

Liquidity, Leverage And Profitability Ratios As Predictors of Financial Distress With Moderation of Firm Size

Ratnawaty Marginingsih¹, Adler Haymans Manurung², Agung Dharmawan Buchdadi³,
Muhammad Yusuf⁴

¹Universitas Bina Sarana Informatika, Jakarta, Indonesia,

²University of Bhayangkara Jakarta Raya, Indonesia,

^{3,4}Universitas Negeri Jakarta, Indonesia

¹ratnawaty.rmg@bsi.ac.id

²adler.manurung@dsn.ubharajaya.ac.id

³abuchdadi@unj.ac.id

⁴myusuf_fe@unj.ac.id

Abstract - Companies are often faced with various challenges that can affect their financial condition, one of which is financial distress. In recent years, many retail companies have experienced challenges, including changes in consumer behaviour, intense competition, poor management, high operating costs and poor macroeconomic conditions. The purpose of this study is to explore the role of liquidity, leverage, and profitability ratios as predictors of financial distress by considering moderation of company size. This study uses quantitative causality method. This research focuses on retail companies listed on the Indonesia Stock Exchange in 2018-2022. The type of data used in this study is secondary data. Data obtained from financial reports and annual reports 2018-2022 which are accessed through the Indonesia Stock Exchange. Sampling using purposive sampling method. The results of data processing conducted by researchers were tested using moderated regression analysis (MRA) with the IBM SPSS Statistics version 27 application. The results showed that liquidity and profitability had a negative and significant effect on financial distress. While the leverage variable has a significant positive effect on financial distress. Company size is not able to moderate liquidity and leverage on financial distress. While company size is able to moderate profitabiliats on financial distress.

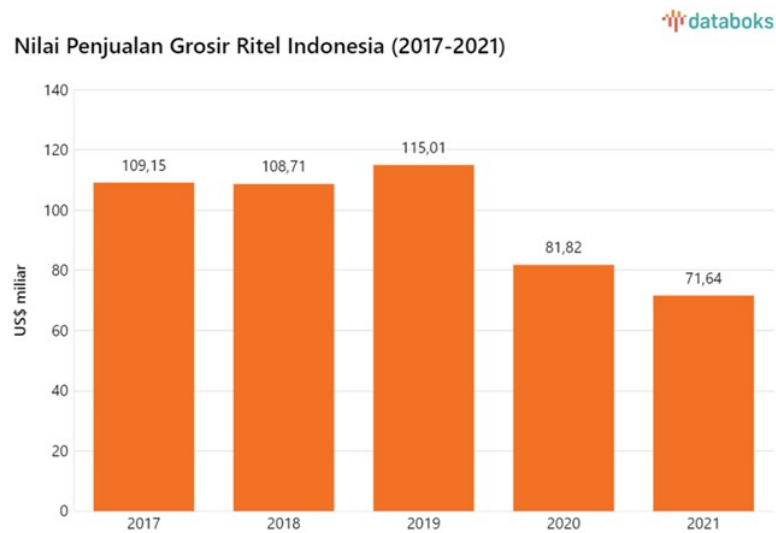
Keywords: *Liquidity, Leverage, Profitability, Company Size, Financial Distress*

I. INTRODUCTION

The company's financial condition is one of the crucial aspects that must be managed properly to ensure long-term business sustainability. In a competitive and dynamic business environment, companies are often faced with various challenges that can affect their financial condition, one of which is financial distress (Pietrzak, 2022). Financial distress is a situation where a company is unable to fulfil its financial obligations, which can lead to bankruptcy if not addressed immediately. The process of corporate bankruptcy proceeds dynamically, starting with signs of an unstable financial situation, followed by management notification of necessary measures, continuous decline, and finally the official announcement of bankruptcy (Wu & Olson, 2022).

In recent years, many retail firms have experienced challenges, including changing consumer behaviour, intense competition, poor management, high operating costs and poor macroeconomic conditions. Financial distress is influenced by macroeconomic conditions, namely the global financial crisis, and in particular, by various firm-specific characteristics (Yazdanfar & Öhman, 2020). Technological advances, such as e-commerce platforms, have led to an increase in online shopping, but companies have had to adapt their business models to meet the growing demand for online shopping (Fernández, et.al, 2021). The COVID-19 pandemic has also impacted the retail industry, with increased demand, travel restrictions and changes in consumer behaviour affecting business operations. Government regulations and policies can also impact operational costs and margins (Wronka, 2022).

