

DETERMINAN FINANCIAL DISTRESS: A STUDY ON THE PROPERTY AND REAL ESTATE SECTOR IN THE INDONESIA STOCK EXCHANGE

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Abstract

The property and real estate sector plays a crucial role in the Indonesian economy but faces significant risks of financial distress. This study aims to identify the determinants of financial distress within this sector, focusing on companies listed on the Indonesia Stock Exchange between 2018 and 2022. The research examines the effects of profitability, liquidity, leverage, interest rates, and inflation on financial distress. Using a quantitative approach, this study applies statistical techniques and regression analysis to secondary data from various property and real estate companies. The findings reveal that: (i) profitability has a negative impact on financial distress, indicating that lower profitability increases the likelihood of financial difficulties; (ii) liquidity also shows a negative relationship with financial distress, meaning reduced liquidity elevates financial risk; (iii) leverage negatively influences financial distress, suggesting that higher debt levels exacerbate financial instability; (iv) rising interest rates contribute to financial distress by increasing borrowing costs, thereby straining company resources; and (v) inflation worsens financial distress by eroding purchasing power and dampening property demand. This study provides valuable insights for stakeholders, including investors and policymakers, to enhance their understanding of financial risk management in the property and real estate sector. The novelty of this research lies in its specific focus on a critical period and sector within the Indonesian economic landscape, addressing key areas of concern for financial stability.

Keywords: Financial distress, Profitabilitas, Likuiditas, Leverage, Interest rates, Inflation

Introduction

The property and real estate sector is a crucial component of Indonesia's economy, significantly contributing to employment opportunities and enhancing community welfare. (i) This sector not only provides housing and commercial spaces but also drives economic growth through investments and infrastructure development. (ii) Furthermore, the real estate industry generates substantial tax revenues that the government utilizes to fund essential public services, including education, healthcare, and infrastructure projects. (iii) In addition, the sector serves as a platform for innovation and technological advancements, fostering sustainable urban development and improving the quality of life for citizens. (iv) Given its importance, ensuring the financial health and stability of businesses within this sector is essential for maintaining national economic resilience. However, financial distress poses a significant threat to the sustainability of property and real estate companies in Indonesia. Recent trends indicate an alarming increase in financial difficulties, as evidenced by several prominent companies seeking debt restructuring or facing bankruptcy. For instance, well-known firms such as PT Citatah Propertindo Tbk and PT Summarecon Agung Tbk have reported substantial losses, leading to applications for suspension of debt payments. This situation highlights the urgent need for stakeholders, including the government, investors, and industry players, to collaborate in creating a supportive environment that mitigates financial risks and promotes the long-term viability of the property sector.

Addressing financial distress not only safeguards investments but also ensures the continued contribution of this sector to Indonesia's economic development. Previous research has highlighted various factors that influence financial distress in the property and real estate sector. Studies by Hertina et al. (2022) and Sudaryo et al. (2022) indicate that profitability and liquidity significantly affect financial stability, with lower profitability and liquidity levels increasing the risk of financial distress. Furthermore, research conducted by Vio Dawa Faniko (2022) emphasizes the role of leverage in exacerbating financial difficulties, suggesting that companies with higher debt levels are more susceptible to financial distress. Additionally, Amin & Hidayah (2023) found that rising interest rates and inflation negatively impact financial performance, contributing to financial instability in the sector. These findings underscore the need for a comprehensive analysis of the determinants of financial distress, particularly in the context of Indonesia's unique economic landscape. Furthermore, profitability, liquidity, and leverage are critical factors influencing financial distress in the property and real estate sector. The risk of financial distress increases when companies fail to maintain adequate profitability and liquidity levels while managing high debt. Research indicates that lower profitability and liquidity can significantly heighten the likelihood of financial difficulties (Hertina et al., 2022; Sudaryo et al., 2022). Consequently, the problem formulation in this study encompasses the following elements:

1. Does profitability affect financial distress?
2. Does liquidity impact financial distress?
3. Does leverage influence financial distress?
4. How do interest rates affect financial distress?
5. How does inflation contribute to financial distress?

In line with the formulation of the problem, this study aims to determine the determinant variables of financial distress based on the variables of profitability, liquidity, leverage, interest rates, and inflation. The implication of this research is to provide information and references for stakeholders, academics, and practitioners interested in analyzing financial distress to support decision-making and further research. The originality of this research relates to the research period, namely 2018 to 2022, and the industrial sector, specifically the property and real estate sector, which plays a vital role in the country's economy. Previous research by Oktavian & Handoyo (2023) also indicates that the liquidity ratio significantly impacts financial distress, supporting the importance of this variable in the analysis conducted in this study.

