THE INFLUENCE OF LIQUIDITY AND LEVERAGE ON FINANCIAL DISTRESS WITH PROFITABILITY AS MODERATING VARIABLES IN PROPERTY AND REAL ESTATE COMPANIES LISTED ON THE IDX PERIOD 2019-2023

Imas MASRUROH¹, Fauji SANUSI², Intan PURBASARI³

1,2,3 Faculty of Economics and Business, Sultan Ageng Tirtayasa University,

Indonesia

Corresponding author: Intan Purbasari E-mail: intanadimanggala@gmail.com

Abstract

This study aims to examine the effect of Liquidity and Leverage on Financial Distress with Profitability as a moderating variable in property and real estate companies listed on the Indonesia Stock Exchange during the 2019–2023 period. This study is quantitative research using documentation techniques to collect data derived from company financial statements. The population in this study includes all property and real estate companies listed on the Indonesia Stock Exchange during the 2019–2023 period. The sample consists of 10 companies out of a total of 59, selected using purposive sampling. The analytical tool used in this study is IBM SPSS 25.0, and the analysis technique employed is Moderated Regression Analysis (MRA). The results show that Liquidity has a significant positive effect on Financial Distress, Leverage has no significant effect on Financial Distress, Profitability is able to moderate the effect of Liquidity on Financial Distress, and Profitability is not able to moderate the effect of Leverage on Financial Distress.

Keywords: Liquidity, Leverage, Financial Distress, Profitability.

INTRODUCTION

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Companies in Indonesia continue to face economic challenges that can impact their performance. These challenges can lead to economic instability and trigger financial crises. It can affect both large and small companies, leading many to experience financial problems and even bankruptcy. Analyzing the signs of bankruptcy is essential to anticipate future insolvency. Companies must maintain a healthy financial system, carefully monitoring cash flow and maintaining liquidity to avoid financial distress.

Financial distress is a condition in which a company experiences difficulty meeting its maturing financial obligations, both short-term and long-term. This situation is often characterized by an inability to pay debts, operational costs, and other obligations, leading to the risk of bankruptcy (Pratiwi & Sudiyatno, 2022). Financial distress can be assessed and measured through financial reports (Sanusi et al., 2022). This condition of financial distress can also occur in various companies, including property and real estate companies. In this study, financial distress was measured using the modified Altman Z-Score. Researchers used the modified Altman Z-Score model because it can be used to predict bankruptcy or financial problems in companies with a high degree of accuracy through a combination of different financial ratios.

The performance of property and real estate companies has fluctuated since the pandemic began in 2020. Fluctuations in company performance can lead to financial distress (Tan, Kristiyanto, & Evelyn, 2023). Therefore, property and real estate companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2023 period were selected as research subjects. These companies present interesting issues, and the researchers also sought to develop relevant solutions to address these







issues. The figure below shows the average Liquidity (CR), Leverage (DER), and Financial Distress (Z-Score) values for property and real estate companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2023 period.



Source: IDX Financial Report (data processed by researchers, 2024)

Figure 1.

The figure above shows that the average Liquidity, Leverage, and Financial Distress values indicate that the financial condition of property and real estate companies has declined and become increasingly risky from 2019 to 2023. The company's ability to pay short-term obligations tends to decline from 1.45 in 2019 to 1.11 in 2023, which means the company's cash or current assets are increasingly limited compared to its debt. Meanwhile, the debt ratio (Leverage) continues to increase from 0.95 to 1.51, indicating that the company is increasingly using debt to finance its activities. Most worryingly, the Z-score value has decreased from 1.39 in 2019 to only 0.53 in 2023. This Z-score indicates the overall financial health of a company, and a value below 1 indicates that the company is in a fairly dangerous condition and at risk of bankruptcy. Overall, this data indicates that companies are experiencing significant financial pressure, particularly after the pandemic, and need to improve debt management and enhance their performance to prevent further decline.

Several internal factors that can influence a company's financial distress include liquidity, leverage, company size, profitability, activity, sales growth, and cash flow (Kasmir, 2019). In this study, liquidity and leverage were selected as factors influencing a company's financial distress. Liquidity reflects a company's ability to meet short-term obligations. A company with high liquidity indicates better performance. If a company has low liquidity, financial distress is likely to occur because the company is deemed unable to meet its obligations when they fall due (Wanda & Dillak, 2021). It can reduce investor interest in investing in the company. The Liquidity Ratio (CR) is used to assess a company's capacity to repay debt directly with existing assets. A liquid company will more easily meet its short-term obligations, which will help investors assess its performance positively (Purbasari, 2024). It is also in accordance with the signaling theory that researchers use; this theory is used on the grounds that companies can provide positive or negative signals to external parties regarding the company's liquidity, so that it is hoped that it can attract investors' interest in investing in the company.

