

## THE ROLE OF PROFITABILITY, LEVERAGE, AND LIQUIDITY IN EFFORTS TO MINIMIZE FINANCIAL DISTRESS

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### ABSTRACT

The impact of the Covid-19 pandemic has made major changes to a country's economy. During the pandemic, many companies tried to survive so that the Covid-19 pandemic did not cause the company to go bankrupt. This research seeks to determine and analyze the influence of Profitability, Leverage and Liquidity ratios on the financial distress of manufacturing companies listed on the Indonesia Stock Exchange (BEI) for the 2020-2022 period. The type of research used is positivistic quantitative research. The type of data in this research is secondary data. The population in this research is manufacturing companies in the consumer goods industry sector, totaling 74 companies. The population of this research was 74 manufacturing companies in the consumer goods industry sector. Using purposive sampling techniques, 48 companies were obtained as research samples. The analysis used is multiple linear regression analysis. The research results found that the profitability and liquidity ratios had no effect on financial distress, the Leverage ratio had an effect on financial distress.

**Keywords :** Financial Distress, Leverage, Liquidity, Profitability

### 1. INTRODUCTION

The Covid-19 pandemic has made major changes to a country's economy. In 2020, almost all countries experienced an economic downturn due to mobility restrictions, making the situation unstable. One of the industries affected by the Covid-19 pandemic is manufacturing companies. This can be seen in the manufacturing Purchasing Managers Index in 2020 which fell to 45.3 from previously 51.9. This will certainly have a major impact on the economy in Indonesia, considering that the manufacturing industry is one of the industries that plays an important role in the Indonesian economy. In some cases, unpredictable economic conditions or unavoidable competition can increase costs and impact company performance. If a company does not have incentives, the company can experience losses and eventually experience financial distress.

According to Putri (2021), financial distress is a situation where a company's finances are in decline which can lead to bankruptcy if not handled properly (R. Putri 2021). According to Sucipto & Muazaroh (2017), financial distress is a situation where a company's financial position is in a crisis or unhealthy situation (Sucipto and Muazaroh 2016). This is usually an early sign of bankruptcy because a company has faced losses for several years. Financial distress is a situation where a company is experiencing financial difficulties that can threaten the survival and ability of a company to fulfill financial obligations. This can be caused by factors such as large debts, decreased income, or changes in the economic environment. Measuring financial performance that is well prepared in a company can function as a tool to determine the possibility of financial distress.

Profitability is the ability of a company to make a profit within a certain time span. This ratio is a measure of the efficiency of company management as measured by the profits obtained from sales and capital gains. By utilizing company assets effectively, it can reduce expenses, realize savings and ensure the availability of funds for further business operations. Profitability can be measured using Return On Assets (ROA). ROA is a ratio that shows how much assets contribute to making a profit. Investors usually use this ratio to measure or compare the financial performance of a company and other companies. In addition, ROA can also measure the efficiency of a company in using its assets to make a profit. It provides an overview of how well a company manages its assets to make a profit. Research by Andriyani et al., (2018) stated that profitability has an influence on financial distress (Andriyani, Paramita, and Taufiq 2018). Further research by Putri et al., (2021) also stated that profitability has an influence on financial distress.

Leverage is a ratio that functions to calculate how much debt is used to fund its investment. Every company certainly requires adequate funds to run its operations. Not only for operational needs, but also to finance the company's investment activities. The amount of funds used for funding must be considered carefully so as not to burden the company in the short and long term. The leverage ratio is measured by the Debt to Equity Ratio (DER). DER shows the amount of capital funded by debt. A company will look for sources of funds that have a low risk that can improve corporate governance so that it gets high profits. With this, financial difficulties can be overcome properly. Fitri & Syamwil's research (2020) stated that leverage has an influence on financial distress (Fitri and Syamwil 2020). Nasution's research (2019) also stated that leverage has an influence on financial distress (Nasution 2019).

Liquidity is a ratio that helps assess a company's ability to pay off short-term debt. The company's management's ability to settle short-term debt can be assessed by the company's owner based on liquidity. Companies that cannot pay off their short-term debt obligations can happen because they do not have any funds at all or are waiting for some assets to be converted into cash. The liquidity ratio is measured using the Current Ratio (CR). CR functions to assess a company's ability to pay off short-term liabilities. This ratio reflects how much a company's current assets are compared to its total current liabilities. Current liabilities are liabilities that are expected to be paid using current assets that must be paid within one period of the company's operations. Companies that have more current liabilities than current assets are likely to have difficulty liquidating when their current liabilities mature. Research conducted by Holili et al., (2021) states that liquidity has an effect on financial distress (Holili, Paramita, and Taufiq 2021). Research from Hadi (2022) also states that liquidity has an effect on financial distress (Hadi 2022).

