

Financial Distress Determination Factors In Food And Beverages Companies In Indonesia Stock Exchanges

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ABSTRACT

This research aimed to find out the effect of leverage, liquidity, profitability, activity, and growth firm on the financial distress of Food and Beverages companies which were listed on Indonesia Stock Exchange. While, the research was quantitative. Moreover, the data were secondary which in the form of company's financial statement. Furthermore, data collection technique used purposive sampling in which the sample was based on criteria given. In line with, there were 78 Food and Beverages companies as sample. Additionally, the data analysis technique used logistic regression analysis with SPSS 23. In addition, the research result concluded leverage which was measured by debt to asset ratio, liquidity which was measured by current ratio and growth firm which was measured by sales growth did not effect the financial distress. On the other hand, profitability which measured by return on asset and activity which measured by total turnover had negative effect on the financial distress of Food and Beverages companies. Keywords: Leverage, liquidity, profitability, activity, growth firm, financial distress.

PRELIMINARY

The development of the world economy is progressing very rapidly and this progress is due to the increasingly strong and widespread influence of globalization in the business world (Hidayat, 2013). This has resulted in very tight business competition in various fields of the company. Businesses that have high advantages and experience will benefit from the widespread influence of globalization. As a result, some newly developing businesses will find it difficult to compete with large-scale companies as well as with foreign companies, so that it will have an impact on these companies that will experience financial difficulties. In addition, there are other goals that are no less important, namely to be able to continue (survive) in competition, develop (growth) and be able to carry out other social functions in the community.

With this aim, the management of the company is required to perform optimally in the company's activities, especially financial problems so as to avoid loss and bankruptcy conditions. The consumer goods industry is a potential industrial sector, particularly the food and beverage sector. The growing and increasing number of food and beverage companies will encourage increased competition (Rohmadini et al., 2018). Therefore, companies must be able to improve strategy, quality and always innovate with their products. Companies need a lot to do all of these things that can make the company into financial difficulties and even lead to bankruptcy. Financial distress or financial distress indicates a situation in which the company is facing financial difficulties. Suryanto (2017) states that financial distress is a condition in which the company is unable to fulfill its obligations to debtors because the company experiences insufficient and insufficient funds and does not achieve the company's economic goals, namely profit. When a company is in financial difficulties, it will be a consideration for investors who will invest their capital. If the problem is not resolved immediately, the company can lead to bankruptcy.

A company should always be aware of bankruptcy because this is a very important and serious issue. This will certainly be detrimental to many parties involved, both internal and external parties of the company. Therefore, a company needs an early warning system in order to take preventive steps. Srengga (2012) states that the financial distress model is necessary for further development, because by knowing the financial distress condition of a company from an early age, it will be better for the company to immediately formulate plans and take corrective actions to anticipate conditions that lead to bankruptcy. The financial distress of a company can be minimized by using financial statement analysis. This report has an important role for users of financial reports for making the right decisions. The state of *financial distress* of a company can be measured through financial reports by analyzing financial reports (Srengga, 2012). Financial reports are the final product of a series of processes for recording and summarizing business transaction data (Hery, 2016). Financial reports can be used as a reference for measuring the health of a company through financial ratios. With this, it can describe the actual situation about the financial condition of a company and these ratios can be an indicator in projecting *financial distress*.

Research on financial distress has been carried out a lot, but it provides different research results, including: (1) Maulidina (2014) with research results that show that liquidity, profitability have a significant effect, while leverage and activity ratios have no effect on financial distress; (2) Utami (2015) with the results of research showing that leverage and company growth have a significant effect, while the activity ratio has no effect on financial distress; (3) Ratna and Marwati (2018) with the results of research showing that the activity

ratio has a significant effect while leverage and profitability have no effect on financial distress; (4) Simanjuntak (2018) with research results showing that leverage and activity have a significant effect while liquidity, profitability and company growth have no effect on financial distress; (5) Susilowati and Fadhilah (2019) with research results which show that liquidity, *leverage*, activity ratios and profitability have a significant effect while company growth has no effect on *financial distress*.