Leverage is also one of the internal factors affecting a company's financial distress. According to Husnan and Pudjiastuti (2015), leverage is the use of borrowed funds to increase potential returns for shareholders. Leverage can increase returns for shareholders if the return on investment is higher than the cost of debt. However, the use of leverage also increases financial risk, as companies must meet debt repayment obligations regardless of their business performance (Utami & Dirman, 2022).





Profitable businesses tend to focus on internal financing and only borrow minimally from external sources due to a lack of available internal capital (Akhmadi et al., 2022). Excessive use of debt poses a risk to the company because, with very high leverage (extreme debt), the company will be trapped in very high debt and will find it difficult to escape the debt burden (Suryani et al., 2024). In this study, the researchers also used the pecking order theory, which states that companies tend to use internal funds first because the cost of gathering external information is higher.

Previous research has identified research gaps. These gaps are based on differences in the results of each relationship between variables within the current research. At this stage, researchers identified gaps related to the relationship between liquidity and financial distress, as found in previous research. Studies by Fikri et al. (2023) and Luspratama et al. (2023) found that liquidity had a significant positive effect on financial distress. Other studies by Aisyah et al. (2023) and Yuliandriani et al. (2022) found that liquidity had a significant negative effect on financial distress. However, studies by Pratiwi & Sudiyatno (2022), Putri & Hendayana (2022), and Rochendi & Nuryaman (2022) found that liquidity did not affect financial distress.

Researchers also found gaps related to the leverage variable and financial distress obtained from previous studies. Research conducted by Aisyah et al. (2023) and Ngabito, R.A. (2024) stated that leverage had a significant positive effect on financial distress. Research conducted by Utami & Dirman (2022) and Yolanda Effendy et al. (2024) indicated that leverage had a significant negative effect on financial distress. However, research conducted by Pratiwi & Sudiyatno (2022), Qathrunnada et al. (2024), and Erayanti (2019) indicated that leverage did not affect financial distress.

Given the gap in research findings, increasing the Z-score value can be influenced by other variables that influence the relationship between Liquidity and Leverage and Financial Distress. To address this gap, researchers attempted to add Profitability as a moderating variable. Profitability can be a consideration for companies using it to increase their Z-score value to avoid financial distress. Increased profitability indicates that a company's financial health is better and can avoid potential financial distress (Ichwanudin et al., 2023). High profitability generally helps companies reduce financial pressure because they can generate sufficient profits to cover operational costs and financial obligations. Conversely, companies with low profitability are more vulnerable to financial distress when leverage is high or liquidity decreases due to a lack of internal funds to meet their obligations. Therefore, profitability not only reflects a company's financial performance but also serves as a significant moderating variable in determining the extent of the influence of liquidity and leverage on financial distress.

Based on the background, business phenomena, and research gaps outlined, this study can be formulated by developing a conceptual and empirical model to address the research gap between the effects of Liquidity and Leverage on Financial Distress. What distinguishes this study from other studies is that it uses the most recent year, and the researcher adds Profitability as a moderating variable. In this study, Profitability is proxied by Return on Equity (ROE). The researcher uses ROE as a research proxy for Profitability because this ratio illustrates the extent to which a company can generate profits from the comparison between net income and equity.

Therefore, the researcher will analyze "The Effect of Liquidity and Leverage on Financial Distress with Profitability as a Moderating Variable in Property and Real Estate Companies Listed on the IDX for the 2019-2023 Period." With diverse research gaps, the researcher aims to test whether Profitability can strengthen or weaken the relationship between Liquidity and Leverage on Financial Distress.





Signaling Theory. Signalling theory states that a company will send signals to users of financial information. In 1973, signaling theory was first proposed by Michael Spence. Spence explained this theory by stating that the sender (the owner of the information) provides a signal in the form of information that describes the company's condition. The information provided by the sender is useful to the recipient, namely investors.

Pecking Order Theory. Pecking Order Theory explains that companies prefer internal financing first, then debt, and finally equity, depending on the availability of internal funding and the cost of each funding source. This theory demonstrates the importance of asymmetric information in corporate financing decisions. First introduced by Donaldson in 1961 and named by Myers and Majluf (1984), this theory suggests that companies tend to use internal funds first because the cost of gathering external information is higher. If internal funds are insufficient, companies will choose debt financing, and only then, if necessary, equity.

Financial Distress. Financial distress is a condition in which a company experiences financial difficulties and is unable to meet its obligations, especially short-term ones. According to Altman (1968), financial distress is a condition in which a company exhibits signs of severe financial incapacity, such as declining revenue, low profits, and an inability to pay its obligations on time. In this study, the modified Altman Z-Score model was chosen as a proxy for financial distress. This model is used to determine financial distress using financial ratios.