LITERATURE REVIEW

The study's theoretical framework is agency theory because company sustainability is pertinent to this theory (Nugroho, Miglietta, et al., 2022; Sukarmi et al., 2022; Yusufa et al., 2022). Additionally, agency theory has implications for corporate sustainability due to the following concerns:

1. Agency Theory emphasizes the necessity of proper supervision and incentives to motivate agents (managers) to act in the interests of the principals (owners). An effective supervisory structure allows owners to monitor managerial actions, promote accountability, and ensure that decisions align with the long-term sustainability of the company (Cuevas-Rodríguez et al., 2012). This is particularly important in the property sector, where financial mismanagement can lead to significant distress.
2. Previous studies have indicated varying impacts of profitability, liquidity, and leverage on financial distress. For example, Hertina et al. (2022) found that profitability negatively affects financial distress, suggesting that lower profitability increases the likelihood of financial difficulties. Conversely, Sudaryo et al. (2022) indicated that high profitability might lead to expectations from creditors, thereby increasing financial distress risk when those expectations are unmet.
3. In terms of liquidity, Sudaryo et al. (2022) demonstrated that low liquidity ratios correlate with a higher likelihood of financial distress. This finding aligns with Altman et al. (1994), who established that liquidity ratios are significant predictors of financial distress. Additionally, research by Oktavianthie (2022) supports this

view, showing that companies with inadequate liquidity face heightened risks of financial distress.

4. Regarding leverage, Vio Dawa Faniko (2022) reported that high leverage increases the risk of financial distress due to the burden of debt. However, Oktavian & Handoyo (2023) found that leverage could also have a negative effect on financial distress, indicating a complex relationship that warrants further investigation. Hidayah (2023) also noted that companies with high leverage ratios often struggle to maintain financial stability, further complicating their operational capabilities.
5. Fisher's Theory illustrates the relationship between nominal interest rates, real interest rates, and inflation. According to Fisher, when inflation rises, nominal interest rates must also increase to maintain stable real interest rates. This dynamic is crucial for companies in the real estate sector, where high borrowing costs can exacerbate financial difficulties (Castellares & Toma, 2020). Understanding this relationship helps stakeholders anticipate the impact of economic fluctuations on financial stability.

In summary, integrating agency theory and Fisher's theory provides a comprehensive framework for analyzing the determinants of financial distress in the property and real estate sector. enables a better assessment of the risks and management practices necessary to mitigate financial distress.

The application of Agency Theory in the context of property and real estate companies can help reduce conflicts of interest between owners (principals) and managers (agents). In this regard, it is crucial for companies to ensure that managers act in the best interests of the owners. Through stringent oversight, appropriate incentives, and effective communication, companies can encourage decisions that support long-term sustainability. Consequently, the risk of financial distress can be minimized, as decisions made are more aligned with the long-term goals of the company. On the other hand, Fisher's Theory, which focuses on the relationship between interest rates and inflation expectations, also has significant implications in the context of financial distress. This theory states that nominal interest rates reflect inflation expectations. When inflation rises, interest rates tend to increase as well, which can elevate borrowing costs for companies. This increase can add to the debt burden, reduce liquidity, and subsequently heighten the risk of financial distress. In the context of the property sector, companies facing high inflation may have to contend with rising operational costs, while revenue from property sales may not increase at the same rate. This can lead to financial imbalances that potentially result in difficulties in meeting financial obligations. By understanding and applying both theories, companies can design better strategies for managing financial risks and avoiding conditions of financial distress.

By applying the principles of agency theory, companies can reduce conflicts of interest between principals and agents, fostering actions that support long-term sustainability. Effective oversight, appropriate incentives, and strong communication between owners and managers are essential elements in maintaining business value and sustainability. Furthermore, Fisher's theory emphasizes the crucial relationship between interest rates, inflation, and a company's financial performance. When companies face financial pressures due to high inflation or rising interest rates, their ability to meet financial obligations and maintain operational stability can be significantly affected. In this context, companies need to provide clear signals to stakeholders regarding their financial condition. Such signals can include actions like mass layoffs, which may indicate that the company is experiencing substantial financial difficulties or is undergoing internal restructuring to cut costs. Additionally, reducing or halting dividend payments may reflect financial distress or an effort to allocate resources more efficiently, especially in light of the dynamics of interest rates and inflation. A downgrade in credit ratings by rating agencies can also signal that the company is facing a higher risk of bankruptcy. By understanding the interplay between agency theory and Fisher's theory, companies can better manage financial risks and enhance transparency with stakeholders, thereby supporting sustainability in the face of economic challenges.

The Altman Z-Score model is an important tool for measuring bankruptcy risk and provides valuable insights into a company's financial condition. Research by Al-Manaseer and Al-Oshaibat (2018) demonstrates that the Z-Score can predict potential insolvency with high accuracy, thereby helping investors and management identify financial distress risks earlier. Furthermore, a study by Kamaluddin (2019) indicates that companies with low Z-Scores tend to face challenges in meeting financial obligations, which can lead to liquidity crises and increased bankruptcy risk. Additionally, Mufidah and Handayani (2024) found that Z-Score analysis can signal declining financial performance, limited access to financing, and reputational damage that may be exacerbated by difficult market conditions. Therefore, understanding the Z-Score and the factors influencing it is crucial for companies in the property and real estate sector to manage financial risks and prevent financial distress.