The differences in some of the results of this study have prompted researchers to conduct research again from some of these studies, namely regarding the effect of leverage, liquidity, profitability, activity ratios and company growth on *financial distress*. Researchers chose *food and beverages* companies that were listed on the Indonesia Stock Exchange (IDX) because the tighter competition in the food and beverages industry resulted in companies taking the right steps in this competition. Each of them is racing to launch the latest product by making various innovations in the product. Based on the above background, the research questions in this study are as follows: (1) Does leverage affect financial distress ?; (2) What is liquidity against financial distress ?; (3) Does profitability affect financial distress ?; (4) Does the activity ratio affect financial distress ?; and (5) Does company growth affect financial distress ?. While the research objectives to be achieved are to: (1) examine leverage affects financial distress; (2) testing liquidity has an effect on financial distress; (3) testing profitability has an effect on *financial distress*; (4) examining the ratio of activities to affect financial distress; (5) testing company growth has an effect on *financial distress*.

THEORETICAL BASIS

Teori Sinyal

According to Brigham and Houston (2011), signal theory is an action taken by the management of a company that provides instructions for investors about how management views the company's prospects. A company that is estimated to have a good and profitable prospect will try to use an alternative by using debt or selling new shares to obtain capital. Signal theory likens the information asymmetry between the parties concerned with management regarding information. There are several things that can be disclosed by management in the financial statements. In financial reports, signal theory is used to notify positive signals (good news) and negative signals (bad news) to its users (Asrin, 2018). Investors and shareholders need relevant, accurate, complete and timely information to make investment decisions. Financial reports are also important for a company to know its financial condition and performance so that it can predict the potential threat of bankruptcy in the future. If the information published by the company is considered a good signal (good news), investors will be interested in trading shares, thus the market will react through changes in the volume of stock trading (Suwardjono, 2010).

LIQUIDITY

The liquidity ratio is the ratio used by the company to measure the level of the company's ability to pay off its short-term obligations that are due soon. If the company is able to fulfill its obligations, then the company can be said to be liquid. Liquidity according to Subramanyam and Wild (2014: 185) says that liquidity is the ability to convert assets into cash or the ability to obtain cash. Meanwhile, according to Sartono (2014: 62), the liquidity ratio is a measure of the company's ability to meet short-term financial obligations on time. The liquidity ratio provides quite a number of benefits for various parties in the company and outside the company. Prastowo (2011: 80) liquidity serves to measure the ability of a company

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to meet its short-term obligations. The liquidity of a company is able to describe the company's ability to meet its short-term obligations to short-term creditors. Based on the definition of liquidity according to the experts above, it can be concluded that this liquidity ratio is used to measure how much the company's ability to meet its short-term financial obligations in order to obtain cash. According to Kasmir (2016: 87), the types to measure the liquidity ratio of a company are as follows: (1) Current Ratio; (2) Quick Ratio (Quick Ratio); (3) Cash Ratio; (4) Cash Turnover Ratio; and (5) Inventory to Net Working Capital (ItNWC)

LEVERAGE

Kasmir (2017: 153), the leverage ratio is a ratio used to measure the extent to which the company's assets are financed with debt. This ratio can describe the amount of debt expense held by its assets. The leverage ratio also describes a company's ability to pay off its long-term and short-term obligations. Leverage is used to measure how much a company is funded by debt. The implementation of debt that is too high will endanger the company (Fahmi, 2013: 127). Thus the company will fall into the extreme leverage category, meaning that the company is trapped in a debt level that is too high and it may be difficult to get rid of the cost of the debt. Therefore, the company should have to balance how much debt is worth taking and where the sources can be used to pay the debt. The leverage ratio has several benefits, namely to analyze the ability of the company's position to liabilities to other parties, to analyze how much the company's assets are financed by debt, to analyze how much corporate debt affects asset management, to analyze the balance between asset values, especially fixed assets and capital, and to analyze the company's ability to meet fixed obligations (Kasmir, 2017: 155). Kasmir (2017: 155), in general there are 5 (five) types of leverage ratios that are often used by companies, including: (1) Debt to Total Asset Ratio (DAR); (2) Debt to Equity Ratio (DER); (3) Time Interest Earned Ratio; (4) Fixed Charge Coverage Ratio; and (5) Long-term Debt to Equity Ratio (LTDtER).