## **2. LITERATUR REVIEW AND HYPOTHESIS**

### **2.1 Literatur Review**

#### *2.1.1 Signaling Theory*

Spence (1973) was the first to propose the theory of signaling and developed by Ross (1977) which explains the nature of a company in providing certain information to external parties, especially financial report information. There is good news and terrible news in the information at hand. The positive update conveyed by the company has an effect on increasing the value of its shares and share prices, so that investors are interested in determining their next steps. If it is bad news, investors will turn to other companies that provide good information (Mahaningrum and Merkusiwati 2020). Brigham and Houston (2021) debate this idea as well, which describes how potential investors' reactions to a firm will be influenced by management's assessment of its prospects for growth in the future. This signal takes the shape of details outlining management's attempts to carry out the owner's desires. When making investment decisions, businesspeople and investors use this information as a key signal (Brigham and Houston 2021).

#### *2.1.2 Financial Distress*

When an organization does not have enough funds to meet its obligations to creditors, it is called financial distress (Francis Hutabarat 2021). Sucipto and Muazaroh (2016) Indicates that a company is in financial hardship when its finances are poor or in crisis. Losses over several years are usually an early sign of financial distress (Sucipto and Muazaroh 2016). When a business has issues that potentially jeopardize its survival and capacity to make debt payments, it is said to be in financial distress. This condition is caused by things such as a decrease in income, large debts, or economic changes (Pradana 2020). Putri (2021) further clarifies that financial hardship results from an unhealthy or inadequate company's finances, which, if not managed appropriately, can lead to financial distress (V. A. Putri and Yustisia 2021).

Among the primary causes of financial difficulties for businesses are: 1) the Neoclassical model, which happens when resources are misallocated and management of the organization neglects to manage resources for operational activities, leading to financial troubles for the company; 2) the Financial model, because a company's poor financial structure causes limitations on liquidation. It demonstrates the business's capacity for long-term survival. However, the business suffers losses in the short term; 3) Corporate governance model. In other words, if a company has a good asset and financial structure but poor management, then the company can also experience financial difficulties (Setiawan and Amboingtyas 2018).

Indicators of signs of financial difficulty from an external company perspective: 1) the company's incapacity to execute and execute policies leads to a decline in sales; 2) a decline in the business's capacity to turn a profit; and 3) a significant reliance on debt; 4) a reduction in the quantity of dividend shares distributed to shareholders over a number of periods in a row; 5) declining company profits and profits (Sari, Susbiyani, and Syahfrudin 2019).

#### *2.1.3 Financial Distress Analysis Model*

Kristanti (2019, 42) reveals an analytical model to predict company financial distress in stages over time (Kristanti 2019):

1) univariate analysis, is a statistical method that uses financial ratios as the only way to predict business failure. For each ratio, a separate classification procedure is set separately. To reduce errors, this model uses a cut-off point. A corporation is classified as failing if its ratio value is less than the cutoff point and as non-failing if it is greater than the cutoff point. Because this model tends to be simple and easy to apply, Altman (1968) stated that this model has the possibility of providing inconsistent results. In addition, this model provides classification results for different ratios for the same company (Altman 1968)

2) Multivariate discriminant analysis; created by Altman (1968) to improve the weaknesses of univariate analysis in predicting potential financial distress. As the best predictor of business failure, this analysis model uses the "Z-Score Model", which consists of five financial ratios consisting of twenty-two variables.

3) Probability model; Multivariate discriminant analysis (MDA) models are criticized for producing conditional probability models (also known as conditional probability models) without assumptions about the distribution of their independent variables. Ohlson (1980) included logistic analysis in his analysis model (Ohlson 1980), and Zmijewski (1984) presented another analysis model that used a more complex probit method than logistic analysis (Zmijewski 1984). Logistics and probit techniques are linear probability models with dependent variables that are discrete, not continuous, or continuous, such as distressed and non-distressed companies. The logit model displays a logistic cumulative distribution function, while the probit displays a normal distribution function.

### 2.1.4 Profitability Ratio

Profitability ratio is a useful ratio for assessing the ability of a company in gaining profits. This ratio calculates the overall performance of the company's management which is aligned with the amount of profit gained "(Hadi 2022). Besides aiming to assess the ability of a company to benefit, the ratio of profitability also has another goal of measuring management efficiency in carrying out company operations. A superior performance is evidenced by the ability of management to obtain maximum profits for the company. This ratio is measured by comparing components in the income statement or balance sheet (Hery 2015).