In this study, it is essential to consider previous research relevant to the analysis of the factors influencing financial distress in the property and real estate sector. One study by Hertina et al. (2022) indicates that profitability has a negative and significant impact on financial distress. This research suggests that the lower a company's profitability, the higher the likelihood that the company will face financial difficulties. Another study by Sudaryo et al. (2022) found differing results, showing that profitability positively affects financial distress. This indicates that companies with high profitability often have high expectations from their creditors; thus, if they fail to meet these expectations, the risk of financial distress increases. Additionally, research by Oktavian & Handoyo (2023) discovered that liquidity ratios positively correlate with financial distress, meaning that higher liquidity ratios increase the likelihood of a company facing financial difficulties. Conversely, Sudaryo et al. (2022) demonstrated that companies with low liquidity ratios are more likely to experience financial distress. These studies reveal discrepancies in results, indicating that the relationship between profitability, liquidity, and financial distress requires further investigation to achieve consistent conclusions. This research aims to delve deeper into the factors affecting financial distress in the property and real estate sector, including the impacts of interest rates and inflation, as discussed in the study by Fitriaty & Saputra (2022).

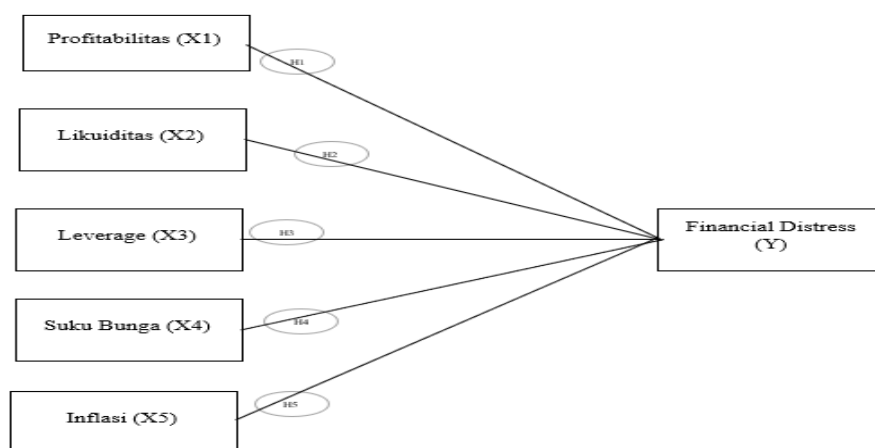
CONCEPTUAL RESEARCH FRAMEWORK

The conceptual framework of this study is based on problem formulation and a review of the literature. Additionally, the research's conceptual paradigm can be illustrated as follows:

HYPOTHESIS DEVELOPMENT

As shown in above, the formulation of hypotheses in this article includes the following:

The Influence of Profitability on Financial Distress



Profitability affects financial distress as it indicates the company's ability to generate profit. Hertina et al. (2022) found that profitability has a negative and significant effect on financial distress, meaning that lower profitability increases the likelihood of financial difficulties. Conversely, Sudaryo et al. (2022) indicated that high profitability can also lead to financial distress due to heightened expectations from creditors. Additionally, Oktavianthie

(2023) emphasized that companies with fluctuating profitability may face challenges in maintaining stable cash flows, contributing to financial distress. Therefore, the hypothesis is:
H01: Profitability has no effect on financial distress.
Ha1: Profitability affects financial distress.

The Influence of Liquidity on Financial Distress

Liquidity reflects a company's ability to meet short-term obligations. Sudaryo et al. (2022) showed that companies with low liquidity ratios are more likely to experience financial distress. Conversely, Oktavian & Handoyo (2023) found that high liquidity can help companies avoid financial difficulties. Utami (2023) also supported this by stating that a strong liquidity position enhances financial stability, allowing firms to navigate economic downturns effectively. Thus, the hypothesis proposed is:
H02: Liquidity has no effect on financial distress.
Ha2: Liquidity affects financial distress.

The Influence of Leverage on Financial Distress

Leverage indicates a company's dependence on debt. Vio Dawa Faniko (2022) found that high leverage has a positive and significant effect on financial distress, implying that higher leverage increases the likelihood of financial challenges. However, Oktavian & Handoyo (2023) presented contrasting findings, indicating that leverage may have a negative effect on financial distress under certain conditions. Hidayah (2023) suggested that companies with prudent leverage management can mitigate risks associated with high debt levels. Therefore, the hypothesis is:
H03: Leverage has no effect on financial distress.
Ha3: Leverage affects financial distress.

The Influence of Interest Rates on Financial Distress

Interest rates can influence borrowing costs, which in turn affect a company's financial condition. Research indicates that rising interest rates are associated with increased financial distress risk (Amin & Hidayah, 2023). Utami (2023) also noted that fluctuations in interest rates can strain cash flows, leading to potential financial difficulties. Thus, the hypothesis proposed is:
H04: Interest rates have no effect on financial distress.
Ha4: Interest rates affect financial distress.

The Influence of Inflation on Financial Distress

Inflation can harm purchasing power and reduce product demand, potentially causing financial distress. Mufidah & Handayani (2024) discussed that high inflation can lead to poor financial performance. Hidayah (2023) further emphasized that sustained inflation increases operational costs, thereby exacerbating financial stress on companies. Therefore, the hypothesis is:
H05: Inflation has no effect on financial distress.
Ha5: Inflation affects financial distress.