PROFITABILITY

Profitability ratio is a ratio to assess a company's ability to seek profit (Kasmir, 2017). The company will experience a profit because it is successful in marketing its products in the market. High sales will certainly get a huge profit. By compiling an income statement, the company will find it easier to find out how the company's financial condition is in a certain period of time (Ayuningtiyas, 2019). Kasmir (2017: 45), the purpose of using profitability ratios for the company and for those outside the company, namely: (1) To measure or calculate the profit earned by the company in a certain period; (2) To compare the company's current profit with the previous year; (3) To measure the progress of the company's profits from time to time; (4) To assess the amount of net profit already taxed with own capital; (5) To measure the productivity of all company funds used, either loan capital or own capital, and others. Profitability can be measured using several indicators, as follows: (1) Gross Profit Margin (GPM); (2) Net Profit Margin (NPM); (3) Operating Margin Ratio (OPM); (4) Return On Asset (ROA); (5) Return On Equity (ROE); and (6) Earning Per Share (EPS).

ACTIVITY

The activity ratio is a ratio used to measure the effectiveness of a company in using its assets and to measure the efficiency level of the company's resource utilization (Kasmir, 2008). Efficiency can be done in all fields, for example in sales, inventory, production and others. If

in production it can use the same costs but results or outputs that have more value can be obtained, then a company can be said to carry out its operating activities efficiently. Hardiyanti (2012) states that the activity ratio is intended to look at several assets and then determine the level of activity of these assets at a certain level of activity. If the level of activity of a company has a low value at a certain sales level, it will result in greater funds embedded in an asset. This reflects that there is ineffectiveness in the field of sales which will certainly harm a company. The activity ratio can be measured using several indicators, as follows: (1) Total Asset Turn Over (TATO); (2) Receivable Turn Over; (3) Inventory Turn Over; (4) Working Capital Turn Over; and (5) Fixed Assets Turn Over.

COMPANY GROWTH

Growth firm is a ratio that describes a company's ability to maintain its economic position in the midst of economic growth and its business sector (Kasmir, 2008). Companies that have a strategy in marketing or sales can compete and even get large profits. The company's growth is proxied by the ratio of sales growth (sales growth ratio). According to Rahmy (2015), sales growth reflects the company's ability to increase sales of the products it produces, both in increasing sales frequency and increasing sales volume. If the sales growth obtained is high, it is said that the company is able to maintain its economic position in market share. According to Brigham and Houston (2011: 189), the higher the company's growth rate, it indicates that the use of corporate debt tends to be more than the slower growth rate. Companies with a fast growth rate can increase the funding needs of the company. The faster the growth rate of the company, the more positive signals are given to internal and external parties because it can be said that the company's performance is in good condition.

FINANCIAL DISTRESS

Suryanto (2017) states that financial distress is a condition in which the company is unable to fulfill its obligations to debtors because the company experiences insufficient and insufficient funds and does not achieve the company's economic goals, namely profit. There are many causes of this financial distress. According to Agusti (2013), factors that affect financial distress are internal factors and external factors. Internal factors that cause financial distress are cash flow difficulties, large amounts of debt, and losses from company operations. Meanwhile, the external factors are the increase in fuel prices and the increase in the loan interest rate. Bankruptcy analysis is important to be known by stock investors and creditors in the company, because they have a high risk of the company's financial condition in the event of bankruptcy. According to Hanafi and Halim (2009), there are two models in bankruptcy analysis, namely the univariate and multivariate models. Univariate analysis can be used when predicting financial difficulties by using the assumption that the distribution of financial variables for companies experiencing financial difficulties and those without financial difficulties is different. Meanwhile, multivariate analysis has a statistical technique that is often used, namely discriminant analysis to clarify observations into two groups, namely bankruptcy and not bankruptcy. Altman Z-score uses this model because the level of accuracy has been tested using five ratios in predicting bankruptcy conditions, namely working capital / total assets, retained earnings / total assets, earnings before interest and taxes or total assets, common stock market value and preference / value. book total accounts payable, sales or total assets. According to Hanafi and Halim (2016) the criteria used by Altman in the Z-score analysis to measure the financial health condition of a company that goes public based on the cut-off point reported by Altman are: (1) If the company's Z-score