According to data obtained from katadata databoks, retail wholesale sales have continued to decline in the last three years. The value of retail wholesale sales in Indonesia for the period 2017-2021 can be seen in the following figure:



Sumber:
United States Department of Agriculture

Source: Katadata (2022)

Figure 1.
Retail Wholesale Sales Value in Indonesia 2017-2021

Based on the figure above, it can be explained that retail wholesale sales in 2021 were recorded at US\$71.64 billion, down 12.4% from retail wholesale sales in 2020. In 2020, the sales value reached US\$81.82 billion, with a 28.9% decrease from 2019. In 2019, retail wholesale sales reached US\$115.01 billion, which was the highest figure in the past five years. Traditional markets are the main source of wholesale sales in Indonesia; in 2021, traditional market retail wholesale sales accounted for 75% of total sales.

Various financial indicators have been used to predict financial distress. Financial ratio analysis is one of the best tools to evaluate company performance by looking at liquidity, solvency, leverage, and profitability. often considered the main predictor (Alarussi, 2021). Liquidity ratios measure a company's ability to meet its short-term obligations with its current assets (Dolgun & Mirakhor, 2020). Leverage, which is often measured through the debt-to-equity ratio, describes the level of debt use in corporate financing. The leverage ratio aims to measure how far the company's financial needs are covered by loans (Simamora & Hendarjatno, 2019). Meanwhile, the profitability ratio shows the company's efficiency in generating profits from its sales or assets. The profitability ratio is an instrument to evaluate the company's ability to receive revenue or profit (Petchsakulwong & Jansakul, 2018).

Although these ratios can provide an overview of a company's financial condition, their effectiveness as predictors of financial distress may vary depending on the size of the company. Firm size, often measured by total assets or revenue, can moderate the relationship between these financial ratios and financial distress (Khaeria & Kristanti, 2023). This is because large and small companies have different operational characteristics and resources. Large companies usually have better access to capital markets, the ability to spread risk more widely, and are more resistant to economic fluctuations than small companies.

Based on the explanation above, this study aims to explore the role of liquidity, leverage, and profitability ratios as predictors of financial distress by considering moderation of company size. By understanding the interaction between financial indicators and company size, a more accurate and comprehensive prediction model is expected. This will not only help in early detection of financial distress, but also in formulating more appropriate strategies to maintain company stability and growth.

II. LITERATUR REVIEW

The Agency Theory

Agency theory is one of the most influential theories in economics and management. This theory explains the relationship between the owner (principal) and the party who manages the company (agent), the relationship between the two is called the principal-agent relationship. This theory was developed by Jensen and Meckling (1976) and is based on the idea that agents have more information than principals, resulting in information asymmetry between the two (Panda & Leepsa, 2017).

Conflicts that arise are caused by differences in interests between the two parties. In this relationship, both parties may have different perspectives. owners may seek to increase the level of profit, while managers may seek to improve the overall performance of the company (Al-Nasser Mohammed & Muhammed, 2017). Agency theory plays an important role in understanding how the relationship between principals (owners or shareholders) and agents (company management) can affect the financial health of the company, including the risk of financial distress.

Financial Distress

Financial distress is a condition in which a company experiences serious problems in meeting its financial obligations, both short and long term (Supriyanto & Darmawan, 2018). This condition reflects the inability or difficulty to pay debts, meet interest payments, or cover daily operating costs. (Mselmi, et, al, 2017). Financial distress can be the beginning of the process towards bankruptcy if not handled properly (Udin, et. al, 2017).

Financial distress can occur in various companies that can cause financial losses, thus requiring careful management to overcome the situation and prevent further financial losses. Companies facing financial distress will experience substantial losses, the ability to predict financial distress before it occurs is important for business success, which tends to have a negative impact on its stakeholders (Ashraf, et., al, 2019).

