Net\ Change\ to\ Cash\ from\ Investing\ and\ Financing\ Activities$$

RESULT

Pooling Test

From the results of the pooling test in Table 1, it can be seen that the significant value of the dummy variable and all dummy variables multiplied by the independent variable having a sig value above 0.05 then the research model passed the pooling test so that the data can be combined to perform data testing.

Table 1. Descriptive Statistics

	N	Mnimum	Maximum	Mean	Std. Deviation
SPRINGATE	39	-1.072	3.576	0.67626	1.132671
LIK	39	0.437	3.933	1.71808	0.886853
DIVER	39	0	1	0.54	0.505
LEV	39	0.139	1.615	0.62426	0.366234
TATO	39	0.016	1.991	0.38769	0.517943
NC	39	-157,491,132,000	178,414,031,000	2,151,948,740.36	70,358,872,794.791

In Table 1, the Springate variable is a variable that shows the potential for bankruptcy of the company. At first the sample data was 22 companies to be tested, but after manual outlier data was carried out using descriptive outliers because the value obtained was > 3. From the results of these outliers as many as 9 companies were deleted so that the remaining 13 companies. Due to the three-year study period, the total sample was 39 units. Descriptive analysis shows:

- a. The Financial Distress variable has a minimum springate value of -1.072 or 107.2% which is owned by Pembangunan Graha Lestari Tbk in 2020, which means this company is experiencing bankruptcy potential. While the maximum value is 3,576 or 357.6% obtained from Bayu Buana Tbk in 2019 which means that this company does not experience the potential for bankruptcy. And with the

- average value of this springate variable 0.6726, this shows the potential for corporate bankruptcy is quite high with an average of 67.26%.
- b. Liquidity variable which is proxied by using the current ratio is used to show the company's liquidity. Based on the table above, the minimum value generated is 0.437 or 43.7% obtained from PT Red Planet Indonesia Tbk in 2020. And the maximum value obtained is 3.9333 or 393.33% obtained from PT Satria Mega Kencana Tbk in 2018. The average liquidity value is 1.71808 or 171.8%. This shows that the company's ability to meet short-term obligations or debts that will soon be due at the time of collection is quite high.
 - c. This business diversification variable shows a company making efforts to expand the products to be sold and maximize profits. In this study, it is classified into two, namely, diversification and non-diversification. Based on table 4.1 above, the minimum value of this business diversification variable is 0 and the maximum value is 1. With an average value of 0.54 or 54%. This means that as many as 7 companies are diversifying their business. The remaining 46% or as many as 6 companies that do not diversify their business.
 - d. Leverage which is proxied by using the Debt to Equity Ratio is used to show the company's leverage. Based on table 4.1 above, the minimum value of this leverage variable is 0.139 or 13.9% obtained from PT Red Planet Indonesia Tbk in 2018 which shows that the company's ability to pay its obligations tends to be low. The maximum value of 1.615 or 161.5% obtained from Pioneerindo Gourment International Tbk which shows that the company's ability to pay its obligations is high. The average value obtained is 0.624, this value is greater than the standard deviation value, which is 0.366. This shows that the leverage variable data is distributed quite well with relatively small data deviations.

Classic assumption test

Normality test

In this study, to test the normality test used the One Sample Kolmogorov-Smirnov Test which is listed in the table. From the test results show that the sig is 0.054 which indicates that > 0.05 . This normality test produces a P-Value of $0.054 > 0.05$, which means it is not H_0 , which means that the residual value of the variable is normally distributed.

Auto Correlation Test

In this study, to test the autocorrelation method used is Run-Test. Based on the results of data processing, the sig value is 0.332, which is > 0.05 , meaning that this result shows that there is no autocorrelation symptom.

Multicollinearity Test

In this study, the technique used is the tolerance test and the value inflation factor. Based on the results of data processing, the tolerance value is > 0.10 and has a VIF value of < 10 for all variables, so it can be concluded that there is no multicollinearity between all independent variables.

Heteroscedasticity Test

In this study, the heteroscedasticity test was carried out using the Glejser test which showed that the sig value of all variables was > 0.05. So it can be concluded that the data does not occur or is free from heteroscedasticity problems.

Multiple Regression Analysis

Multiple linear regression model aims to express the functional relationship between the independent variable and the dependent variable. Then the linear regression equation is obtained as follows:

$$Y = -0.623 + 0.278LIK + 0.330DU - 0.282LEV$$

Where Y=Springate value, LIK = Liquidity, and DU = Business Diversification

F Test

The F test aims to determine whether this research model is fit. The results of the F test can be seen in the following Table 2.

Table 2
F Test Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.220	5	7.244	19.076	.000 ^b
	Residual	12.532	33	0.380		
	Total	48.752	38			

From the table above, the sig value is 0.000 or less than 0.005. So the results of this F test are not rejecting Ho, meaning that the model in this study is feasible to be used/tested.