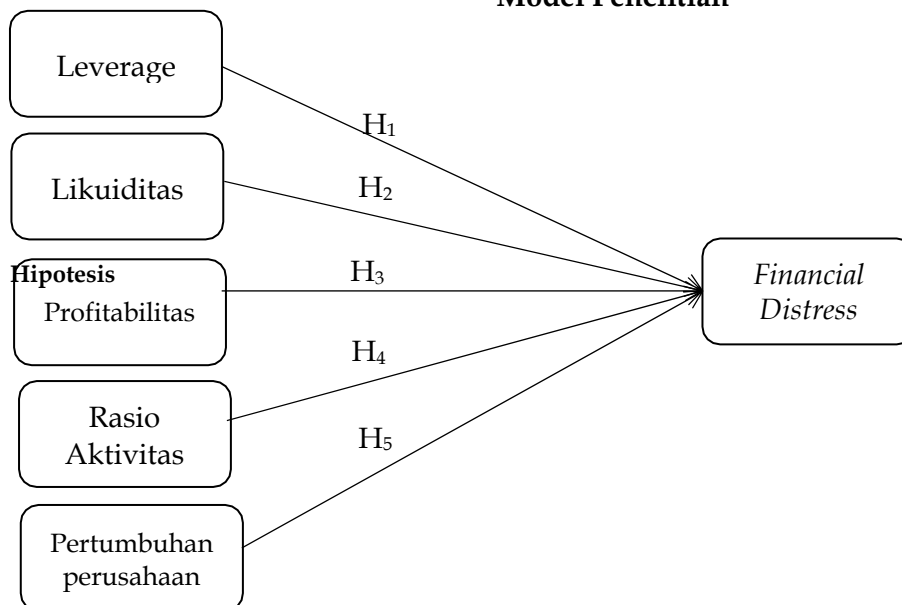
value is <1.81 , then health company finance is included in the financial distress criteria; (2) If the company's Z-score is $1.81 - 2.99$, the company's financial health is included in the criteria for financial distress; (3) If the Z-score of the company is > 2.99 , then the company's financial health is included in the criteria of being healthy or not in financial distress.

RESEARCH MODEL

Based on the theoretical review that has been described, the researcher indicates the factor of the theory of signaling, in this case seen from the leverage, liquidity, profitability, activity ratio and company growth to financial distress. Conceptual framework to describe the relationship between the independent variables, in this case the ratio of leverage, liquidity, profitability, activity ratios and company growth to the dependent variable, namely financial distress. The following is a conceptual framework that describes this relationship.

Gambar 1

Model Penelitian



The hypothesis is an answer or a provisional guess with reference to the formulation of the problem which is stated in the form of a sentence. Based on the thought framework and conceptual framework described above, the researcher can propose the following hypothesis:

- H1: Leverage affects financial distress.
- H2: Liquidity affects financial distress.
- H3: Profitability affects financial distress
- H4: Activity ratio affects financial distress.
- H5: Company growth affects financial distress

RESEARCH METHODS

Research Type and Population (Object) Research

This type of research used in this research is a type of quantitative research. The quantitative research method is a method based on the philosophy of positivism, which is used to research on certain populations or samples (Sugiyono, 2014). Comparative causal is a type of research that has causal characteristics between 2 or more variables. This study is used to predict financial distress, which is expressed in the form of dummy variables, namely 1 for companies with financial distress and 0 for non-financial distress companies. In this study, the population that will be used as the object of research are food and beverages companies listed on the Indonesia Stock Exchange in 2013-2018 (www.idx.co.id). The total population of food and beverage sector companies listed on the Indonesia Stock Exchange is 18 companies.