In determining companies experiencing financial distress, the Altman Z-Score method (1968) is used to indicate the potential for a company to experience bankruptcy (Sareen & Sharma, 2022). The Altman Z-Score formula for a company is:

$$Z\text{-Score} = 1,2 X_1 + 1,4 X_2 + 3,3 X_3 + 0,6 X_4 + 1,0 X_5$$

Description:

X1 = Working Capital/Total Assets

X2 = Retained Earnings/Total Assets

X3 = Earnings before Interest and Taxes/Total Assets

X4 = Market Value of Equity/Total Book Value of Liabilities

X5 = Sales/Total Assets

Liquidity

The liquidity ratio shows the company's ability to fulfil its obligations in the short term. The liquidity of a company can be used to predict when the company faces financial difficulties. Liquidity can be measured using the current ratio. Current ratio shows the company's ability to pay off its current liabilities with its current assets. How much current assets available can cover current liabilities. The following is the formula for finding the current ratio:

$$\text{Current Asset (CR)} = \frac{\text{Current Asset}}{\text{Current Liabilities}} \times 100\%$$

According to Saleh & Sudiyatno, if current debt increases earlier than current assets, the current ratio will decrease, this can cause signs of financial crisis (Ningsih & Asandimitra, 2023). The results showed that liquidity has a significant positive effect on financial distress (Mappadang, 2019; Maximillian & Septina, 2022). Meanwhile, different results show that the company's financial condition by the company's liquidity level as measured by the current ratio has a significant negative effect on financial distress (Masdupi, et, al, 2018; Dianova & Nahumury, 2019).

H₁: Liquidity has a significant effect on financial distress

Leverage

The leverage ratio shows how much debt is borne by a company, compared to its assets. Using this ratio can determine how well a company's ability to pay all its obligations, both short and long term (Kasmir, 2019). Leverage can be measured by ratios such as Debt to Equity Ratio (DER) and Debt to Assets Ratio (DAR). In this study, the proxy used is Debt to Equity Ratio (DER). The following is the formula for finding the Debt to Equity Ratio (DER):

$$\text{Debt to Equity Ratio (DER)} = \frac{\text{Total Debt}}{\text{Total Asset}} 100\%$$

In the financial structure of a business, leverage is a useful but also risky tool. Judicious use of debt can increase profits, but it must also be done carefully to avoid a financial crisis. Companies can maximise profits and minimise risks that can cause financial problems by understanding and managing leverage properly. The results showed that leverage proxied by DER has a significant positive effect on financial distress (Dianova & Nahumury, 2019; Farooq, et. al., 2021; Ningsih & Asandimitra, 2023; Kalash, 2023).

H₂: Leverage has a significant effect on financial distress

Profitability

The profitability ratio shows how effective and efficient the management of a company is by showing the ability of a company to generate profits in relation to total assets, sales, and own capital within a certain period of time (Kasmir, 2019). By optimising the use of its assets, the company will reduce costs, which means the company will get savings and have sufficient funds to carry out its business activities. In this case the proxy used is Return on Asset (ROA). The following is the formula for finding Return on Asset (ROA):

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}} 100\%$$

The results showed that profitability has a significant negative effect on financial distress (Hastiarto, et. al., 2021; Sardo, et. al, 2022).

H₃: Profitability has a significant effect on financial distress

Firm Size, Liquidity and Financial Distress

To control liquidity and financial crisis, firm size plays an important role. Large companies have greater access to financial resources, wider diversification, and higher operational efficiency, but small companies, despite having adequate liquidity, may be more vulnerable to financial distress. The formula that can be used to determine a company's Firm Size is :

$$\text{Firm Size} = \text{Log}(\text{Total Assets}) \text{ of the Company}$$

The results showed that company size is able to moderate liquidity on financial distress significantly (Kariani & Budiasih, 2017; Suharti, et. al.2021). Different results show that company size is unable to moderate liquidity on financial distress (Buchari, 2022).

