

The Effect of Leverage, Liquidity, and Firm Size on Financial Distress in Manufacturing Companies Listed on the IDX in 2021-2023



I Gede Adiputra¹, Nur Ainun Bangun², Padmapraba Tanibnu³, Juan Felix⁴

^{1,2,3,4} Faculty of Economics and Business of Tarumanagara University, Jakarta, Indonesia

ABSTRACT: This study aims to determine the effect of liquidity ratio, leverage, and Firm Size on the occurrence of financial distress in manufacturing companies listed on the IDX in the food and beverage sector in 2021-2023. The population of this study were manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2021-2023. Sampling using purposive sampling technique so that 14 companies were obtained with 3 years of analysis units. The independent variables of this study are liquidity, leverage, Firm Size and the dependent variable is financial distress. The data collection method uses secondary data through annual financial reports from www.idx.co.id. The analysis technique in this study uses descriptive analysis and logistic regression because the dependent variable in this study is a dichotomous variable. The results of the study found that there was no influence of liquidity as measured by the current ratio which had a negative effect on the occurrence of financial distress, there was a significant positive influence of leverage as measured by DER on the occurrence of financial distress, there was no influence of Firm Size as measured by Log total assets on the occurrence of financial distress.

KEYWORDS: Liquidity, Leverage, Firm Size, Financial Distress

I. INTRODUCTION

The current global economic conditions and business developments in the era of globalization have influenced the increasingly tight competition in the business world and require business actors to further develop the quality and quantity of their companies. Competition to achieve goals and increase profits, forces companies to strengthen their basic management or fundamental management in order to survive and avoid financial difficulties that lead to bankruptcy or insolvency. According to sahamok.com in 2013-2017 there were still 19 companies that were delisted from the Indonesia Stock Exchange. Hadi & Anggraeni (2008) stated that the delisting event from the stock exchange is one of the early indications that a company will go bankrupt. This can also be called financial distress. Financial distress is bad news that the company's financial condition is unhealthy or the company's financial crisis leads to bankruptcy. The wave of free trade has made the domestic industrial sector stagnant. Local products are made helpless by the presence of imported goods that continue to dominate the domestic market. The phenomenon of bankruptcy that befell companies in Indonesia due to being hit by a storm of foreign products that continuously flooded Indonesia reached 180,000 companies (Hendra et.al, 2018). A company must continue to improve and maintain its performance to become a healthy company and avoid financial distress or even bankruptcy. However, in reality, many large companies in Indonesia have gone bankrupt. For example, PT. Nyonya Mener, which has been established since 1919, was declared bankrupt by the Semarang District Court on August 3, 2017 because it had debts of up to IDR 7.4 billion. Then PT. Royal Standar (RS) Group, which oversees Amper Jaya, was declared bankrupt by the Central Jakarta Commercial Court on March 6, 2017 because it had debts of IDR 333 billion from 18 creditors from a total of IDR 1.258 trillion in RS Group bills from a total of 23 creditors. Sariwangi Company was also declared bankrupt on November 18, 2018 by the Panel of Judges of the Central Jakarta Commercial Court, granting the request for cancellation of homologation from PT Bank ICBC Indonesia against PT Sariwangi Agricultural Estate Agency, and PT Maskapai Perkebunan Indorub Sumber Wadung because Sariwangi and Indorub had been proven to be negligent in carrying out their obligations according to the peace plan in the previous Debt Payment Obligation Suspension (PKPU) process (Tribunnews.com, 2018).

Companies that experience bankruptcy can be said to be experiencing financial distress so that they can be threatened with de-listing or removal from the Indonesia Stock Exchange (IDX). Companies that experience de-listing or removal generally experience financial distress or financial difficulties which result in being unable to fulfill their obligations (Susilowati, 2019:20). There are various types of industries, one of the industries with dominant growth is the manufacturing industry. According to

The Effect of Leverage, Liquidity, and Firm Size on Financial Distress in Manufacturing Companies Listed on the IDX in 2021-2023

sahamok.com, a manufacturing company is a processing industry company that processes raw materials into semi-finished or finished goods. Manufacturing companies are identical to factories that apply machines, equipment, engineering techniques, and labor. The manufacturing industry sector plays a very important role in the dynamics of stock trading on the Indonesia Stock Exchange. This is evidenced by the contribution of the manufacturing industry sector reaching 21.02%, but there was a decrease in contribution in 2017 due to the large number of delisted shares (Lubis, 2019). Financial Distress can be predicted using financial ratios. Fahmi (2015:107) states that this financial ratio is useful for analyzing the company's financial condition. One of the financial ratios is the Liquidity ratio. Ardiyos (2013:327) defines the liquidity ratio as the comparative relationship between current assets and current liabilities that must be met by the company in a short time, in other words the liquidity ratio is the company's ability to meet its short-term obligations. Research by Andriansyah (2018), Andriyani, Paramita, Muchamad (2018), Tukan (2018), Jamaludin, Maslichah, Cholid (2018), Carolina, Marpaung, Derry (2017), Aisyah, Kristanti, Djusminar (2017) and Putra, Purnamawati, Edy (2017) shows that the liquidity ratio does not have a significant effect on financial distress in a company. This is in contrast to research conducted by Ardian, Andini, Kharis (2017), Masdupi, Abel, Tasman (2018), and Widhari and Lely (2015) which shows that the liquidity ratio has a significant effect on financial distress in a company. All previous studies used the Current Ratio proxy. In addition to the liquidity ratio, the second is the leverage ratio, leverage is a ratio used to measure the extent to which a company's assets are financed by debt. This means the company's ability to meet debt obligations with the amount of its assets.