Sampling Technique

The sample used is all food and beverages companies listed on the Indonesia Stock Exchange for the period 2013-2018, which were selected using a purposive sampling method using certain criteria. The criteria required are as follows: (1) food and beverage sector companies listed on the Indonesia Stock Exchange in the 2013-2018 period; (2) food and beverage sector companies that publish financial reports regularly during the 2013-2018 period; and (3) food and beverages sector companies that use rupiah as reporting currency.

Data collection technique

The data used in this research is secondary data. The research data is taken from the Indonesia Stock Exchange website (www.idx.co.id). Researchers use the documentation method which is carried out by utilizing the financial statements of food and beverages sector companies on the Indonesia Stock Exchange in the 2013-2018 period.

Variables and Variable Operational Definitions

The leverage ratio is a ratio used to measure the extent to which the company's assets are financed with debt (Kasmir, 2017). In calculating the leverage ratio, which is proxied by using a debt to asset ratio, according to Srengga (2012) the following formula can be used:

$$\text{Debt to Asset Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

Liquidity according to Subramanyam and Wild (2014: 185) says that liquidity is the ability to convert assets into cash or the ability to obtain cash. In calculating the liquidity ratio, which is proxied by using the current ratio, according to Sutrisno, (2017: 247) the following formula can be used:

$$\text{Current Ratio} = \frac{\text{Aktiva Lancar}}{\text{Hutang Lancar}} \times 100\%$$

The profitability ratio is a ratio used to measure a company's ability to generate profits from its normal business activities (Hery, 2016). In calculating the profitability ratio which is proxied by using return on assets, according to Rohmadini et al., (2018) the following formula can be used:

$$\text{Return On Asset} = \frac{\text{Laba Bersih}}{\text{Total Assets}}$$

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The activity ratio is a ratio that measures the level of effectiveness of a company in using its assets, including to measure the level of efficiency of the company in utilizing existing resources (Hery, 2016). In calculating the activity ratio proxied by using total asset turnover, according to Dewi (2019) the following formula can be used:

$$\text{TATO} = \frac{\text{Penjualan Bersih}}{\text{Total Aktiva}}$$

The growth ratio is a ratio that describes a company's ability to maintain its economic position amidst economic growth and its business sector (Kasmir, 2017). In calculating this ratio, which is proxied by using the sales growth ratio, according to Firdiana (2016) the following formula can be used:

$$\text{Sales Growth} = \frac{(\text{sales } t) - (\text{sales } t - 1)}{\text{sales } t - 1}$$

Financial distress, this variable is a binary variable which means the variable is presented in a dummy form. With the binominal size, namely one (1) if the company experiences financial distress and zero (0) does not experience financial distress. Companies experiencing financial distress can be predicted using the Altman Z-Score method. From the calculated Altman Z-Score, it can be taken from the lowest point, namely 1.81. Companies that have a z-score of less than 1.81 can be categorized as experiencing financial distress and if the company has a z-score of more than 2.99, it can be categorized that the company does not experience financial distress. According to Hanafi and Halim (2009) the equation to be used in finding the altman z-score is as follows:

$$Z\text{-score} = 0,717 X_1 + 0,847 X_2 + 3,107 X_3 + 0,420 X_4 + 0,998 X_5$$

Information:

X1: (Current assets - Current liabilities) / Total assets

X2: Retained earnings / Total assets

X3: Profit before interest and tax / Total assets

X4: Market value of equity / book value of total liabilities

X5: Sales / Total assets

Analysis Technique Data

Descriptive statistics

Descriptive statistical analysis according to Ghozali (2016) is used to provide an overview or description of data seen from the mean (mean), standard deviation, variance, maximum, minimum, sum, range, kurtosis, and skewness. Descriptive statistical analysis objectively classifies, analyzes, and interprets the data under study to make it easier to understand the variables used in the study.