H₄: Firm size is able to moderate liquidity on financial distress

Firm Size, Leverage and Financial Distress

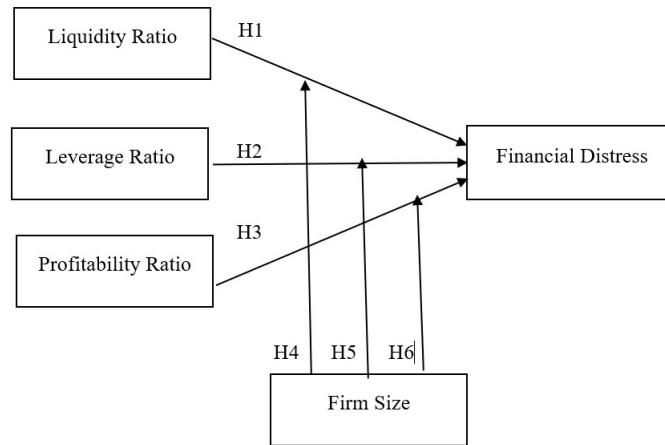
Highly leveraged firms are at greater risk of financial distress because they have obligations to pay interest and principal. The impact of leverage on financial distress is not the same for all firms, and firm size plays an important role in moderating the relationship. Research results show that company size is able to moderate leverage on financial distress significantly (Kariani & Budiasih, 2017; Suharti, et. al.2021). Different results show that company size is unable to moderate leverage on financial distress (Buchari, 2022).

H₅: Firm size is able to moderate leverage on financial distress

Firm Size, Profitability and Financial Distress

High profitability tends to reduce the risk of financial distress because profitable firms have financial reserves to deal with financial difficulties. Less profitable companies are more vulnerable to financial distress because they may not have enough income. The results of the study indicate that company size is able to moderate profitability on financial distress significantly (Kariani & Budiasih, 2017; Suharti, et. al.2021).

H₆: Firm size is able to moderate leverage on financial distress



Source: Data processed by author (2024)

Figure 1. Framework of Thinking

III. METHOD

This study uses a quantitative causality method to explain the independent variables, namely liquidity, leverage, profitability on the dependent variable, namely financial distress with company size as a moderating variable. This research focuses on retail companies listed on the Indonesia Stock Exchange in 2018-2022. The type of data used in this study is secondary data. Data obtained from financial reports and annual reports 2018-2022 which are accessed through the Indonesia Stock Exchange. Sampling using purposive sampling method with criteria: (1) Retail sector companies listed on the Indonesia Stock Exchange for the period 2018-2022. (2) Retail sector companies that publish financial reports and are published consistently during the 2018-2022 period. (3) Retail sector companies that present complete data related to research variables during the 2018-2022 period. Thus 25 companies were obtained with 5 years of observation. Data analysis using the MRA moderated regression model (Moderated Regression Analysis) and processed using SPSS 27.

The purpose of Moderation regression analysis (MRA) is to determine whether the moderating variable will strengthen or weaken the relationship between the independent variable and the moderated variable (Ghazali, 2021). The research model that can be used in this study is as follows:

Model 1:

$$FDIS = \alpha + \beta_1 CR + \beta_2 DER + \beta_3 ROA + \beta_4 FS + e$$

Model 2:

$$FDIS = \alpha + \beta_1 CR + \beta_2 DER + \beta_3 ROA + \beta_4 FS + \beta_5 CR * FS + \beta_6 DER * FS + \beta_7 CR * FS + e$$

IV. RESULT AND DISCUSSION

Overview of Research Objects

The data in this study were taken from retail sub-sector companies listed from the period 2018 to 2022. The population of this study was 35 companies. The sample selection used purposive sampling method and produced a sample of 25 companies. The criteria for selecting samples can be seen in the following table:

Table

No	Criteria	Total
1	Retail sub-sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2018-2022	35
2	Companies that do not provide financial reports consistently in the period 2018-2022	10
3	Number of companies sampled	25
	Research year	5
	Total sample data during the study period	125
	Total sample indicated as outliers	9
	Total sample data during the study period	116

1.

Sample Selection

Source: Data processed by author (2024)

Descriptive Statistics

Table 2. Descriptive Statistical Test Results Model 1

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
CR	116	.155	7.370	1.96588	1.402961
ROA	116	-.503	.316	.02693	.094972
DER	116	.124	10.515	1.30150	1.696158
FS	116	24.607	33.140	29.11278	1.708245
FDIS	116	-.617	8.229	1.03567	1.860637
Valid N (listwise)	116				

Source: Data processed (2024)

From table 2, it can be seen that the average for the liquidity ratio through the current asset proxy is 1.96588 with the lowest value of 0.156 and the highest value of 7.370, while the average profitability ratio is 0.02693 with the lowest value of -0.503 and the highest value of 0.310. For the leverage ratio, the average is 1.30150 with the lowest value of 0.124 and the highest of 10.515. For the average company size of 29.11278 with the lowest value of 24.007 and the highest value of 33.140. The average financial distress is 1.035667 with the lowest value of -0.617 and the highest value of 8.229.