Liquidity. Liquidity is a company's ability to meet its obligations, especially short-term ones. According to Subramanyam (2023), liquidity is a company's ability to meet its immediate (short-term) financial obligations. In this study, liquidity is proxied by the current ratio, which is the ratio of a company's current assets to its short-term liabilities. The current ratio is used to determine a company's ability to meet its short-term liabilities using its current assets (Hanafi & Halim, 2016).

Leverage. Leverage is a measure of how much a company uses debt to increase potential returns on investment. According to Husnan (2015), leverage is the use of debt in a company's capital structure to increase returns for shareholders. In this study, the proxy used to measure leverage is the Debt-to-Equity Ratio (DER), which is a ratio that compares total debt divided by equity. This ratio is used to determine the level of leverage, or a company's dependence on debt versus equity.

Profitability. Profitability is a company's ability to generate profits. According to Kasmir (2019), profitability is a company's ability to generate maximum profit from all its resources, as reflected in various financial ratios. In this study, the researcher decided to use Return on Equity (ROE) as a proxy for profitability. ROE is used to determine how efficiently a company uses equity to generate profits.

Hypothesis Development. Liquidity is a comparison used to evaluate financial statements by assessing a company's ability to pay its obligations. A company with a Current Ratio above one is considered capable of paying its current liabilities with its current assets. Therefore, industries with a high Current Ratio can increase their Z-Score, thereby reducing the industry's potential for financial distress because the company is deemed capable of paying its current obligations (Wanda & Dillak, 2021). Liquidity signaling theory explains a company's ability to meet its obligations, especially short-term ones. When companies have a high level of liquidity, they can easily access funds to meet short-term obligations, reducing reliance on debt or asset sales, which can be detrimental to the company in the long term. Therefore, high liquidity is often associated with increased financial distress.

Research conducted by Fikri et al. (2023), Sukma et al. (2022), Tan Kristiyanto & Evelyn (2023), Luspratama et al. (2023), and Ngabito R.A. (2024) demonstrates that liquidity has a significant positive effect on financial distress. In this study, the researchers assumed that a higher liquidity





value for a company would increase its financial distress. It is demonstrated by the use of the Current Ratio (CR) proxy, a ratio that compares a company's current assets to its current liabilities. A higher ratio indicates that a company has more assets than short-term liabilities to pay. Thus, the risk of financial distress for a company is reduced. Based on the above description, the following hypothesis can be proposed by the researchers:

H1: Liquidity has a positive and significant effect on financial distress.

Leverage is a measure of how much a company uses debt to increase potential returns on investment. Excessive debt can be detrimental to a company, as it falls into the extreme leverage category, meaning it is trapped in high debt levels and finds it difficult to recover from them (Pratiwi & Sudiyatno, 2022). According to Kasmir (2019), leverage is a ratio used to indicate the extent to which a company's funding needs or assets are financed by debt.

Research conducted by Aninda & Dillak (2020), Utami & Dirman (2022), Ragil Putri et al. (2022), Luspratama et al. (2023), and Yolanda Effendy et al. (2024) indicates that leverage has a significant negative effect on financial distress. In this study, researchers assume that a higher leverage value will reduce the financial distress value. High leverage means the company has greater interest and principal payment obligations. It is demonstrated by the use of the Debt-to-Equity Ratio (DER) proxy, a ratio that shows the comparison between a company's total debt and its equity. Based on the description above, the following hypothesis can be proposed by researchers:

H2: Leverage has a negative and significant effect on Financial Distress

In this study, Liquidity and Profitability are two crucial factors in assessing a company's financial health, particularly in predicting the risk of Financial Distress. Liquidity refers to a company's ability to meet its short-term obligations using readily liquid assets, such as cash and cash equivalents. When a company's liquidity is compromised, this can increase the risk of Financial Distress, a condition in which a company struggles to meet its financial and operational obligations, which can lead to bankruptcy or debt restructuring (Altman, 1968). Conversely, Profitability reflects a company's ability to generate profits from its operations. In some cases, even when a company faces liquidity issues, strong profitability can help mitigate the negative impact of these issues.

The addition of Profitability as a moderating variable in this study is supported by previous research, including Aditya & Wiwi (2021), Sintia & Rays (2022), Eduard & Adaline (2023), Ningsih & Asandimitra (2023), and Luspratama et al. (2023), which concluded that Profitability moderates the effect of Liquidity on Financial Distress. In this study, the researchers assumed that high Profitability can function as a moderating variable, strengthening the positive impact of Liquidity on Financial Distress. It is demonstrated by the use of the Return on Equity (ROE) proxy, a ratio that shows the comparison between net profit and equity. High Profitability will increase the effect of Liquidity on Financial Distress. Conversely, low Profitability will decrease the effect of Liquidity on Financial Distress. Based on the above description, the researchers can propose the following hypothesis:

H3: Profitability can moderate the effect of Liquidity on Financial Distress

In this study, leverage and profitability are also crucial factors in assessing a company's financial health, particularly in predicting the risk of financial distress. According to Kasmir (2019), leverage is a ratio used to indicate the extent to which a company's funds or assets are financed by debt. Leverage refers to the use of debt to finance assets, which can increase the risk of financial distress when a company is unable to generate sufficient cash flow to meet its obligations. The higher the leverage level, the greater the debt burden, which can lead to financial pressure if the company's performance declines. Companies with high profitability tend to have better cash flow, enabling them to manage debt and reduce the risk of financial distress despite high leverage levels. High







profitability makes it easier for companies to pay interest and principal on debt, reducing the negative impact of debt use.