Table 3

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	-0.623	0.399		-1.562	0.128

LIK	0.278	0.125	0.218	2.223	0.033
DIVER	0.330	0.223	0.147	1.479	0.149
LEV	-0.282	0.318	-0.091	-0.889	0.381
TATO	2.112	0.245	0.966	8.610	0.000
NIC	6.135	0.000	0.038	0.403	0.689

Multiple Linear Regression Results

In Table 4, we can see that the liquidity variable has a sig value of 0.033 which is smaller than 0.05 which means that it shows that liquidity has a significant influence on financial distress. This business diversification variable has a sig value of 0.149 which is greater than 0.05. So from this result, it shows that business diversification does not have a significant effect on financial distress. The leverage variable has a sig value of 0.381 which is greater than 0.05. So from these results, it shows that leverage does not have a significant effect on financial distress

Coefficient of Determination (R²)

The coefficient of determination test is used to measure how much the ability of the independent variable is able to explain the dependent variable. The results of the coefficient of determination can be seen Table 3.

Table 4

Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.862 ^a	0.743	0.704	0.616235

From Table 3, we can see that the coefficient of determination (R²) is 0.704. This means that 70.4% of the variables of potential bankruptcy or financial distress can be explained by the independent variables, namely liquidity as proxied by the current ratio, business diversification, and leverage as proxied by DER, as well as 2 control variables that participate in data processing, namely TATO and Delta NIC. While the remaining 29.6% can be explained by other factors outside the model described.

DISCUSSION

Effect of Liquidity on financial distress

Based on the results of testing the liquidity variable showed significant results with a significance value of 0.033 ($0.033 < 0.05$). This shows that there is sufficient evidence that liquidity affects financial distress in hotel and tourism companies listed on the IDX in a positive direction, meaning that the more liquid the sample companies are, the higher the Springate value, so if the springate value is high, the company does not experience financial problems. (no potential for bankruptcy).

This liquidity variable is proxied by using the current ratio. Liquidity is one of the variables that is often used with the aim of seeing a comparison between current assets and current liabilities of the company. This shows that if a company has high current assets, it will be able to pay off the obligations of a company. Conversely, if the company has low current assets assuming the amount of current debt remains, the company will have difficulty paying off the company's obligations. Therefore, the liquidity variable has a negative effect on financial distress.

In line with the theory of bankruptcy, the higher the level of liquidity means the company can be said to have sufficient funds to meet its obligations and not cause financial distress. However, if the company cannot fulfill its obligations because it does not have funds or current assets and is unable to control its expenses, it will cause financial distress. This is in line with research conducted by (Fadlillah & Susilowati, 2019) which found that liquidity had a negative effect on financial distress.

Effect of business diversification on financial distress

Based on the test results of the business diversification variable, it shows a significance value of $0.149 > 0.05$. It can be interpreted that there is not enough evidence that diversification has an effect on financial distress. A positive direction means that if the company has business diversification that is different from its tourism business, the higher the Springate value will be, so if the springate value is high, the company will not experience financial distress (no potential for bankruptcy).

This result is in line with the theory of bankruptcy, business diversification is carried out in order to obtain maximum profits. But this business diversification requires relatively large costs, if after diversifying the income obtained cannot cover the costs incurred, the company will be threatened with potential bankruptcy. This business diversification is carried out with the aim of increasing market penetration and maximizing profits. But in this study Doing or not diversifying business has no effect on the threat of potential bankruptcy. This is thought to be due to the Covid-19 pandemic which has attacked almost all sectors of the economy.

What makes companies that diversify their businesses suffer losses or it could be that companies that diversify their businesses still get profits but the profits are used to cover other company sectors. This is in line with research conducted by Febriyan and Prasetyo (2019) that stated that that business diversification has a negative effect on financial distress.

The Influence of Leverage on Financial Distress

Based on the results of testing the leverage variable, which is proxied using DER, the results show a significance value of $0.381 > 0.05$. It can be interpreted that there is not enough evidence that leverage has an effect on financial distress. With the result of the coefficient value of -0.282 (negative direction), it means that if the company has a high leverage value (debt is more than its own capital) then the Springate value will be smaller, so if the springate value is small/low then the company tends to experience more experiencing financial distress (having the potential for bankruptcy).

The direction of the results of this study already supports the bankruptcy theory, which says that one of the factors that causes bankruptcy is the debt burden or interest expense. The more principal we borrow, the more interest costs we have to pay as well. This of course reduces the company's profit and makes it possible for the company to experience financial distress. But for this study, whether or not the company's debt is large compared to its capital does not affect the potential threat of bankruptcy. This is thought to be due to the Covid-19 pandemic which has attacked almost all sectors of the economy. This is in line with research conducted by (Susilawati et al., 2017) and (Khoiriyah, 2018) which prove that leverage has a positive effect on financial distress.

CONCLUSION

This research conclude that:

1. Liquidity there is sufficient evidence of a negative effect on financial distress.
2. Business diversification there is not enough evidence of a negative effect on financial distress.
3. Leverage there is not enough evidence of a positive effect on financial distress.

SUGGESTION

Further research is expected to use a larger sample and take other sectors such as pharmaceutical companies listed on the Indonesia Stock Exchange (IDX) or other sectors affected by the Covid-19 pandemic. In addition, it can also use a more specific year to the Covid-19 pandemic so that can obtain financial distress results that are more focused on the Covid-19 pandemic with other methods of measuring potential bankruptcy such as the zmijewski model or the grover model

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