Table 3. Descriptive Statistical Test Results Model 2

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
CR	116	.155	7.370	1.96588	1.402961

ROA	116	-.503	.316	.02693	.094972
DER	116	.124	10.515	1.30150	1.696158
FS	116	24.607	33.140	29.11278	1.708245
FDIS	116	-.617	8.229	1.03567	1.860637
CR_FS	116	4.704	206.302	56.85880	40.151667
ROA_FS	116	-12.382	9.331	.84006	2.633311
DER_FS	116	-18.166	233.944	30.13928	54.085069
Valid N (listwise)	116				

Source: Data processed (2024)

From table 3 it can be seen that the average for the liquidity ratio with moderation of company size averages 56.85880 with the lowest value of 0.4704 and the highest value of 206.302. For the profitability ratio with moderation of company size, the average is 0.84006 with the lowest value of -12.382 and the highest value of 9.331. As for the average leverage ratio moderated by company size, the average value is 30.13928 with the lowest value of -18.166 and the highest value of 233.944.

Determination Coefficient Test

The coefficient of determination is a measure of how far the model's ability to explain variations in the dependent variable. If the Adjusted R Square number is high, it indicates that the independent variables provide almost all the information needed to predict variations in the dependent variable. The results of the calculation of the coefficient of determination of this study are presented in the following table:

Table 4. Determination Coefficient Test (Model 1)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.365 ^a	.133	.102	2.758341

a. Predictors: (Constant), FS, CR, DER, ROA

Source: Data processed (2024)

Based on table 4, it can be seen that the acquisition of the Adjusted R Square number for model 1, shows that liquidity with the proxy current asset ratio (CR), leverage with the proxy debt to equity ratio (DER), profitability with the proxy return on assets (ROA) and firm size (FS) has an influence on financial distress of 10.2% and 80.81% is explained by variables outside of the regression model.

Table 5. Determination Coefficient Test (Model 2)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.899 ^a	.795	.799	.107594

a. Predictors: (Constant), DER_FS, CR, ROA_FS, DER, FS, ROA, CR_FS

Source: Data processed (2024)

Based on table 5, it can be seen that the acquisition of the Adjusted R Square number of model 2, shows that liquidity with the proxy current asset ratio (CR), leverage with the proxy debt to equity ratio (DER), profitability with the proxy return on assets (ROA) and firm size (FS), as well as moderation CR_FS, DER_FS and ROA_FS have an influence on financial distress of 79.9% and 20.1% is explained by variables outside of the regression model.

F Statistical Test

The F statistical test (F-test) basically shows whether all independent variables included in the model have a joint influence on the dependent variable. The results of the F test calculation with a significance level of 5% ($\alpha=0.05$) can be seen in the following table:

Table 6. F Statistical Test (Model 1)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	130.020	4	32.505	4.272	.003 ^b
	Residual	844.537	111	7.608		
	Total	974.558	115			

a. Dependent Variable: FDIS

b. Predictors: (Constant), FS, CR, DER, ROA

Source: Data processed (2024)

In table 6, the results of the F-model 1 test also show that together the independent variables have a significant influence on the dependent variable. This can be evidenced from the calculated F value of 4.272 with a significance level of 0.003 smaller than 0.05 or 5%, then the regression model can be used to predict financial distress or it can be said that liquidity with proxy current asset ratio (CR), leverage with proxy debt to equity ratio (DER), profitability with proxy return on assets (ROA) and firm size (FS) together have an effect on financial distress.

Table 7. F Statistical Test (Model 2)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	396.876	7	56.697	4897.580	.000 ^b
	Residual	1.250	108	.012		
	Total	398.126	115			

a. Dependent Variable: FDIS

b. Predictors: (Constant), DER_FS, CR, ROA_FS, DER, FS, ROA, CR_FS

Source: Data processed (2024)

In table 7, the results of the F-model 1 test also show that together the independent variables have a significant influence on the dependent variable. This can be evidenced from the calculated F value of 4897.580 with a significance level of 0.000 less than 0.05 or 5%, then the regression model can be used to predict financial distress or it can be said that liquidity with proxy current asset ratio (CR), leverage with proxy debt to equity ratio (DER), profitability with proxy return on assets (ROA) and firm size (FS) and moderation CR_FS, DER_FS and ROA_FS together have an effect on financial distress.