The addition of Profitability as a moderating variable in this study is supported by previous research, including Sintia & Rays (2022), Virnanda & Oktaviana (2023), Ningsih & Asandimitra (2023), Amah et al. (2023), and Meita Dilani et al. (2024), which states that Profitability can moderate the relationship between Leverage and Financial Distress. In this study, the researchers assumed that high Profitability can function as a moderating variable, strengthening the negative impact of Leverage on Financial Distress. It is demonstrated by the use of Return on Equity (ROE) as a proxy, a ratio that shows the comparison between net profit and equity. High Profitability will increase the effect of Leverage on Financial Distress, while low Profitability will decrease the effect of Leverage on Financial Distress. Based on the above description, the researchers can propose the following hypothesis:

H4: Profitability can moderate the effect of Leverage on Financial Distress

METHODS

In this study, the researcher used a quantitative approach. The companies that became the object of the study were determined using a purposive sampling method. Data analysis was conducted using a multiple regression method or Moderated Regression Analysis (MRA), which aims to examine the effect of Liquidity and Leverage on Financial Distress with Profitability as a Moderating Variable in property and real estate companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2023 period. The data used in this study is secondary data. This secondary data was obtained indirectly, namely, financial reports from property and real estate companies from the official website of the Indonesia Stock Exchange (IDX). The population in this study was 59 property and real estate companies listed on the IDX during the 2019-2023 period. The sampling technique used was purposive sampling, namely a sampling technique based on the researcher's criteria. Based on the established criteria, the sample used in this study amounted to 10 companies out of a total of 59 property and real estate companies listed on the IDX for the 2019-2023 period. Based on the research problem formulation and hypotheses, the relationships between the variables that are the focus of this study are interpreted as a whole. To assist in the data analysis process, statistical tools such as IBM SPSS 25.0 were used. The analysis methods used were descriptive statistics, classical assumption testing, moderated regression analysis (MRA), and hypothesis testing.

RESULT AND DISCUSSION

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Liquidity (CR)	50	.143	2.792	1.29746	.752302
Leverage (DER)	50	.313	4.992	1.29744	1.022321
Profitability (ROE)	50	418	.116	04382	.104626
Financial Distress (Z-Score)	50	-3.099	2.642	.82758	1.175519
Valid N (listwise)	50				

Based on the table above, it can be seen that the number of observation data for each variable is 50 (N), obtained from 10 property and real estate companies during the 5-year observation period. The explanation of each variable is as follows: Liquidity (CR) has a minimum value of 0.143 owned by Duta Anggada Realty Tbk. (DART) In 2022, the maximum value of 2.792 was owned by Ristia







Bintang Mahkotasejati Tbk. (RBMS) In 2021. The average value of 1.29746 is greater than the standard deviation of 0.752302, indicating small deviations and less varied data. Leverage (DER) has a minimum value of 0.313 owned by Sentul City Tbk. (BKSL) In 2023, a maximum value of 4.992 was owned by PP Properti Tbk. (PPRO) In 2023. The average of 1.29744 is greater than the standard deviation of 1.022321, indicating small deviations and less varied data. Profitability (ROE) has a minimum value of -0.418 or 41.8% for Modernland Realty Tbk. (MDLN) In 2020, a maximum value of 0.116 or 11.6% for Intiland Development Tbk. (DILD) In 2023. The average ROE of -0.04382 indicates a loss to equity, with a standard deviation of 0.104626 indicating large deviations and varied data. Financial Distress predicted by the modified Z-Score has a minimum value of -3.099 for Modernland Realty Tbk. (MDLN) In 2020 and a maximum value of 2.642 for PP Properti Tbk. (PPRO) In 2019. The average Z-Score of 0.82758 is classified as being in the distress zone (<1.1) with a standard deviation of 1.175519, which indicates a large level of deviation and varying data.

Table 2. One-Sample Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test				
		Unstandardized		
		Residual		
N		50		
Normal Parameters ^{a,b}	Mean	.0000000		
	Std. Deviation	.65847913		
Most Extreme Differences	Absolute	.076		
	Positive	.076		
	Negative	060		
Test Statistic		.076		
Asymp. Sig. (2-tailed)		.200c,d		
TF (1' ('1' (' ' ' ' ' ' ' ' ' ' ' ' '	1			

a. Test distribution is Normal.