Research on the effect of leverage on financial distress has been widely conducted. Research conducted by Mahaningrum and Merkusiwati (2020) shows that leverage has a positive and significant effect on financial distress. So this means that the greater the company's activities financed by debt, the greater the possibility of financial distress. However, this is different from Srikalimah's research (2017) which shows that leverage has no effect on financial distress. This shows that the higher the company's activities in meeting its short-term obligations, the less likely financial distress is. Another factor that also affects financial distress is Firm Size. Firm Size is a description of how much total assets are owned by the company Kurniasanti & Musdholifah, (2018). Assets are chosen to calculate Firm Size because assets are considered the most stable, therefore the size of the assets is related to the company's finances. The greater the total assets owned by the company, the less likely the company is to experience financial distress. Companies with large total assets will find it easier to diversify so that the possibility of experiencing financial distress is very small. In addition, with large total assets, it is expected that the company will be more able to pay off obligations in the future so that the company will avoid financial problems (Putri & Merkusiwati, 2014). Conversely, the smaller the size of the company, the higher the potential for financial distress experienced by the company. Research conducted by Li & Du, (2011) found that Firm Size affects financial distress. These results indicate that the higher the size of the company, the lower the financial distress experienced by the company. In line with research by Putri & Merkusiwati, (2014) which shows a significance level of 0.003 with a coefficient of -0.964, which means that Firm Size has a negative effect on financial distress. The greater the total assets owned by the company will have an impact on increasing the ability to pay off the company's obligations in the future, so that the company can avoid financial problems. This research is supported by research conducted by Setyowati & Sari, (2019). This is not in accordance with the results of Ayu et al.'s research, (2017) found that Firm Size as measured by Ln total assets did not have a significant effect on financial distress. Strengthened by research by Kristanti, Rahayu, & Huda., (2016) and Cinantya & Merkusiwati, (2015) that the size of a company's assets is not able to indicate financial problems experienced by the company.

Based on the explanation of the gap and research gap phenomena, this study encourages a study entitled "The Effect of Liquidity, Leverage, and Firm Size on Financial Distress in Manufacturing Companies Listed on the IDX in 2021-2023".

II. LITERATURE REVIEW

Financial Distress

Financial distress or financial difficulties are conditions in which a company is unable to meet its obligations, both short-term and long-term. If this condition is allowed to continue, the company may go bankrupt or be liquidated. Then Platt and Platt stated that the usefulness of financial distress information that occurs in a company is: (1) it can speed up management action to prevent problems before bankruptcy occurs. (2) Management can take merger or takeover actions so that the company is better able to pay debts and manage the company better. (3) Provide early warning signs of future bankruptcy (Ayu, 2017:140).

According to Altman (2005) in Hendra et al., (2018) financial distress is a broad concept consisting of several situations where a company faces financial difficulties. Common terms to describe the situation are failure, bankruptcy, default, and insolvency. If the company shows a weakening financial condition, it can make stakeholders such as creditors and shareholders lose their trust. That way, these stakeholders will withdraw from working with the company. If the company fails to find a way out, it is a sign that the company is in a financial distress situation on the verge of bankruptcy. There are several measurements to measure financial distress, including:

The Effect of Leverage, Liquidity, and Firm Size on Financial Distress in Manufacturing Companies Listed on the IDX in 2021-2023

Altman Model (1968)

Altman was the first to apply Multiple Discriminant Analysis (MDA). The use of the Altman model as a measure of bankruptcy performance is not fixed but rather develops over time, where testing and discovery of the model continues to be expanded. This model then became popular for predicting financial distress. Here is the Altman model equation:

$$Z = 1,2 Z1 + 1,4Z2 + 3,3Z3 + 0,6Z4 + 1 Z5$$

Z1 = Working Capital / Total Asset

Z2= Retained Earning / Total Asset

Z3= Earning before interest and taxes / Total Asset

Z4= Book Value of Equity / book value of total debt

Z5= Sales / Total Asset

The criteria used to predict corporate bankruptcy with the discriminant model is by looking at the zone of ignorance, namely the Z value area, where the Z value is categorized as follows:

- For a Z-Score value of less than or equal to 1.81, the company is experiencing financial difficulties and high risk.
- For a Z-Score value between 1.81 and 2.67, the company is considered to be in the gray area. In this gray area, there is a possibility that the company will go bankrupt and some will not, depending on how the company's management can immediately take action to immediately overcome the problems experienced by the company.
- For a Z-Score value greater than 2.67, it provides an assessment that the company is in a very healthy condition so that the possibility of bankruptcy is very small.