Statistical t-test

The t test is a test to measure how far the influence of one explanatory or independent variable individually in explaining the variation in the dependent variable. The test results with a significance level of 5% ($\alpha=0.05$) can be seen in the following table:

Table 8. Statistical t-test (Model 1)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.256	.774		5.496	.000
	CR	-.467	.128	-.302	-3.340	.002
	ROA	-2.254	2.366	-.067	-2.842	.004

DER	.063	.016	.393	3.987	.000
FS	.283	.153	.182	1.847	.067

a. Dependent Variable: FDIS
Source: Data processed (2024)

Based on the results from table 8, it can be concluded that the regression equation for model 1 is:

$$FDIS = 4.256 - 0.467 CR - 2.254 ROA + 0.063 DER + 0.283 FS + e$$

From the above equation it can be explained that it has a constant of 4.256. This shows that if the independent variables CR, ROA, DER and FS are assumed to be constant, then the dependent variable financial distress (FDIS) will increase by 4.256%. Then for the direction of the sign and significance, the CR and ROA variables have a negative and significant direction on the financial distress variable (FDIS) where the probability result is below 0.05, while the DER variable has a positive and significant direction on financial distress (FDIS) with a probability result of $0.000 < 0.005$ While the firm size (FS) variable has a positive and insignificant direction on financial distress (FDIS) with a probability result of $0.067 > 0.05$.

Table 9. Statistical t-test (Model 1)

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.010	.365		2.765	.007
	CR	.062	.140	.047	.443	.658
	ROA	-.012	1.479	-.001	-.008	.994
	DER	.006	.007	.005	.887	.377
	FS	-.035	.013	-.032	-2.783	.006
	CR_FS	-.002	.005	-.039	-.373	.710
	ROA_FS	-.005	.053	-.008	-.102	.919
	DER_FS	.034	.000	.998	183.138	.000

a. Dependent Variable: FDIS
Source: Data processed (2024)

Based on the results from table 9, it can be concluded that the regression equation for model 2 is:

$$FDIS = 1.010 + 0.062 CR - 0.012 ROA + 0.006 DER - 0.035 FS - 0.002 CR * FS - 0.005 ROA * FS + 0.034 DER * FS + e$$

From the above equation it can be explained that it has a constant of 1.010. This shows that if the independent variables CR, ROA, DER, and FS as well as moderation CR_FS, ROA_FS and DER_FS are assumed to be constant, the dependent variable financial distress (FDIS) will increase by 1.010%. Moderation of CR_FS and ROA_FES has a negative direction and is not significant with a probability value above 0.05. While DER_FS moderation has a positive and significant direction with a probability value of $0.000 > 0.05$.

Discussion

The Influence of Liquidity on Financial Distress

Based on the results in table 8, it shows that the liquidity variable with the Current Ratio (CR) proxy shows an unstandardised coefficient beta value of -0.467 and the t-count result of -3.340 is greater than the t-table of 1.981 ($3.340 > 1.981$) with a significance level of 0.002 smaller than 0.05. Thus, **H1 is accepted**, which means that liquidity affects financial distress. The smaller the liquidity, the higher the company experiences financial

distress. The results of this study are in line with research (Masdupi, et, al, 2018; Dianova & Nahumury, 2019) which states that the company's liquidity level as measured by the current ratio has a significant negative effect on financial distress. The company will not be in financial distress if the CR percentage is high, and vice versa if the CR percentage is low then the company can be said to be in financial distress.

The Influence of Leverage on Financial Distress

Based on the results in table 8, it shows that the leverage variable with the Debt to Equity Ratio (DER) proxy shows an unstandardised coefficient beta value of 0.063 and the t-count result of 3.987 is greater than the t-table of 1.981 ($3.987 > 1.981$) with a significance level of 0.000 smaller than 0.05. Thus, **H2 is accepted**, which means that leverage affects financial distress. The greater the leverage, the higher the company experiences financial distress. The results of this study are in line with research (Dianova & Nahumury, 2019; Farooq, et. al., 2021; Ningsih & Asandimitra, 2023; Kalash, 2023) which states that leverage proxied by DER has a significant positive effect on financial distress. A higher leverage (DER) value is associated with a lower Z-score value, which means that the possibility of the company experiencing a financial crisis is higher on the verge of bankruptcy. If the company's debt is too large, the performance of the agent (management) must be further evaluated because funding decisions depend on the agent. This is in line with agency theory, which explains that the agent is given by the principal the decision-making authority to maximise resources to obtain the most profit at the lowest cost. The more debt owned by the company will increase the costs that must be paid by the company for the principal and interest paid.