Based on the table above, the residual normality test with the One Sample Kolmogorov-Smirnov Test shows that the Asymp. Sig. (2-tailed) The value obtained is 0.200. It indicates that the significance value is greater than 0.05 (0.200 > 0.05), which means that the data used by the researcher meets the normality test requirements because they are normally distributed.

Table 3.

	Coefficients ^a							
	Unstan	dardized	Standardized			Colline	arity	
Model	Coef	ficients	Coefficients	t	Sig.	Statist	ics	
	В	Std. Error	Beta			Tolerance	VIF	
1 (Constant)	.205	.326		.630	.532		_	
Liquidity (CR)	.510	.162	.326	3.155	.003	.667	1.500	
Leverage (DER)	.235	.130	.204	1.807	.078	.559	1.790	
Profitability (ROE)	10.719	2.498	.954	4.291	.000	.144	6.932	
Moderation 1 (CRxROE)	-3.296	1.769	272	-1.863	.069	.335	2.985	
Moderation 2 (DERxROE)	487	.702	135	694	.492	.188	5.331	



b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.



AND AUDITING



a. Dependent Variable: Financial Distress (Z-Score)

Based on the table above, it can be seen that the variables still exhibit multicollinearity. Therefore, the researcher transformed the data using mean centering.

Table 4.

	Co	efficients ^a				
Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
В	Std. Error	Beta		_	Tolerance	VIF
1.426	.145		9.866	.000		
.366	.204	.234	1.795	.079	.420	2.381
.213	.150	.186	1.421	.162	.418	2.392
5.810	1.561	.517	3.723	.001	.370	2.705
-3.296	1.769	306	-1.863	.069	.265	3.778
487	.702	106	694	.492	.308	3.250
	Coe B 1.426 .366 .213 5.810 -3.296	Unstandardized Coefficients B Std. Error 1.426 .145 .366 .204 .213 .150 5.810 1.561 -3.296 1.769	Coefficients Coefficients B Std. Error Beta 1.426 .145 .366 .204 .234 .213 .150 .186 5.810 1.561 .517 -3.296 1.769 306	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Unstandardized Coefficients Standardized Coefficients t Sig. Sig. Collinea Statist B Std. Error Beta 9.866 .000 .000 .366 .204 .234 1.795 .079 .420 .213 .150 .186 1.421 .162 .418 5.810 1.561 .517 3.723 .001 .370 -3.296 1.769 306 -1.863 .069 .265

Based on the table above, it can be seen that all variables used in the regression model in this study are free from multicollinearity symptoms, as evidenced by a tolerance value greater than 0.10 and a VIF value less than 10.

Table 5.

		Coefficientsa			
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	.470	.080		5.881	.000
X1Centered	164	.113	312	-1.458	.152
X2Centered	069	.083	178	832	.410
ZCentered	-1.128	.863	298	-1.307	.198
Moderasi1Centered	-1.202	.979	331	-1.228	.226
Moderasi2Centered	.324	.389	.208	.833	.409

Based on the table above, it shows that the results of the heteroscedasticity test on the variables Liquidity, Leverage, Profitability, Interaction of Liquidity with Profitability, and Interaction of Leverage with Profitability have a significance value of > 0.05, and it can be concluded that there are no symptoms of heteroscedasticity.

Table 6.

	Coefficientsa								
Model	Unstandardi	zed Coefficients	Standardized Coefficients	t	Sig.				
	В	Std. Error	Beta						
1 (Constant)	.828	.134		6.159	.000				
X1Centered	.981	.187	.628	5.258	.000				







X2Centered	.106	.137	.092	.771	.445
a. Dependent Var	iable: Financia	al Distress (Z-Sco	re)		

Based on the table above it shows the results of equation 1, namely: (i) Z-Score = 0.828 + 0.981CR + 0.106DER + ϵ . The constant value (a) of 0.828 indicates that if the independent variables, namely liquidity and leverage, are zero, then the financial distress value (Z-Score) is 0.828. The liquidity regression coefficient of 0.981 indicates that every 1 unit increase in liquidity (CR) will increase the Z-Score value by 0.981, and vice versa if there is a decrease. Meanwhile, the leverage regression coefficient of 0.106 means that every 1 unit increase in leverage (DER) will increase the Z-Score value by 0.106, and vice versa; if there is a decrease in leverage, the Z-Score will decrease by 0.106.

Table 7.