This research aims to analyze the impact of each of these variables on financial distress within the property and real estate sector in Indonesia

Metode Penelitian

This form of research employs a quantitative methodology. This study utilizes statistical methods to test hypotheses derived from established theories (Darmawan, 2019). The sampling mechanism in this study is illustrated in the following table:

No	Description	Number of Companies
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1	Total Companies in the Property and Real Estate Sector on the Indonesia Stock Exchange	92
2	The number of companies with incomplete or inaccessible financial statements during the period from 2018 to 2022.	52
3	Number of Companies that published complete annual financial statements consistently during the period 2018-2022	40
	Observation Years (2018 - 2022)	5
	Sample Size in the Research Observation (40 companies x 5 years)	200

Furthermore, the statistical method used in this article to test the research hypothesis is logistic regression analysis. Therefore, the equations in this study include:

Variable	Dimension	Indicator	Measurement Scale
Financial Distress	Company's ability to meet its financial obligations	Z-Score Altman	Nominal
Profitability	Company's ability to generate profit	ROA (Return on Asset)	Ratio
Liquidity	Company's ability to meet short-term obligations	CR (Current Ratio)	Ratio
Leverage	Use of debt in the company's financial structure	(DER) Debt to Equity Ratio	Ratio
Interest Rate	Applicable interest rate in the financial market	BI Rate	Ratio
Inflation	General increase in the prices of goods and services	CPI (Consumer Price Index)	Ratio

RESULT AND DISCUSSIONS

RESULT

DESCRIPTIVE STATISTICAL ANALYSIS

Descriptive statistical analysis is employed to provide an overview of the data, focusing on the maximum, minimum, mean, and standard deviation values. In this research, the variables included in the descriptive statistical calculations are Profitability (X1), Liquidity (X2), Leverage (X3), Interest Rate (X4), Inflation (X5), and Financial Distress (Y). From this descriptive statistical analysis, the following sample representation is obtained:

Table 3

	N	Minimum	Maximum	Mean	Std. Deviation
Profitability	200	-0.360	0.430	0.02015	0.072427
Liquidity	200	0.080	24.880	2.79050	2.818211
Leverage	200	-55.730	6.880	0.26230	4.600946
Interest Rate	200	0.040	0.060	0.05000	0.008967
Inflation	200	0.020	0.060	0.03200	0.014734
Valid (listwise)	N 200				

Source data: *processed data*

Based on Table 3 above, the average Profitability (X1) value during the study period was 0.02015, with the highest value of 0.43 and the lowest value of -0.36, while the standard deviation was 0.072427. The average Liquidity (X2) value during the study period was 2.79050, with the highest value of 24.880 and the lowest value of 0.08, while the standard deviation was 2.818211. The average Leverage (X3) value during the study period was 0.26230, with the highest value of 6.880 and the lowest value of -55.730, while the standard deviation was 4.600946. The average Interest Rate (X4) value during the study period was 0.05000, with the highest value of 0.060 and the lowest value of 0.040, while the standard deviation was 0.008967. The average Inflation (X5) value during the study period was 0.03200, with the highest value of 0.060 and the lowest value of 0.020, while the standard deviation was 0.014734.

CLASSICAL ASSUMPTION TEST

The Classical Assumption Test is a series of tests conducted to evaluate whether the regression model meets the basic assumptions necessary for drawing valid conclusions. The purpose of this test is to ensure that the regression model satisfies the BLUE (Best Linear Unbiased Estimator) criteria. Therefore, it is important to conduct classical assumption testing that encompasses several aspects

RESULTS OF THE REGRESSION MODEL FIT TEST

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	7.519	8	0.482

Based on the model fit results above, the Chi-square value is 7.519 with a significance value of 0.482. Since the significance value is greater than 0.05, it indicates that the model is capable of predicting its observed values, meaning the model can be accepted as it fits the observational data

RESULTS OF THE OVERALL MODEL FIT TEST

Overall Model Fit Test

Iteration History ^{a,b,c,d}								
Iteration		-2 Log likelihood	Coefficients					
			Constant	Profitabilitas	Likuiditas	Leverage	Suku Bunga	Inflasi
Step 1	1	187.872	-0.623	10.855	0.219	0.043	10.688	-7.291
	2	146.396	-1.116	23.529	0.501	0.175	0.176	-1.181
	3	121.076	-2.018	38.409	0.865	0.489	-8.488	1.953
	4	100.951	-3.903	56.220	1.341	1.357	-13.601	4.512
	5	95.497	-5.565	72.469	1.763	2.032	-15.220	5.701
	6	94.905	-6.357	80.299		2.325	-15.330	5.649
	7	94.895	-6.481	81.489	2.007	2.368	-15.193	5.526
	8	94.895	-6.484	81.511	2.008	2.369	-15.188	5.522
	9	94.895	-6.484	81.511	2.008	2.369	-15.188	5.522

a. Method: Enter

b. Constant is included in the model.

c. Initial -2 Log Likelihood: 263.582

d. Estimation terminated at iteration number 9 because parameter estimates changed by less than .001.

The initial -2 Log Likelihood (-2LL) value was 263.582, while after iterations, it decreased to 94.895, indicating a reduction of 168.687. The -2LL value reflects how well the model fits the data; the lower the value, the better the model explains the data. This significant decrease indicates that the new model is more effective than the initial model. Thus, the reduction of -2LL from 263.582 to 94.895 shows that the regression model has improved in its ability to explain the data

COEFFICIENT OF DETERMINATION TEST

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	94.895 ^a	0.570	0.778
a. Estimation terminated at iteration number 9 because parameter estimates changed by less than .001.			