### 2.1.5 Ratio of Leverage

Leverage ratio is an indicator that is useful in measuring the ability of a company to pay off all short -term obligations and long -term liabilities. In carrying out activities, a company certainly requires sufficient amount of funding inventory. "The leverage ratio shows the need for the company to think of providing funding of company debt that is borne" (Ratna and Marwati 2018).

A company that has a high leverage ratio (having a large amount of debt) can have an impact on the emergence of large financial risks. This risk arises because the company must bear the burden of interest payment that must be done efficiently and effectively through the purchase of certain production assets. A company manager is required to have expertise in handling the level of company leverage, especially in the point of view of observing the relationship between financial risks and returns received by the company from loan funds (Hery 2015).

### 2.1.6 Likuidity Ratio

The liquidity ratio is called a working capital ratio (current asset ratio) in which this ratio serves to assess the liquidity of a company. The company is declared liquid if the company is able to agree with short -term obligations when due. In order for a company to meet its short -term obligations, the company must have the availability of good cash or short -term assets in sufficient quantities that are easily converted or converted into cash. This ratio allows company owners to evaluate the ability of the company's management in managing the funds used to pay the short -term obligations of a company. The liquidity ratio provides quite a lot of benefits for stakeholders. This relationship is useful not only for the company's internal stakeholders but also external stakeholders such as investors, creditors and suppliers (Hery 2015).

## 2.2 Hypothesis

It is predicted that the ratio of profitability, leverage, and liquidity has an influence on the occurrence of financial distress. The high profitability ratio is considered by the company in a healthy financial condition so that the possibility of financial distress is very low. The higher the leverage the higher the possibility that the company will occur financial distress. High liquidity means the company's ability to meet its short -term debt is also high so that the possibility of avoiding financial distress is getting higher. Based on this explanation, the temporary hypothesis formulation is as follows:

H1: There is an influence between the ratio of profitability to financial distress.

H2: There is an influence between the leverage ratio to financial distress.

H3: There is an influence between the ratio of liquidity to financial distress.

## 3. RESEARCH METHOD

The type of research used is positivistic quantitative research. This type of data in this researcher is secondary data. The population of this study was 74 manufacturing companies in the consumer goods industry sector using purposive sampling techniques, 48 companies were sampled of research. The analysis used is multiple linear regression analysis. The research model is as follows:

### Research model

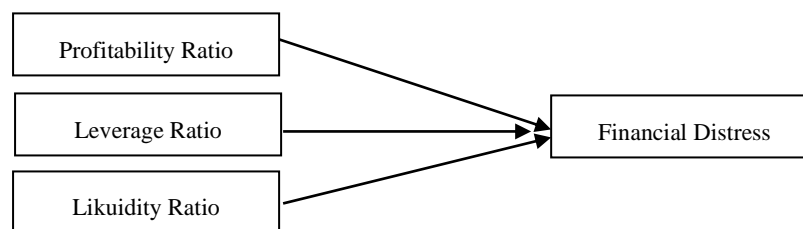


Table 1. Research Instrument

No.	Variable	Indicator	Instrument	Scala	Source
1.	Profitability Ratio	Return on Assets (ROA)	ROA = Net Profit/Total Assets	Rasio	(Hery 2015)

2.	<i>LeverageRatio</i>	<i>Debt to Equity Ratio (DER)</i>	DER = Total Liability/Total Equity	Rasio (Hery 2015)
3.	Likuidity Ratio	<i>(Current Ratio)</i>	CR = Current Assets/Current Liability	Rasio (Hery 2015)
4.	<i>Financial Distress</i>	<i>Zmijewski X-Score</i>	XScore = $-4,3 - 4,5X1 + 5,7X2 + 0,004X3$	Rasio (Zakkiyah 2014)

## 4. RESULT AND DISCUSSION

### 4.1 Result

#### 4.1.1 Data Normality Test

Data Normality Test This study tests data by viewing the normal probability plot at SPSS output. If the data leaflet or point is near the diagonal line, the probability plot is considered normal. The test results show that data leaflets or small dots are near the diagonal line. This means that the data meets the normality criteria so that data can be stated normally distributed.

#### 4.1.2 Multicollinearity Test

Multicollinearity test is useful to prove the correlation between the independent variables in the regression model. The test results prove the tolerance and VIF values of profitability, leverage, and liquidity variables > 0.1 and <10. This means that there is no multicollinearity.

#### 4.1.3 Autocorrelation Test

The autocorrelation test in this study is useful for seeing whether autocorrelation occurs in the independent variable and the dependent variable. Autocorrelation Test This study uses the Durbin-Watson test and uses SPSS aids with criteria, namely positive autocorrelation when the D-W value is smaller than -2. If the DW value is between -2 and 2, there is no autocoreela. Negative autocorrelation occurs when the DW number is greater than 2. The Durbin -Watson Value of this researcher is 1,342 which is located between -2 and 2.