Zmijewski Model

The prediction model produced by Zmijewski in 1983 is a 20-year research that has been repeated. Zmijewski (1984) uses liquidity ratio analysis, leverage, and measures the performance of a company. Zmijewski made predictions with a sample of 75 bankrupt companies and 73 healthy companies during 1972 to 1978, the F-Test indicator against the ratio of the rate of return group, liquidity, leverage turnover, fixed payment coverage, trends, firm size, and stock return volatility, showed significant differences between healthy and unhealthy companies. Then this model produces the following formula: $X = -4,3 - 4,5X1 + 5,7X2 + 0,004X3$
Where :

X1 = ROA (Return on Asset)

X2 = Leverage (Debt Ratio)

X3 = Liquidity (Current Ratio)

If the score obtained is more than 0 (zero) then the company is predicted to go bankrupt, but if the score obtained is less than 0 (zero) then the company is predicted not to have the potential to go bankrupt.

Liquidity

According to Moeljadi (2010:67) that liquidity is an indicator of the company's ability to pay all its financial obligations when due. A high level of liquidity indicates that the company has no difficulty paying its obligations in the short term, so that creditors do not need to worry about providing loans.

Liquidity is a problem related to a company's ability to meet its financial obligations that must be met immediately (Riyanto, 2011: 25). While the liquidity ratio is the ability to pay short-term financial obligations on time. The company's liquidity is indicated by the size of its current assets, namely assets that are easy to convert into cash including cash, securities, receivables, inventory (Sartono, 2010: 116).

The liquidity ratio assessment used by researchers is the current ratio because the current ratio is broadly a measure of liquidity including its ability to measure (1) the ability to meet current liabilities. The higher the amount of current assets to current liabilities, the lower the confidence that the current liabilities will be paid. (2) Loss buffer. The larger the buffer, the smaller the risk. The current ratio indicates the level of security available to cover the decline in the value of non-cash current assets when the assets are released or liquidated. (3) Current fund reserves. The current ratio is a measure of the level of security against uncertainty and shocks such as strikes and extraordinary losses, which can temporarily and unexpectedly endanger cash flow.

The liquidity ratio is an indicator of the extent to which a company can pay off its short-term debts. Companies that have a high level of liquidity indicate that the company has current assets that are ready to be used to pay off its short-term debts. This study uses the current ratio proxy. The current ratio is a comparison between the amount of current assets compared to the amount of current debt. The higher the value of the liquidity ratio, the greater the company's chances of paying off its short-term debts because the amount of current assets is greater than the amount of current debt. Then the possibility of the company experiencing financial distress is also smaller because the company is able to manage its current assets to pay its short-term debts.

The Effect of Leverage, Liquidity, and Firm Size on Financial Distress in Manufacturing Companies Listed on the IDX in 2021-2023

This is in accordance with research by Masdupi, Abel, Tasman (2018) and Widhari and Lely (2015) which shows that the liquidity ratio with the current ratio proxy has a significant negative effect on financial distress in a company.

H1: Liquidity has a negative effect on the company's financial distress.

Leverage

According to Hanafi (2012:79) leverage is the use of assets and sources of funds by a company that has fixed costs (fixed expenses) with the intention of increasing potential shareholder profits. Meanwhile, according to Agus Sartono (2013:263) financial leverage is the use of funds that have fixed expenses with the hope that it will provide additional profits that are greater than its fixed expenses so that the profits available to shareholders will increase.

According to Munawir (2010:70), the definition of the leverage ratio is a ratio that shows the extent to which a company is financed by debt. This ratio also indicates an indication of the level of security of lenders (creditors). Meanwhile, Kasmir (2013:151) leverage ratio is a ratio used to measure the extent to which a company is financed by debt.

Based on the definition above, it can be concluded that this leverage ratio is a ratio used to measure the extent to which a company is financed by debt. The use of debt that is too high will endanger the company because it will fall into the extreme leverage category, namely the company is trapped in a high level of debt and it is difficult to release the debt burden. Therefore, companies should balance how much debt is appropriate to take and from which sources can be used to pay debts.

The use of a good leverage ratio will provide many benefits for companies to face all possibilities that will occur, as according to Kasmir (2013:153), including:

- To find out the company's position regarding obligations to other parties (creditors).
- To assess the company's ability to meet fixed obligations (such as loan installments including interest).
- To assess the balance between the value of assets, especially fixed assets and capital.
- To assess how much the company's assets are financed by debt.
- To assess how much influence the company's debt has on asset management.
- To assess or measure how much of each rupiah of equity is used as collateral for long-term debt.
- To assess how much loan funds will be collected immediately, there are so many times the equity owned.