Result of the Coefficient of Determination Test

Based on the table above, the Coefficient of Determination in the logistic regression is reflected by the Nagelkerke R Square value. The Nagelkerke R Square is 0.778, which means that 77% of the variability in the dependent variable can be explained by the variability in the independent variables

MULTICOLLINEARITY TEST

Correlation Matrix							
		Constant	Profitability	Liquidity	Leverage	Interest Rate	Inflation
Step 1	Constant	1.000	-0.429	-0.543	-0.552	-0.722	0.360
	Profitability	-0.429	1.000	0.624	0.698	-0.053	-0.015
	Liquidity	-0.543	0.624	1.000	0.705	-0.064	0.061
	Leverage	-0.552	0.698	0.705	1.000	0.006	-0.007
	Interest rate	-0.722	-0.053	-0.064	0.006	1.000	-0.753
	Inflation	0.360	-0.015	0.061	-0.007	-0.753	1.000

Result of Multicollinearity Test

The correlation among independent variables can indicate multicollinearity if the values are sufficiently high, generally above 0.90. Table 4.5 shows that Profitability and Liquidity have a correlation of 0.624, Profitability and Leverage 0.698, Liquidity and Leverage 0.705, and Interest Rate and Inflation -0.753. Overall, all correlations among the independent variables are below 0.90, indicating no strong evidence of multicollinearity.

LOGISTIC REGRESSION TEST

Variables in the Equation							
	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)

								Lower	Upper
Step 1 ^a	Profitability	-81.511	14.346	32.282	1	0.000	0.000	0.000	0.000
	Liquidity	-2.008	0.380	27.891	1	0.000	0.134	0.064	0.283
	Leverage	-2.369	0.495	22.914	1	0.000	0.094	0.035	0.247
	Interest Rate	15.188	45.078	0.114	1	0.736	3943853.224	0.000	9.246
	Inflation	-5.522	29.235	0.036	1	0.850	0.004	0.000	3.069
	Constant	6.484	2.066	9.847	1	0.002	654.455		
a. Variable(s) entered on step 1: Profitabilitas, Likuiditas, Leverage, Suku Bunga, Inflasi.									

Result of Logistic Regression Test

Based on the results of the logistic regression analysis in the table above, the logistic regression model can be formed by examining the estimated parameter values from the variables in the equation. The regression model based on the estimated parameter values in the variables in the equation is as follows:

$$FD = \alpha + \beta_1 \text{Prof} + \beta_2 \text{Liq} + \beta_3 \text{Lev} + \beta_4 \text{IR} + \beta_5 \text{Inf} + \varepsilon$$

Thus,

$$FD = 6.484 - 5.522 \text{ Profitability} - 2.008 \text{ Liquidity} - 2.369 \text{ Leverage} + 15.188 \text{ Interest Rate} - 5.522 \text{ Inflation}$$

Based on the logistic regression equation above, it can be explained as follows:

1. Profitability: Measured by ROA, the regression coefficient is -81.511 and significant at 0.000 (less than 0.05). This indicates that Profitability has a significant effect on Financial Distress. The Exp(B) value of 0.000 suggests that higher Profitability decreases the likelihood of Financial Distress.
2. Liquidity: Measured by CR, the regression coefficient is -2.008 and significant at 0.000. This indicates that Liquidity also has a significant effect on Financial Distress. The Exp(B) value of 0.134 shows that an increase in Liquidity reduces the likelihood of Financial Distress.
3. Leverage: Using DER, the regression coefficient is -2.369 with a significance of 0.000, indicating a significant effect on Financial Distress. The Exp(B) value of 0.094 indicates that higher leverage decreases the likelihood of Financial Distress.
4. Interest Rate: The regression coefficient is positive at 15.188 with a p-value of 0.736 (greater than 0.05), indicating that the interest rate does not have a significant effect on Financial Distress.
5. Inflation: The regression coefficient is -5.522 with a p-value of 0.850 (greater than 0.05), also indicating that inflation does not have a significant effect on Financial Distress.

DISCUSSION

The Influence of Profitability on Financial Distress

The first hypothesis (H1) states that Profitability has a negative effect on Financial Distress. The regression results confirm that profitability, measured by ROA, has a negative and significant impact on Financial Distress. This finding aligns with agency theory, where higher profitability aligns the interests of management and shareholders, thereby reducing the risk of financial distress. Property and real estate companies with high profitability tend to have healthy cash flows, the ability to manage obligations, and a strong market position, all of which reduce the risk of financial difficulties. High profitability also enhances the company's credibility in accessing additional funding and investing in new projects, which can strengthen competitiveness and market share. These findings are consistent with the research by Dwiantari et al. (2021), which shows a significant negative impact of profitability on financial distress. However, this study contradicts the results of Oktavian & Handoyo (2023), which indicate that profitability may have a positive effect on financial distress, reflecting potential high risks despite high profitability. This

suggests that profitability does not always guarantee good financial conditions, especially if accompanied by aggressive risk-taking behavior by management