Logistic Regression Analysis

In this study, hypothesis testing was carried out using multivariate analysis, namely by using logistic regression analysis, where the independent variable is a combination of nominal metrics and non-metrics). In its use, logistic regression does not require a normal distribution on the independent variable (independent variable). In addition, this analysis technique does not require classical assumption tests (multicollinearity test, heteroscedasticity test, normality test and auto correlation) on the independent variables (Ghozali, 2011). This regression analysis is used to test whether the variables of leverage, liquidity, profitability, activity and growth firm have an effect on financial distress. According to Ghozali (2016: 324) where the regression model is stated as follows:

$$FD = \beta_0 + \beta_1 Lev + \beta_2 Lik + \beta_3 Pro + \beta_4 Akt + \beta_5 Grw$$

Information :

FD = Probability of companies experiencing financial distress

B0 = Constant

$\beta_{1,2,3,4,5}$ = independent variable regression coefficient

Lev = Leverage

Lik = Liquidity

Pro = Profitability

Akt = Activity

Grw = Growth Firm Assessing Model Feasibility

Regression (Good of Fit Test)

According to Ghozali (2016), goodness of fit test can be done by paying attention to the output of Hosmer and Lemeshow's Goodness of Fit Test, with the hypothesis:

H₀: The hypothesized model is fit with the data

H_a: The hypothesized model does not fit the data

If the Hosmer and Lemeshow statistical value is equal to or less than 0.05, then the null hypothesis (H₀) is rejected and this means that there is a significant difference between the model and its observation value so that the Goodness of Fit Test Model is not good because the model cannot predict its observation value. Conversely, if the statistical value of Hosmer and Lemeshow is more than 0.05, then the null hypothesis (H₀) cannot be rejected, which means that the model is able to predict the value of its observations.

Assessing the Overall Model (Overall Fit Model)

This test is used to assess the overall model that has been hypothesized whether it is fit or not with the data. To assess the overall model, it is indicated by -2 Log Likelihood value by comparing the value between -2 Log Likelihood at the beginning (Block Number = 0) with the -2 Log Likelihood value at the end (Block number = 1). If the value of -2 Log Likelihood (Block Number = 0) is greater than the -2 Log Likelihood value (Block Number = 1), then the whole model shows a good regression model. The decrease in Log Likelihood shows that the model is getting better (Ghozali, 2016: 328).

Feasibility Assessing Models Regression (Good of Fit Test)

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Assessing the Coefficient of Determination (Nagelkerke R Square)

Nagelker's R Square is a test to test how much influence the independent variable has on the dependent variable. Nagelker's R Square values vary from 0 (zero) to 1 (one). If the

value of Nagelker's R Square is getting closer to 1 (one), the model is considered the betterness of fit (Ghozali, 2016).

Classification Table

The classification table is used to calculate the true and false estimated values (Ghozali, 2016: 329). In the column there are two predictive values of the dependent variable, namely financial distress (1) and no financial distress (0). Meanwhile, the row shows the actual observed value of the variable.

Hypothesis test

Model Test

This test aims to test whether the independent variables consisting of the ratio of leverage, liquidity, profitability, activity, and growth firm have an overall effect on the independent variables, namely financial distress. Then the hypothesis testing is:

H₀ = leverage, liquidity, profitability, activity, and overall growth firm have no effect on financial distress conditions.

H₁ = leverage, liquidity, profitability, activity, and firm growth as a whole have an effect on financial distress.

With a significance level of $\alpha = 5\%$, the test criteria is that H₀ is accepted and H₁ is rejected if the significance is > 0.05

Wald Test

Wald test is conducted to find out how far all independent variables, namely the ratio of leverage, profitability, activity, and growth firm which are included in the model have an influence on the dependent variable, namely financial distress. This Wald test aims to determine the significance level of each independent variable on the dependent variable by looking at the column of significance of $\alpha = 5\%$. The criterion in testing is if the value of the significance level is ≤ 0.05 , then the research model can be said to be feasible.

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