Leverage describes the relationship between the company's debt to capital and assets. This ratio shows how much the company's ability is financed by debt using the capital it has. According to Andre & Taqwa, (2014) leverage measures how much of a company's assets are financed or derived from debt. If a company's financing is mostly derived from debt from third parties, this will result in the risk of difficulty in payments due to assets being much smaller than the company's debt. If this situation cannot be resolved properly, the potential for financial distress will be even greater

In line with signaling theory, companies with high levels of leverage indicate that a company is able to provide large profits, so that this situation provides a positive signal to the company's investors. Investors will be increasingly interested and assume that the company's condition has good prospects in the future. Restianti & Agustina, (2018) explain that the liquidity ratio can be a signal sent by the company to investors. This is because the greater the company's activities are financed by debt, the greater the possibility of financial distress experienced by the company, because the greater the company's obligation to pay debt.

Financing a company with debt has an impact on the company. This happens because the company depends on outside parties to finance its operational needs. This means that the greater the company's funding from debt, the greater the possibility of the company experiencing financial distress, because the greater the company's obligation to pay off the debt. The influence of leverage on financial distress has been proven by Susilawati (2017) and Khoiriyah (2017) who found that leverage has a positive effect on financial distress. If a financing company uses more debt, this is at risk of payment difficulties in the future due to debt being greater than the assets owned. If this situation cannot be resolved properly, the potential for financial distress will be even greater. The influence of leverage on financial distress is proven by research by Larasati & Wahyudin, (2019) and Khaliq et al., (2014) that the higher the level of leverage, the higher the company's financial difficulties will be. The results of this study indicate that companies that are financed more with debt will have a greater risk of financial distress in the future because liabilities exceed the amount of capital Verayanti & Sukirman, (2019). Based on previous research and theoretical studies, the following research hypotheses can be developed:

H2: Leverage has a positive effect on financial distress Firm Size

According to Brigham & Houston (2006), Firm Size is a measure of the size of a company as indicated or assessed by total assets, total sales, profit, tax burden, and others. Large companies tend to have more capital sources and are less likely to go bankrupt, so they are better able to meet their financial obligations. In other words, large companies tend to have debt or use external funds in larger amounts.

Sawir (2000) Firm Size is stated as a determinant of financial structure in almost every study for different reasons:

1. Companies can determine the level of ease with which companies obtain funds from the capital market. Small companies generally lack access to organized capital markets, both for bonds and stocks. Even if they have access, the launch costs of

The Effect of Leverage, Liquidity, and Firm Size on Financial Distress in Manufacturing Companies Listed on the IDX in 2021-2023

selling a small number of securities can be a barrier. If securities are issued, small company securities may be less marketable, requiring pricing in such a way that investors get results that provide significantly higher returns.

2. Firm Size determines bargaining power in financial contracts. Large companies can usually choose funding from various forms of debt, including special offers that are more profitable than those offered by small companies. The larger the amount of money used, the greater the possibility of making contracts designed according to the preferences of both parties instead of using standard debt contracts.

3. There is a possibility that the effect of scale in costs and returns makes larger companies able to earn more profits. Ultimately, Firm Size is followed by other characteristics that affect financial structure. Other characteristics such as companies often do not have special staff, do not use financial plans, and do not develop their accounting systems into a management system.

According to Yogyanto (2007) that the size of assets is used to measure the size of the company, the size of the assets is measured as the logarithm of total assets. Likewise, according to Harahap (2007) that Firm Size is measured by the natural logarithm (Ln) of the average total assets of the company. The use of total assets is based on the consideration that total assets reflect the size of the company and are thought to affect timeliness.

Firm Size describes how much total assets the company has. Companies with large total assets will easily diversify and tend to be less likely to go bankrupt. The greater the total assets owned by the company, the more the company is expected to be able to pay off future obligations, so that the company can avoid financial problems (Hendra et al., 2018). The influence of Firm Size on financial distress has been proven by Susilowati & Fadlillah, (2019) who found that Firm Size has a negative effect on financial distress. The greater the total assets of the company, the more stable and stronger the company's financial condition will be in financial distress (Ayu et al., 2017). Signal theory is a theory related to the reasons why companies give signals to outsiders or the market. Information that has been submitted by the management will be used by the market to make decisions. Information related to Firm Size is very useful for users of financial information. By knowing the size of the company, it will make it easier for investors to consider their investment. The larger the size of the company, the greater the company's control over the market. According to Rahayu & Sopian, (2016), the size of the company can indicate that the company is able to finance the company's operational activities, in addition, the company is also expected to be able to pay off obligations in the future, so that the company can avoid financial distress.

Firm Size can be used as an indicator of the company's financial difficulties, because through the size of the company, the sustainability of the company's business can be analyzed, whether the company is in a healthy condition or is experiencing financial difficulties. So, the larger the Firm Size, the more the company will avoid financial distress (Verayanti & Sukirman, 2019). Firm Size has an effect on financial distress because the greater the total assets owned by the company will have an impact on increasing the ability to pay off the company's obligations in the future, so that the company can avoid financial distress.