The Influence of Liquidity on Financial Distress

The second hypothesis (H2) states that Liquidity has a negative effect on Financial Distress. The regression results show that liquidity, measured by the Current Ratio (CR) proxy, has a negative and significant impact on Financial Distress, thus supporting this hypothesis. This finding aligns with agency theory, where high liquidity aligns the interests of management and shareholders, reducing the likelihood of the company experiencing financial distress. High liquidity indicates a company's ability to meet short-term obligations, thereby reducing the risk of financial difficulties. These results are consistent with the study by Dwiantari et al. (2021), which also found a significant negative effect of liquidity on financial distress. Companies with high liquidity have greater current assets compared to short-term liabilities, making it easier to meet obligations. However, this study contradicts the findings of Oktavian & Handoyo (2023), which indicate that liquidity ratios have a positive effect on financial distress. They argue that high liquidity does not always reflect good financial conditions; idle funds or inefficient use of funds can increase the potential for financial distress. In certain situations, companies may maintain high liquidity as a precautionary measure, but this can hinder the efficient use of funds.

The Influence of Leverage on Financial Distress

Hypothesis three (H3) states that leverage has a negative effect on financial distress. The regression results indicate that leverage, measured by the Debt Equity Ratio (DER), has a negative and significant impact on financial distress, thus this hypothesis is accepted. Agency theory explains that as leverage increases, managers have greater responsibility to ensure that the company meets its obligations. Close monitoring by creditors encourages managers to manage the company more carefully and efficiently, which can reduce the risk of financial distress. This study is consistent with the findings of Oktavian & Handoyo (2023), which show that increased leverage can raise the likelihood of financial difficulties, aligning with agency theory that suggests higher risks may arise from conflicts of interest between management and shareholders. However, this study's results contrast with those of Carmenita et al. (2023), who found that leverage positively influences financial distress. They argue that high leverage can provide fresh funding for operations and investments, enhancing the company's ability to cope with financial difficulties. Furthermore, stringent oversight from creditors may encourage management to handle finances better, thereby reducing the risk of financial distress.

The Influence of Interest Rates on Financial Distress

Hypothesis four (H4) states that interest rates have a positive effect on financial distress. The regression results show that the significance value of the interest rate variable is 0.736, indicating that it is not statistically significant. Therefore, this hypothesis is accepted, suggesting that changes in interest rates do not have a significant impact on the financial distress condition of the company. According to Fisher's Theory, the nominal interest rate consists of the real interest rate and the expected inflation rate. In the context of property and real estate companies, the characteristics of long-term assets such as land and buildings may explain why changes in interest rates do not significantly affect them. If the real interest rate remains stable, changes in the nominal interest rate will not have a substantial impact on the interest burden incurred, allowing companies to better plan their finances and manage debt. Companies in this sector can also adjust the selling or rental prices of assets in line with inflation, thereby covering the interest burden. The characteristics of stable or appreciating assets help companies maintain a healthy financial condition even with changes in interest rates. Thus, Fisher's theory explains that companies can anticipate changes in interest rates and inflation, contributing to their financial stability.

The Influence of Inflation on Financial Distress

Hypothesis five (H5) posits that inflation has a positive effect on financial distress. However, the regression results indicate that inflation has a negative impact on financial distress, leading to the rejection of this hypothesis. The significance value for the inflation variable is 0.850, which means it is not statistically significant, suggesting that inflation does not influence the financial distress of the company. Fisher's Theory states that the nominal interest rate consists of the real interest rate and expected inflation. In the context of property and real estate companies, the characteristics of long-term assets such as land and buildings, which tend to be stable or appreciate in value, can explain the ineffectiveness of inflation on financial distress. Companies in this sector can adjust the selling or rental prices of their assets in line with inflation, ensuring that revenues remain aligned with inflation changes and that interest burdens can be managed. As a result, inflation does not have a significant impact on the financial condition of companies, especially in the context of relatively low inflation rates. This suggests that the characteristics of assets and the companies' ability to adjust prices can mitigate the risk of financial distress despite changes in inflation.

CONCLUSION

Based on the problem formulation, research findings, and discussion, the following conclusions can be drawn:

1. Profitability (ROA) has a negative and significant effect on financial distress.
2. Liquidity (CR) has a negative and significant effect on financial distress.
3. Leverage (DER) has a negative and significant effect on financial distress.
4. Interest rates do not have an effect on financial distress.
5. Inflation does not have an effect on financial distress