The Influence of Profitability on Financial Distress

Based on the results in table 8, it shows that the profitability variable with the Return on Asset (ROA) proxy shows an unstandardised coefficient beta value of -2.254 and the t-count result of -2.842 is greater than the t-table of 1.981 ($2.842 > 1.981$) with a significance level of 0.004 smaller than 0.05. Thus, **H3 is accepted**, which means that profitability affects financial distress. The smaller the profitability, the higher the company experiences financial distress. The results of this study are in line with research (Hastiarto, et. al., 2021; Sardo, et. al, 2022) which states that profitability has a significant negative effect on financial distress. Profitability helps companies to achieve higher profits which can be used to improve operational activities and reduce the risk of financial distress.

The Influence of Liquidity on Financial Distress with Firm Size as a Moderating Variable

Based on the results in table 9, it shows that the firm size variable in moderating leverage on financial distress shows an unstandardised coefficient beta value of -0.002 and the t-count result of -0.373 is smaller than the t-table of 1.981 ($0.373 < 1.981$) with a significance level of 0.710 greater than 0.05. Thus, **H4 is rejected**, which means that company size is unable to moderate liquidity on financial distress. This is in line with research conducted by (Buchari, 2022) which states that company size is unable to moderate liquidity on financial distress. Although company size often offers several advantages, such as more experienced management and better access to financial resources, existing liquidity is not always sufficient to prevent financial distress, so company size is not always able to moderate the relationship between liquidity and financial distress.

The Influence of Leverage on Financial Distress with Firm Size as a Moderating Variable

Based on the results in table 9, it shows that the company size variable in moderating leverage on financial distress shows an unstandardized coefficient beta value of -0.005 and the t-count result of -0.102 is smaller than the t-table of 1.981 ($0.102 < 1.981$) with a significance level of 0.919 greater than 0.05. Thus, **H5 is rejected**, which means that company size is unable to moderate leverage on financial distress. This is in line with research conducted by (Buchari, 2022) which states that company size is unable to moderate leverage on financial distress. This shows that leverage has a direct and specific impact on the company's ability to meet short-term obligations, company size has no effect on leverage, so company size is unable to moderate the effect of leverage on financial crisis.

The Influence of Profitability on Financial Distress with Firm Size as a Moderating Variable

Based on the results in table 9, it shows that the firm size variable in moderating leverage on financial distress shows an unstandardised coefficient beta value of 0.034 and the t-count result of 183.138 is greater than the t-table of 1.981 ($183.138 > 1.981$) with a significance level of 0.000 smaller than 0.05. Thus, **H6 is accepted**, which means that company size is able to moderate profitability on financial distress. This is in line with research conducted by (Kariani & Budiasih, 2017; Suharti, et. al.2021) which states that company size is

able to moderate profitability on financial distress. High profitability tends to reduce the risk of financial distress because profitable companies have financial reserves to deal with financial difficulties.

V. CONCLUSION

Based on the results of the research and discussion above, it can be concluded that in model 1 the liquidity variable (X1) and Profitability (X3) have a negative and significant effect on financial distress. The smaller and profitability of liquidity, the higher the company experiences financial distress. While the leverage variable (X2) has a significant positive effect on financial distress. Companies can maximise profits and minimise risks that can cause financial problems by understanding and managing leverage properly. From the results of model 2 testing, company size is unable to moderate the liquidity (X1) and leverage (X2) variables on financial distress. This shows that while company size is able to moderate profitability (X3) on financial distress. This shows that high profitability tends to reduce the risk of financial distress because profitable companies have financial reserves to deal with financial difficulties.

This study has several limitations, such as the number of data samples used only for the observation period of 5 years. It is hoped that further research can use a longer observation period so that it can see bankruptcy predictions over a longer period of time. This research is also limited to the retail sub-sector so it is hoped that further research can expand the research sample to other sectors and add other variables not used in this study.

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