Research conducted by Thim et al., (2011) which is proxied by the logarithm of total assets proves that Firm Size has an effect on financial distress. This shows that the larger the Firm Size indicates that the company is in good condition and does not experience financial distress. In line with research conducted by Putri & Merkusiwati, (2014) and based on theoretical studies, the following research hypothesis can be developed: H3: Firm Size has a negative effect on financial distress

Conceptual Framework and Hypotheses

To clarify the formulation of the research hypothesis, the following is a research hypothesis scheme:

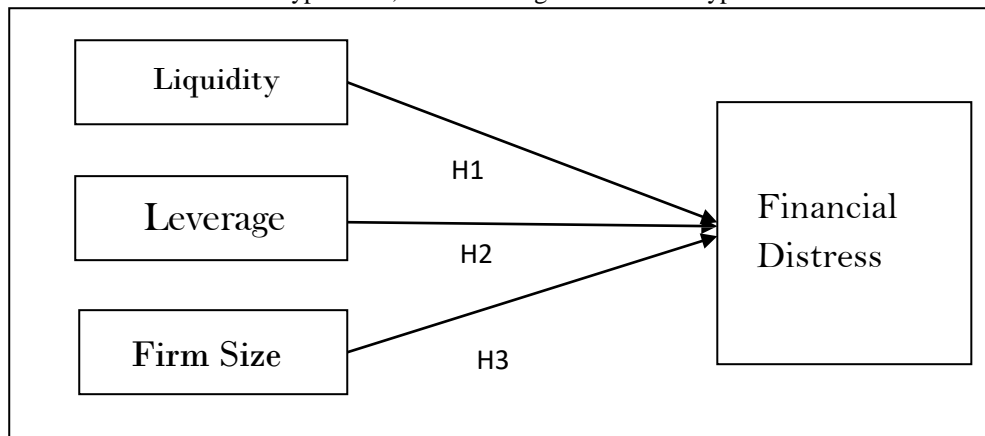


Figure1: Research Model

Based on the theoretical framework above, the authors formulate the following hypothesis:

The Effect of Leverage, Liquidity, and Firm Size on Financial Distress in Manufacturing Companies Listed on the IDX in 2021-2023

H1: Liquidity has a negative effect on financial distress

H2: Leverage has a negative effect on financial distress

H3: Firm Size has a negative effect on financial distress

III. METHODS

The population used in this study were all manufacturing companies in the food and beverage sector listed on the Indonesia Stock Exchange (IDX) in 2021-2023. Manufacturing companies were chosen because manufacturing companies are the mainstay sector to increase and spur the economy in Indonesia. Manufacturing companies are more productive and have a wide chain effect (ekonomi.okezone.com). This sample selection used a purposive sampling method with the following criteria:

1. Registered as a manufacturing company in the food and beverage sector.
2. Companies that publish financial reports for the period 2021-2023.
3. Companies have complete data.
4. Companies that make financial reports in Rupiah.

Financial distress is identified as a company that will experience financial difficulties which if allowed to continue will result in bankruptcy or insolvency. A company can be said to be experiencing financial distress when viewed from negative cash flow, declining profits or even deficits, unable to pay company debts, experiencing termination of employment of company employees, and even planning to terminate company operations.

Financial distress, which is classified as a dummy variable, is measured using the interest coverage ratio. The interest coverage ratio, which is one of the solvency ratios or commonly called the times interest earned ratio, can reflect how many times the interest expense is covered by profit or cash flow. If the interest coverage ratio in a company shows a number more than 1, then it is classified as a company that is not experiencing financial distress and in the dummy variable coding it is given the code 1, while if the interest coverage ratio shows a number less than 1, then the company can be said to be a company experiencing financial distress and in the dummy variable coding it is given the code.

Klapper, Claessens, & Djankov (1999) explain that "a company that is in financial difficulty is a company that has an interest coverage ratio of less than 1 (one)", so financial distress is measured using the interest coverage ratio. In this study, financial distress is proxied or measured using the interest coverage rate (Wardhani, 2006). The interest coverage rate is the ratio between interest costs and the company's operating profit. This ratio is designed to link the company's financial costs with the company's ability to pay those costs and serves as a measure of the company's ability to pay interest and avoid bankruptcy (Anggarini, 2010). So, the higher the interest coverage ratio, the greater the company's ability to pay interest. The formula for calculating the interest coverage ratio is as follows (Hadi & Andayani, 2014):

$$\text{Interest Coverage Ratio} = \frac{\text{Operating Profit}}{\text{Interest Expenses}}$$

Liquidity ratio is a ratio to see the company's ability to pay its debts or short-term obligations. In this study, researchers chose to use the current ratio proxy. The formula for finding the current ratio is:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} \times 100 \%$$

The leverage ratio is used to determine the extent to which the company is able to pay off or meet its long-term obligations. In this study, researchers used the Debt Ratio proxy. The DebtRatio formula is:

$$\text{Total debt to equity ratio} = \frac{\text{Utang lancar} + \text{Utang jangka panjang}}{\text{Jumlah modal sendiri}}$$