Bibliografi

- alius, M., Shofia, A., Triha, H., Satria, T. F., Harma, B., & Mulia, J. R. (2023). Analisis Pengaruh Pertumbuhan Angkatan Kerja, Inflasi Dan Suku Bunga Terhadap Jumlah Ukm. *Indonesian Journal Of Multidisciplinary On Social And Technology*, 1(3), 290–296. <https://doi.org/10.31004/Ijmsst.V1i3.232>
- Amin, M. F. Al, & Hidayah, R. (2023). Pengaruh Profitabilitas, Leverage, Inflasi Dan Suku Bunga Terhadap Financial Distress Dalam Masa Pandemi Covid-19. *Syntax Literate ; Jurnal Ilmiah Indonesia*, 8(7), 4868–4881. <https://doi.org/10.36418/Syntax-Literate.V8i7.12920>
- Andy Field. (2024). *Discovering Statistics Using Ibm Spss Statistics*. *Jurnal Sains Dan Seni Its*, 6(1), 51–66. <http://Repositorio.Unan.Edu.Ni/2986/1/5624.Pdf%0ahttp://Fiskal.Kemenkeu.Go.Id/Ejournal%0ahttp://Dx.Doi.Org/10.1016/J.Cirp.2016.06.001%0ahttp://Dx.Doi.Org/10.1016/J.Powtec.2016.12.055%0ahttps://Doi.Org/10.1016/J.Ijfatigue.2019.02.006%0ahttps://Doi.Org/10.1>
- Carmenita, T., Armeliza, D., & Utaminingtyas, T. H. (2023). Pengaruh Net Profit Margin, Leverage Dan Sales Growth Terhadap Financial Distress (Perusahaan Sektor Properti Dan Real Estate Yang Terdaftar Di Bei 2020 – 2022). 4, 374–385.
- Castellares, R., & Toma, H. (2020). Effects Of A Mandatory Local Currency Pricing Law On The Exchange Rate Pass-Through. *Journal Of International Money And Finance*, 106(Xxxx), 102186. <https://doi.org/10.1016/J.Jimonfin.2020.102186>
- Cfa Institute. (2024). *Financial Statement Analysis Cfa ® Program Curriculum 2024 • Level Prerequisite Reading • Volume 3*. 3.
- Chakraborty, M., Byshkin, M., & Crestani, F. (2020). Patent Citation Network Analysis: A Perspective From Descriptive Statistics And Ergms. *Plos One*, 15(12 December), 1–29. <https://doi.org/10.1371/Journal.Pone.0241797>
- Chohan, R. (2023). Agency Theory In Marketing: 27 Years On. *Journal Of Strategic Marketing*, 31(4), 767–793. <https://doi.org/10.1080/0965254x.2021.1996448>

- Christine, D., Wijaya, J., Chandra, K., Pratiwi, M., Lubis, M. S., & Nasution, I. A. (2019). Pengaruh Profitabilitas, Leverage, Total Arus Kas Dan Ukuran Perusahaan Terhadap Financial Distress Pada Perusahaan Property Dan Real Estate Yang Terdapat Di Bursa Efek Indonesia Tahun 2014-2017. *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, 2(2), 340–350. <https://doi.org/10.36778/Jesya.V2i2.102>
- Cicmil, D. (2023). The Influence Of Financial Indicators On Liquidity: An Empirical Analysis Of Profitability, Leverage, And Fund Age. *Ekonomika*, 69(3), 15–32. <https://doi.org/10.5937/Ekonomika2303015c>
- Darmawan, Deni. (2019). *Metode Penelitian Kuantitatif*. Bandung: PT Remaja Rosdakarya.
- Deng, Y., Gan, Q., & Zhou, X. (2022). Macro shocks and real estate investment trusts. *The Review of Financial Studies*, 35(3), 1183-1228
- Dwiantari, R. A., Gede, L., & Artini, S. (2021). The Effect Of Liquidity, Leverage, And Profitability On Financial Distress (Case Study Of Property And Real Estate Companies On The Idx 2017-2019). *American Journal Of Humanities And Social Sciences Research*, 5, 367–373. www.ajhssr.com
- Fernawati, A. F. (2020). Analisis Rasio Profitabilitas Dan Rasio Keuangan Sebagai Dasar Penilaian Kinerja Keuangan Pada Pt. Indofarma (Persero) Tbk Periode Maret 2014-2018. *Jurnal Aktiva : Riset Akuntansi Dan Keuangan*, 1(3), 35–45. <https://doi.org/10.52005/Aktiva.V2i1.50>
- Fitriaty, F., & Saputra, M. H. (2022). Inflasi, Suku Bunga Dan Resesi Terhadap Kinerja Saham Perusahaan Properti Dan Real Estate Di Bursa Efek Indonesia. *Jurnal Manajemen Terapan Dan Keuangan*, 11(04), 981–992. <https://doi.org/10.22437/Jmk.V11i04.21767>
- Friske, W., Hoelscher, S. A., & Nikolov, A. N. (2023). The Impact Of Voluntary Sustainability Reporting On Firm Value: Insights From Signaling Theory. *Journal Of The Academy Of Marketing Science*, 51(2), 372–392. <https://doi.org/10.1007/S11747-022-00879-2>
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS*.
- Habibi, H., & Utami, W. (2022). Study Of Covid19 Pandemic, Financial Ratios, And Macroeconomic Impact On Financial Distress In Indonesian Manufacturing Firms Traded On The Indonesian Stock Exchange. *International Journal Of Economics, Business, And Entrepreneurship*, 5(2), 98–108. <http://ijebe.feb.unila.ac.id/index.php/ijebe/article/view/202>
- Handayati, P., Izzalqurny, T. R., Fauzan, S., & Shobah, N. (2022). The Phenomenon Of Financial Distress Of Manufacturing Companies In Indonesia During The Covid-19 Pandemic. *International Journal Of Research In Business And Social Science* (2147- 4478), 11(9), 166–173. <https://doi.org/10.20525/Ijrbs.V11i9.2205>
- Hertina, D., Wahyuni, L. D., & Ramadhan, G. K. (2022). Pengaruh Profitabilitas, Leverage Dan Likuiditas Terhadap Financial Distress. *Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan*, 4(9), 4013–4019. <https://doi.org/10.32670/Fairvalue.V4i9.1583>
- Hidayah, N., Azhar, Z., Setiany, E., Utami, W., & Tarmidi, D. (2024). Business : Determinants Of Erm Quality And Its Impact. *Business: Theory And Practice*, 25(1), 11–23. <https://journals.vilniustech.lt/index.php/Btp/article/view/19302/11928>
- Ibm Corp. (2021). *Ibm Spss Statistics 29 Core System User's Guide*. 1–288. https://www.ibm.com/docs/en/sslvm_b_29.0.0/pdf/Ibm_Spss_Statistics_Core_System_User_Guide.pdf
- Isayas, Y. N. (2021). Financial Distress And Its Determinants: Evidence From Insurance Companies In Ethiopia. *Cogent Business And Management*, 8(1). <https://doi.org/10.1080/23311975.2021.1951110>
- Jaffe, J. F., & Mandelker, G. (1976). Inflation and Stock Prices. *The Journal of Finance*, 73(6), 3025–3025.
- Kalash, I. (2023). The Financial Leverage–Financial Performance Relationship In The Emerging Market Of Turkey: The Role Of Financial Distress Risk And Currency Crisis. *Euromed Journal Of Business*, 18(1), 1–20. <https://doi.org/10.1108/Emjb-04-2021-0056>