			Table 7.			
			Coefficientsa			
	Model	Unstandardiz	zed Coefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	1.420	.139		10.236	.000
	X1Centered	.645	.150	.413	4.310	.000
	X2Centered	.253	.105	.220	2.406	.020
	Z Centered	6.755	1.092	.601	6.185	.000
a. De	ependent Variable	e: Financial Dis	tress (Z-Score)			

Based on the table above, it shows the results of equation 2, namely: (ii) Z-Score = 1.420 + 0.645CR + 0.253DER + 6.755ROE + ϵ . The constant value of 1.420 indicates that if all independent variables, namely liquidity, leverage, and profitability, are zero, then the financial distress value (Z-Score) is 1.420. The liquidity regression coefficient of 0.645 indicates that every 1 unit increase in liquidity (CR) will increase the Z-Score value by 0.645, and vice versa if there is a decrease. The leverage regression coefficient of 0.253 means that every 1 unit increase in leverage (DER) will increase the Z-Score value by 0.253, and a decrease in leverage will decrease the Z-Score by the same amount. Meanwhile, the profitability regression coefficient of 6.755 indicates that every 1 unit increase in profitability (ROE) will significantly increase the Z-Score value by 6.755, and every 1 unit decrease in ROE will decrease the Z-Score value by 6.755.

Table 8.

			14010 01						
Coefficients ^a									
	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.			
		В	Std. Error	Beta					
1	(Constant)	1.426	.145		9.866	.000			
	X1Centered	.366	.204	.234	1.795	.079			
	X2Centered	.213	.150	.186	1.421	.162			
	ZCentered	5.810	1.561	.517	3.723	.001			
	Moderasi1Centered	-3.296	1.769	306	-1.863	.069			
	Moderasi2Centered	487	.702	106	694	.492			

a. Dependent Variable: Financial Distress (Z-Score)







Based on the table above, it shows the results of equation 3, namely: (iii) Z-Score = 1.426 + 0.366CR + 0.213DER + 5.810ROE - 3.296CRROE - 0.487DERROE + ϵ . The constant value of 1.426 indicates that if all independent variables, namely liquidity, leverage, profitability, and the interaction between liquidity and profitability, as well as leverage and profitability, are zero, then the financial distress value (Z-Score) is 1.426. The liquidity regression coefficient of 0.366 means that every 1 unit increase in liquidity (CR) will increase the Z-Score value by 0.366, and vice versa if there is a decrease. The leverage regression coefficient of 0.213 indicates that every 1 unit increase in leverage (DER) will increase the Z-score by 0.213. The profitability regression coefficient of 5.810 indicates that every 1-unit increase in profitability (ROE) will increase the Z-Score by 5.810, and vice versa. Meanwhile, the interaction coefficient between liquidity and profitability of -3.296 indicates that every 1-unit increase in the CRROE interaction will decrease the Z-Score by 3.296, and a decrease in the interaction will increase the Z-Score by 1.4870 indicates that every 1-unit increase in the DERROE interaction will decrease the Z-Score by 1.4870 indicates that every 1-unit increase in the DERROE interaction will decrease the Z-Score by 1.4870 indicates that every 1-unit increase in the DERROE interaction will decrease the Z-Score by 1.4870 indicates that every 1-unit increase in the DERROE interaction will decrease the Z-Score by 1.4870 indicates that every 1-unit increase in the DERROE interaction will decrease the Z-Score by 1.4870 indicates that every 1-unit increase in the DERROE interaction will decrease the Z-Score by 1.4870 indicates that every 1-unit increase in the DERROE interaction will decrease the Z-Score by 1.4870 indicates that every 1-unit increase in the DERROE interaction will decrease the Z-Score by 1.4870 indicates that every 1-unit increase in th

Table 9

Coefficientsa									
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.				
	В	Std. Error	Beta						
1 (Constant)	1.426	.145		9.866	.000				
X1Centered	.366	.204	.234	1.795	.079				
X2Centered	.213	.150	.186	1.421	.162				
ZCentered	5.810	1.561	.517	3.723	.001				
Moderasi1Centered	-3.296	1.769	306	-1.863	.069				
Moderasi2Centered	487	.702	106	694	.492				

Based on the table above showing the results of the hypothesis test, the following is the implementation and decision to accept or reject the hypothesis. First, for the effect of Liquidity on Financial Distress, it is known that the regression coefficient value of the Liquidity variable as measured by the Current Ratio (CR) is 0.366 with a calculated t-value of 1.795, greater than the t-table of 1.67866 (at α = 0.1; df = 46), and has a significance of 0.079 (<0.1), so the results are significant and the coefficient shows a positive direction. Therefore, Ho1 is rejected and Ha1 is accepted, so that the first hypothesis, "Liquidity has a significant positive effect on Financial Distress," is accepted. Second, for the influence of Leverage on Financial Distress, the Leverage regression coefficient (DER) value is 0.213 with a t-count of 1.421 smaller than the t-table of 1.67866 and a significance of 0.162 (>0.1), so the result is not significant, so H02 is accepted and Ha2 is rejected. Thus, the second hypothesis, "Leverage has a significant negative effect on Financial Distress," is rejected. Third, for the influence of Profitability in moderating Liquidity on Financial Distress, the CRROE interaction coefficient value is -3.296 with a t-count of -1.863 smaller than the t-table but significant (0.069 < 0.1), so H03 is rejected and Ha3 is accepted. It shows that the third hypothesis, "Profitability is able to