Firm Size is a measure of the size of a company indicated or assessed by total assets, total sales, amount of profit, tax burden and others (Brigham & Houston, 2006). Firm Size is formulated as follows:

$$\text{Firm Size} = \text{Log Total Company Assets}$$

Hypothesis testing in this study uses Logistic Regression analysis which is used to see the effect of liquidity, leverage, profitability and size on companies experiencing financial distress. Logistic Regression is applied because the dependent variable in this study is a dichotomous variable as in the study (Fadhilah & Syafruddin, 2013). In logistic regression, it does not require normality tests, heteroscedasticity, and classical assumption tests on the dependent variable Ghazali (2009), but in this study uses a

The Effect of Leverage, Liquidity, and Firm Size on Financial Distress in Manufacturing Companies Listed on the IDX in 2021-2023

multicollinearity test to see whether or not there is a correlation between independent variables. The formula used as in the study by Hadi & Andayani, (2014) is as follows:

$$\text{Logit FIN_DIS} = \beta_0 + \beta_1 \text{Lik} + \beta_2 \text{Lev} + \beta_3 \text{Prof} + \beta_4 \text{Size}$$

Logit FIN_DIS: dummy variable for the possibility of financial distress, namely:

financial distress companies have a value = 0, and non-financial distress companies have a value = 1 β_0 :

Constant

Lik: Liquidity

Lev: leverage

Prof: profitability

Size: Firm Size

IV. RESULT AND DISCUSSION

Hypothesis testing is carried out with the aim of answering the problem formulation in this study. The following are the results of hypothesis testing through t-2 Logistic Regression Analysis in the following study:

Table 1: Results of t-2 Logistic Regression Analysis

		B	S.E.	Wald	Sig.	Kesimpulan
Step 1 ^a	Likuiditas	.000	.002	.026	.873	Ditolak
	Leverage	.021	.007	9.127	.003	Diterima
	Size	.020	.104	.039	.843	Ditolak

Source: Data Sekunder yang Diolah, 2025

The results of the logistic regression test show that the liquidity variable as measured by the current ratio has a significance value of 0.873. This value is greater than the significance level of 5% (0.05). Thus, this study rejects the first hypothesis (H1) which states that liquidity has a negative effect on the occurrence of financial distress in manufacturing companies listed on the IDX in 2021-2023.

The leverage variable as measured by DER has a significance value of 0.003 and is smaller than the significance level of 5% (0.05). Thus, this study accepts the second hypothesis (H2) which states that leverage has a positive effect on the occurrence of financial distress in manufacturing companies listed on the IDX in 2021-2023.

The Firm Size variable as measured by Log total assets has a significance value of 0.843 and is greater than the significance level of 5% (0.05). Thus, this study rejects the first hypothesis (H4) which states that size has a negative effect on the occurrence of financial distress in manufacturing companies listed on the IDX in 2021-2023.

V. DISCUSSION

1. The Effect of Liquidity on Financial Distress

Based on the results of the liquidity variable test, statistically it shows insignificant results at $\alpha = 0.05$, which is 0.873 ($0.873 > 0.05$) so that H_a is rejected and H_o is accepted. This shows that liquidity has no effect on financial distress in manufacturing companies listed on the IDX in 2021-2023.

This study uses the current ratio to calculate the liquidity value. The absence of an effect of liquidity on financial distress makes it possible to use the current ratio to measure short-term liquidity, while financial distress is a long-term prediction (Fitri, 2020). Thus, it can be said that companies with a high current ratio are not necessarily included in the category of companies experiencing financial distress. Likewise, companies with a low current ratio are not necessarily free from the risk of financial distress.

The results of the study do not match the signaling theory which explains that the company's financial ratio is used as a signal for the company to provide information to external parties regarding the company's condition as a basis for decision making. The liquidity ratio measured using the current ratio is used by the company as an information signal for users of financial statements that describe the company's ability to meet its short-term obligations using its current assets. However, the measurement of the current ratio is unable to describe the actual condition regarding the presence or absence of financial distress risk in the company. This shows that not all signals given by the company can be used directly as a basis for decision making. Empirical evidence shows that Siwani Makmur Tbk in 2016 had the highest liquidity ratio of 651.94 with an interest coverage rate of -0.943 or less than 1. This shows that Siwani Makmur Tbk is experiencing financial distress. Meanwhile, Eterindo Wahanatama Tbk in 2018 had the lowest liquidity ratio of 0.002 with an interest coverage rate of less than 1 or experiencing financial difficulties. Thus, it can be seen that the magnitude of the liquidity ratio cannot be directly used as a basis for assessing whether or not a company is experiencing financial

The Effect of Leverage, Liquidity, and Firm Size on Financial Distress in Manufacturing Companies Listed on the IDX in 2021-2023

distress. The results of this study support the results of the research by Kamaluddin (2019) and Khoiriyah (2018) which stated that there was no effect of liquidity on financial distress. However, this study is different from the study conducted by Susilowati (2019) which found that liquidity had a negative effect on financial distress.

2. The Effect of Leverage on Financial Distress

Based on the results of the leverage variable test, statistically significant results were shown at $\alpha = 0.05$, which was 0.003 ($0.003 < 0.05$) so that H_a was accepted and H_o was rejected. This shows that leverage has a significant effect on financial distress in manufacturing companies listed on the IDX in 2021-2023.