#### 4.1.4 Heteroskedasticity Test

Heterokedasticity test is useful for proves whether there is an inequality between the residual variables of the regression model and other observations. If the residual value remains called homocodasticity. The results of the research show that the point does not collect in one place and no regular pattern is formed. The point spreads above, below, and around the number 0. This means that there is no heterokedasticity in this study.

#### 4.1.5 Multiple Linier Regression Analysis

$$FD = -0,105 - 0,004 P + 0,476 Le - 0,053 L + 0,578$$

Information:

FD = Financial Distress  
P = Profitability Ratio  
Le = Leverage Ratio  
L = Likuidity Ratio

#### 4.1.5 Hypothesis Test

##### Model Feasibility Test (F test)

F test is useful in knowing or not a model. The F test was carried out from a significant value (GIS.) Comparison with the level of trust to be achieved ( $\alpha$ ) or comparing the Fcount and Ftable values. If the value is significant  $\alpha < 0.05$ , the model is accepted. Conversely, if the significant value is  $\alpha > 0.05$ , the model is rejected. Obtained the results of the F test as follows:

**Table 2. Model Feasibility Test Result (Test F)**

Model	Sum Of Square	df	Mean Square	F	Sig.
1	32,635	3	10,878	9,795	0,000

Source: Data Processing Result, 2024

##### Determination Coefficient (R2)

The coefficient of determination is useful for seeing the size of the ability of a model to present the variable variable dependa. The coefficient of determination has a value between the numbers 0 and 1. The results of the coefficient of determination (R2) show the value of r count of 0.676. The coefficient of determination has a value that is located between 0 to 1. It is known that the results of the calculation obtained are  $0.676 < 1$ . Other variables that are not examined in this study.

*t test (partial)*

The T test is useful to prove the effect of independent variables individually on the dependent variable. T test can be done by knowing the GIS value. From each independent variable that is declared to have a partial effect if the value of sig. <0.05. It is known that the t table value in this study is equal to 1,97705. The test results can be seen in the following table:

**Table 3 Test Results t (partial)**

Variable	t count	Sig	Information
Profitabilitas	-0,030	0,976	No effect
Leverage	5,248	0,000	Influentia
Likuiditas	-0,631	0,532	No effect

Source: Data Processing Result, 2024

## 4.2 Discussion

### 4.2.1 Result of The First Hypothesis Testing

The results showed that there was no influence between profitability and financial distress. Profitability is a useful ratio to see how many companies make a profit. Companies that have high profitability prove that the company's financial performance using assets is managed effectively and efficiently where the company will minimize the burdens issued so that profitability will increase. However, companies that have high profitability are not certain to avoid financial distress. Market fluctuations and market demand that have decreased dramatically can make the company in a financial distress condition. So even with companies that have value. Low profitability is not always in financial difficulties. This means that the high and low profitability of a company cannot affect the state of the financial difficulties of a company. This happens because even in an economic crisis, the company has been able to manage its assets effectively and efficiently and its profitability does not occur significantly. This can be seen from the average profitability graph that tends to be stable.

### 4.2.2 Result of The Second Hypothesis Test

The results showed that there was an influence between leverage and financial distress. This can be seen from the average leverage ratio that increased in 2022. The leverage ratio is useful to assess the number of company assets funded by debt. Companies that have a large amount of debt can distribute negative signals to investors in investing. Investors become hesitant to invest because of the large amount of company debt that is likely to cause bankruptcy. Companies that publish high leverage can worsen financial distress because of the negative impact of investors who view that this is a major risk that can increase further funding costs. This makes it difficult for companies to get fees or improve existing credit facilities. When a company is unable to pay off its obligations, bankruptcy will occur.

### 4.2.3 Result of The Third Hypothesis Test

The results showed that there was no influence between liquidity and financial distress. This can be seen from the average liquidity ratio that occurred in 2021-2022. However, the decline in liquidity does not always indicate the company has financial difficulties if the company's finances are well managed. Liquidity serves to assess the ability of the company to agreed with short -term debt. In general, high liquidity makes the possibility of financial difficulties even smaller. However, high liquidity also does not always reflect the company's financial condition in good conditions. High liquidity can occur if the company is not productive in using assets and is inefficient in using its funds. However, declining liquidity does not always indicate that the company occurs financial difficulties. This happens because even in post -pandemic conditions that make the economic situation unstable, many companies implement the effectiveness strategy of cash management, manage debt well, and or find short -term loans so as to avoid bankruptcy.

## 5. CONCLUSION

Based on the results of the testing and discussion, the conclusion obtained is that there is no influence between profitability and liquidity with financial distress, and there is an influence between the leverage of financial distress.

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