moderate the influence of Liquidity on Financial Distress," is accepted. Because the interaction is significant, Profitability acts as a moderating variable and also as an independent variable, so this relationship is included in the form of quasi-moderation. Fourth, for the influence of Profitability in moderating Leverage on Financial Distress, it is known that the DERROE interaction coefficient value of -0.487 with a calculated t-value of -0.694 is smaller than the t-table and a significance of 0.492 (> 0.1), so the result is not significant, so H04 is accepted and Ha4 is rejected. Therefore, the hypothesis "Profitability is able to moderate the influence of Leverage on Financial Distress" is rejected. Thus, Profitability only acts as an independent variable and cannot be said to be a moderating variable, so the form of the moderation relationship is a predictor moderation.

Based on the test results it shows that Liquidity, measured using the Current Ratio (CR), has significant results with a positive coefficient value (B). Therefore, this study accepts the first hypothesis (H1), which states that Liquidity has a positive and significant effect on Financial Distress. H1 is accepted. The results of the study indicate that Liquidity has a significant positive effect on Financial Distress in property and real estate companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2023 period. It means that the higher the level of Liquidity of a company, the higher the Financial Distress value, which reflects a healthier financial condition, so the potential for the company to experience Financial Distress becomes smaller. Conversely, if Liquidity decreases, the Financial Distress value will also decrease. This result is supported by the average value of Liquidity and Z-Score, namely, (CR) decreases, the Z-Score also decreases, and when CR increases, the Z-Score also increases. This research is in accordance with Signaling Theory, which states that the level of liquidity is an important signal used by external parties, including investors and creditors, to assess a company's health and prospects. High liquidity reflects a company's ability to meet its short-term obligations and indicates a stable financial condition. Therefore, companies with good liquidity tend to gain more trust from creditors and investors, thereby avoiding the risk of bankruptcy. Conversely, a decrease in liquidity can be a negative signal indicating potential financial difficulties and increasing the risk of financial distress. The results of this study are supported by several previous studies, namely research conducted by Sukma et al. (2022), Bukhari & Linda (2022), Hertina et al. (2022), Tan Kristiyanto & Evelyn (2023), and Luspratama et al. (2023), which showed that liquidity has a positive and significant effect on financial distress. It reveals that the higher a company's liquidity level, the higher its Z-score, meaning the company is less likely to experience financial distress. It indicates that companies that have a greater ability to meet their short-term obligations tend to be in a healthier and more stable financial condition.

Based on the test results, it shows that Leverage, measured using the Debt to Equity Ratio (DER), has an insignificant result because the significance value is > 0.1 with a positive coefficient value (B). Therefore, this study rejects the second hypothesis (H2), which states that Leverage has a negative and significant effect on Financial Distress. **H2 is rejected.** The results of the study indicate that Leverage does not affect Financial Distress in property and real estate companies listed on the IDX for the 2019-2023 period. This study indicates that the level of Leverage, as measured by the Debt to Equity Ratio (DER), does not have a significant effect on the value of Financial Distress. The high or low ratio between total debt and equity in companies in this sector does not directly affect the risk of Financial Distress. It may occur because property companies have a capital-intensive business model and commonly use debt financing in carrying out long-term projects, so a capital

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structure with high Leverage may be considered normal in this industry. Furthermore, companies with high leverage can still maintain healthy financial performance as long as they have strong cash flow and stable revenue. Therefore, in the property and real estate sector, leverage is not always a primary indicator of vulnerability to financial distress, unlike other sectors that are more sensitive to debt burdens. The average leverage and Z-score support this finding. The DER value increased consistently from 2019 to 2023, indicating that the capital structure of property and real estate companies during that period was increasingly dependent on debt. However, this change in DER value was not accompanied by a commensurate change in the Z-score value. Despite the increase in DER, the Z-score fluctuated annually, indicating that leverage levels did not affect financial distress. This research is inconsistent with the Pecking Order Theory, as property companies tend to rely more on external funding (debt) than retained earnings, so a high DER is not a primary indicator of bankruptcy risk in this sector. In the Pecking Order theory, companies with high leverage are assumed to have greater financial risk because they must pay interest and principal on debt, thus increasing the likelihood of financial distress. However, in the property and real estate industry, companies tend to rely on external funding, including debt, as part of their long-term business strategy, primarily due to the nature of this business, which requires large capital for initial project investments. Therefore, high debt usage does not necessarily lead to financial distress as long as the company is able to manage its project cash flow well. The results of this study are supported by Erayanti (2019), Sariroh (2021), Pratiwi & Sudiyatno (2022), Hertina et al. (2022), and Qathrunnada et al. (2024), which show that leverage does not affect financial distress. These results indicate that information on changes in DER, as can be obtained from financial statements, does not influence investors' investment decisions. Investors do not consider the use of debt or the repayment of interest and principal, which ultimately does not affect investors' perceptions of future profits.