The results of this study are in accordance with the signaling theory that the level of leverage is used by companies to provide signals to users of financial statements. Disclosure of information regarding the level of leverage is intended to provide an overview of the company's condition. The high leverage presented by the company can indicate that the company has a high risk of financial distress. Thus, users of financial statements can consider it as a basis for decision making.

The amount of leverage owned by a company indicates the company's ability to use debt to finance its assets (Putri, 2020). If a financing company uses more debt, this risks future payment difficulties due to debt being greater than the assets owned. If this situation cannot be resolved properly, the potential for financial distress will be even greater. The results of this study are in line with the findings of Susilawati (2017) and Khoiriyah (2017) that leverage has a positive effect on financial distress.

3. The Effect of Firm Size on Financial Distress

Based on the results of testing the Firm Size variable, statistically it shows insignificant results at $\alpha = 0.05$, which is 0.843 ($0.843 > 0.05$) so that H_a is rejected and H_o is accepted. This shows that Firm Size does not affect financial distress in manufacturing companies listed on the IDX in 2021-2023.

The results of this study do not support the signaling theory which states that the larger the Firm Size indicates the larger the company in controlling the market. The size of the company can be used as a consideration by external parties as one of the bases for decision making, for example investors. Companies with large total assets are indicated to be able to finance the company's operations and pay off future obligations, thus avoiding financial distress (Verayati & Sukirman, 2019).

Firm Size is a measure of the size of a company which is indicated or assessed by total assets, total sales, amount of profit, tax burden and others (Brigham & Houston, 2001). The absence of an effect of Firm Size on financial distress can occur because companies that have large assets are inseparable from the risk of financial distress originating from economic risk (Putri, 2020). This economic risk can arise from external factors of the company, in the form of inflation, fluctuations in the rupiah exchange rate and changes in interest rates. Therefore, companies with large assets do not necessarily reduce the risk of financial distress.

Empirical evidence shows that not all large companies can be indicated in a state of no financial distress. The lowest data on the Firm Size variable owned by Indo Acidatama Tbk in 2016 had an interest coverage level of 1.093 or more than 1. This value indicates that the Indo Acidatama Tbk company is not in financial difficulty. Thus, it can be seen that the size of the company cannot determine the risk of financial distress. The results of this study are in accordance with the results of research from Hendra (2017) and Ayu (2017) which state that Firm Size as measured by total assets does not affect financial distress.

VI. CONCLUSION

This study is intended to empirically test the effect of liquidity, leverage, profitability, and Firm Size on financial distress in manufacturing companies listed on the Indonesia Stock Exchange in 2021-2023. The conclusions that can be drawn from this study are as follows: Liquidity does not have a significant effect on financial distress, Leverage has a significant effect on financial distress, Firm Size does not have a significant effect on financial distress.

VI. ACKNOWLEDGEMENTS

This research is supported by Tarumanagara University, where the author serves as a lecturer. We express our gratitude to PDr. Sawidji Widodoatmodjo, SE, MM, the Dean of the Faculty of Economics and Business at Tarumanagara University, for providing valuable insights and expertise that greatly assisted in this research. We extend our thanks to the International Journal of Social Sciences And Human Research (IJSSHR) for providing the opportunity for the author to share insights with the community through its scholarly journal. We also appreciate everyone who provided guidance and assistance in completing this research. May this good collaboration continue to thrive with various parties

REFERENCES

- 1) Alifah, Mohd Norfian. 2014. Prediction Of Financial Distress Companies In The Trading And Services Sector In Malaysia Using Macro economic Variables. *Procedia - Social and Behavioral Sciences*, vol 129: 90 – 98

The Effect of Leverage, Liquidity, and Firm Size on Financial Distress in Manufacturing Companies Listed on the IDX in 2021-2023

- 2) Amir, Shaleh dan Bambang Sudiyatno. 2013. Pengaruh Rasio Keuangan untuk Memprediksi Probabilitas Kebangkrutan Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia. *Jurnal Dinamika Akuntansi, Keuangan dan Perbankan*. Vol.2, No.1
- 3) Arikunto, Suharsimi. 2013. *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta
- 4) Asyikin, Jumirin. 2018. Analysis Of Financial Performance To Predict Financial Distress In Sharia Commercial Banks In Indonesia. *International Journal Of Accounting, Finance, And Economics*. Vol 1 (2): 11-20.
- 5) Ayu, Adindha Sekar. 2017. Pengaruh Likuiditas, Leverage, Profitabilitas, Dan Ukuran Perusahaan Terhadap Financial Distress Studi pada Perusahaan Manufaktur Sektor Industri Dasar dan Kimia yang Terdaftar di Bursa Efek Indonesia tahun 2012-2015). *Jurnal Administrasi Bisnis (JAB)|Vol. 43 No.1*
- 6) Brigham, Eugene F. dan Joel F.Houston. 2006. *Manajemen Keuangan Buku I Edisi Kedelapan*. Jakarta: Erlangga.
- 7) Darmawan & Supriyanto. 2018. The Effect Of Financial Ratio On Financial Distress In Predicting Bankruptcy". *Journal Of Applied Managerial Accounting* Vol. 2, No. 1: 110-120.
- 8) Fachrudin, Khaira Amalia. 2008. *Kesulitan Keuangan Perusahaan Dan Personal*.NMedan: USU Press 9) Fahmi, Irham. 2013. *Analisis Laporan Keuangan*. Bandung: Alfabeta.
- 9) Ghozali, Imam. 2011. *Aplikasi Analisis Multivariate dengan Program SPSS*. Semarang: Badan Penerbit Universitas Diponegoro
- 10) Harahap, Sofyan Syafri. 2007. *Analisa Kritis atas Laporan Keuangan*. Jakarta: PT. Raja Grafindo Persada.
- 11) Harjito, Agus dan Martono. 2005. *Manajemen Keuangan*. Jakarta: Jala Sutia Hanafi, Mahduh dan Abdul Halim. 2012. *Analisis Laporan Keuangan*. Yogyakarta: UPP STIM YKPN
- 12) Hendra. 2017. Faktor-Faktor Yang Mempengaruhi Financial Distress (Studi Empiris Pada Perusahaan Pertambangan yang terdaftar di Bursa Efek Indonesia Periode 2014-2016). *Jurnal Penelitian*, Vol 1, No 1.
- 13) Kamaluddin, Amrizah et all. 2019. Financial Distress Prediction Through Cash Flow Ratios Analysis. *International Journal of Financial Research* Vol. 10, No. 3:63-76.
- 14) Kasmir. 2013. *Analisis Laporan Keuangan*. Jakarta: PT. Raja Grafindo Persada Khoiriyah, Riza Milatul. 2018. *Analisis Variabel Penjelas Terhadap Kondisi*
- 15) *Financial Distress Pada Perusahaan Non-Keuangan yang Terdaftar di Bursa Efek Indonesia". Jurnal Fakultas Ekonomi*, VI 1, No.1.
- 16) Masdupi, Erni et All. 2018. The Influence Of Liquidity, Leverage And Profitability On Financial Distress Of Listed Manufacturing Companies In Indonesia. *Advances in Economics, Business and Management Research*, volume 57: 223228
- 17) Moeljadi. 2010. *Manajemen Keuangan. Pendekatan Kuantitatif dan Kualitatif*. Malang: Bayu Media Publishing
- 18) Munawir, S. 2010. *Analisa Laporan Keuangan*. Yogyakarta: Liberty
- 19) Orina, Andre. 2013. Pengaruh Profitabilitas, Likuiditas dan Leverage dalam Memprediksi Financial Distress pada Perusahaan Aneka Industri yang Terdaftar di BEI. *Jurnal. UNP*
- 20) Putri, Deanisyah Suryani dan Erinosa NR. 2020. Pengaruh Rasio Keuangan, Ukuran Perusahaan dan Biaya Agensi terhadap Financial Distress. *Jurnal Eksplorasi Akuntansi*, Vol.2, No. 1, Hal 2083-2098.
- 21) Ratna dan Marwati. 2018. Analisis Faktor- Faktor Yang Mempengaruhi Kondisi Financial Distress Pada Perusahaan Yang Delisting Dari Jakarta Islamic Index Tahun 2012-2016. *Jurnal Tabarru' : Islamic Banking and Finance*. Vol 1 (1) : 51 – 62.
- 22) Riyanto, Bambang. 2011. *Dasar-dasar Pembelanjaan Perusahaan*. Yogyakarta: BPFE.
- 23) Sartono, Agus. 2010. *Manajemen Keuangan Teori dan Aplikasi*. Yogyakarta: BPFE
- 24) Sawir, Agnes. 2005. *Analisis Kinerja Keuangan dan Perencanaan Keuangan Perusahaan*. Jakarta: PT Gramedia Pustaka.
- 25) Sugiyono. 2015. *Metode Penelitian Kuantitatif, kualitatif dan R & D*. Bandung: Alfabeta
- 26) Susilawati, Della. 2017. Pengaruh Profitabilitas, Ukuran Perusahaan dan Leverage Terhadap Financial Distress Pada Perusahaan yang Terdaftar di Bursa Efek Indonesia (BEI). *Jurnal Akuntansi*, Vol 3, No 2.
- 27) Susilowati, Pusvita Indria Mei dan M. Rizali Fadlillah. 2019. Faktor-Faktor Yang Mempengaruhi Financial Distress Pada Perusahaan Manufaktur Di Indonesia. *Jurnal AKSI (Akuntansi dan Sistem Informasi)* Vol. 4 No. 1
- 28) Yogyanto, Hartono. 2007. *Teori Portofolio dan Analisis Investasi*. Yogyakarta: BPFE
<https://bali.tribunnews.com/2018/10/18/tak-hanya-sariwangi-3-perusahaan-legendaris-indonesia-ini-juga-pailit>



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0)

(<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.