Based on the test results, it shows that Liquidity (CR) moderated by Profitability (ROE) has significant results because the significance value is <0.10 with a negative coefficient value (B). It indicates that Profitability is able to reduce the effect of Liquidity on Financial Distress, and Profitability acts as an independent variable and a moderating variable because it can interact with the independent variable, namely Liquidity, so it can be concluded that the moderation relationship is in the form of quasi-moderation. Thus, this study accepts the third hypothesis (H3), which states that Profitability is able to moderate the effect of Liquidity on Financial Distress. **H3 is accepted.** The results of the study show that Profitability, as measured by Return on Equity (ROE), is able to moderate and reduce the effect of Liquidity as measured by the Current Ratio (CR) on Financial Distress in property and real estate companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2023 period. It means that when a company's Profitability is high, the effect of Liquidity on Financial Distress becomes weaker. It is due to conditions where a company records high net profit, but this profit does not necessarily indicate adequate cash availability, especially if sales are made on credit and cash receipts are delayed. In such situations, even though financial statements show good profit performance, the company's cash remains limited, resulting in a decline in the Liquidity ratio, which also lowers the Financial Distress (Z-Score) value. The results of this study are supported by Aditya & Wiwi (2021), who stated that profitability can weaken the effect of liquidity on financial distress. It is because companies classified as having low liquidity are considered capable of repaying their short-term debt with their current assets. Then, the company's profits are allocated to repay short-term debt, thus further protecting the company from financial stress. Other



researchers who also support this research include Amah et al. (2023), Eduard & Adaline (2023), and Meita Dilani et al. (2024), who also found that profitability moderates the effect of liquidity on financial distress.

Based on the test results, it shows that Leverage (DER) moderated by Profitability (ROE) has an insignificant value with a negative coefficient (B). It indicates that Profitability is unable to moderate the effect of Leverage on Financial Distress, and Profitability only acts as an independent variable because it has a direct effect. Thus, this study rejects the fourth hypothesis (H4), which states that Profitability is able to moderate the effect of Leverage on Financial Distress. **H4 is rejected.** The results of the study indicate that Profitability, as measured by Return on Equity (ROE), is unable to moderate the relationship between Leverage, as measured by Debt to Equity Ratio (DER), on Financial Distress in property and real estate companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2023 period. It means that the company's Profitability level does not have a significant role in strengthening or weakening the effect of Leverage on the risk of financial distress. This study is also supported by the fact that DER itself does not show a significant effect on Financial Distress, which indicates that the size of the company's debt burden is relatively not a major factor causing financial distress. The low ROE during the study period indicates the company's weak ability to generate profits from its capital. Furthermore, the insignificant effect of leverage may be due to the property industry's generally capital-intensive nature and reliance on long-term financing, so debt does not necessarily lead to short-term financial distress. This finding is supported by previous research by Aditya & Wiwi (2021), Luspratama et al. (2023), and Eduard & Adaline (2023), which showed that profitability was unable to moderate the effect of leverage on financial distress.

CONCLUSION

Based on the research and discussion conducted to examine the effect of Liquidity and Leverage on Financial Distress, with Profitability as a moderating variable in property and real estate companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2023 period, several conclusions were obtained. First, Liquidity (CR) has been shown to have a positive and significant effect on Financial Distress. It means that the higher a company's Liquidity, the higher the Z-Score, reflecting a healthier financial condition. Conversely, a decrease in Liquidity will decrease the Zscore. Second, Leverage (DER) has no significant effect on Financial Distress, indicating that high or low debt does not directly affect the risk of financial distress in the property and real estate sector. It can be explained because this industry tends to use debt as part of a long-term project financing strategy, so a capital structure with high Leverage is considered reasonable. Third, Profitability (ROE) is able to moderate the effect of Liquidity on Financial Distress. In this case, even though the company shows a high net profit, it does not necessarily have sufficient cash if sales are made on credit, so the Liquidity ratio decreases and also lowers the Z-Score value. Thus, Profitability can weaken the effect of Liquidity on Financial Distress, making it a moderating variable with a quasimoderation form. Fourth, Profitability is unable to moderate the effect of Leverage on Financial Distress. The low ROE during the study period indicates the company's weak ability to generate profits from its equity, making it ineffective in strengthening or weakening the effect of Leverage on the risk of financial distress. Therefore, in this context, Profitability only functions as an independent variable and not as a moderating variable.





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