- Kamaluddin, A. (2019). Financial Distress Prediction Through Cash Flow Ratios Analysis. *International Journal Of Financial Research*, 10(3), 63–76. <https://doi.org/10.5430/Ijfr.V10n3p63>
- Luspratama, R., Edward, Y. R., & Rahmi, N. U. (2023). Profitability Moderates The Effect Of Firm Size, Leverage, And Liquidity On Financial Distress. *Oblik I Finansi*, 3(3(101)), 53–64. [https://doi.org/10.33146/2307-9878-2023-3\(101\)-53-64](https://doi.org/10.33146/2307-9878-2023-3(101)-53-64)
- Mardiatmoko, G.-. (2020). Pentingnya Uji Asumsi Klasik Pada Analisis Regresi Linier Berganda. *Barekeng: Jurnal Ilmu Matematika Dan Terapan*, 14(3), 333–342. <https://doi.org/10.30598/Barekengvol14iss3pp333-342>
- Martini, & Setyawasih, R. (2022). Prediksi Financial Distress Pada Perusahaan Sektor Property Dan Real Estate Yang Terdaftar Di Bursa Efek Indonesia Periode 2017-2020. *Formosa Journal Of Sustainable Research*, 1(3), 357–374. <https://doi.org/10.55927/Fjsr.V1i3.959>
- Masduki, U., Efriadi, A. R., & Ermalina, E. (2019). Kemampuan Model Z- Score Dan Model Springate Dalam Memprediksi Financial Distress Bpr Multi Artha Sejahtera. *Jurnal Manajemen Dan Keuangan*, 8(1), 68–79. <https://doi.org/10.33059/Jmk.V8i1.1156>
- Mashudi, M., Himmati, R., Ardillah, I. F. R., & Sarasmitha, C. (2021). Financial Distress Prediction In Infrastructure, Utilities, And Transportation Sector Companies 2015-2020. *Jurnal Keuangan Dan Perbankan*, 25(3), 656–670. <https://doi.org/10.26905/Jkdp.V25i3.5858>
- Maulidia, L., & Asyik, N. F. (2020). Pengaruh Profitabilitas, Leverage, Dan Likuiditas Terhadap Financial Distress Pada Perusahaan Food And Beverage Di Bursa Efek Indonesia. *Jurnal Ilmu Dan Riset Akuntansi*, 9(2), 1–15. <http://jurnalmahasiswa.stiesia.ac.id/index.php/Jira/Article/View/2788>
- Minanari, M., Nurhasanah, N., Safira, S., Nugroho, L., & Nugraha, E. (2024). Financial Distress Determinants Factors Of Retail Companies With Profitability As Moderating (Indonesia Cases 2016-2021). *Business Economics And Management Research Journal*, 7(1), 29–47. <https://doi.org/10.58308/Bemarej.1324931>
- Msomi, T. S., & Nzama, S. (2023). Analyzing Firm-Specific Factors Affecting The Financial Performance Of Insurance Companies In South Africa. *Insurance Markets And Companies*, 14(1), 8–21. [https://doi.org/10.21511/Ins.14\(1\).2023.02](https://doi.org/10.21511/Ins.14(1).2023.02)
- Mufidah, K., & Handayani, A. (2024). Prediksi Financial Distress Pada Sektor Perbankan Dengan Menggunakan Metode Altman Z-Score, Grover, Springate Dan Zmijewski. *Jurnal Ekonomi Manajemen Sistem Informasi*, 5(6), 540–553. <https://doi.org/10.38035/Jemsi.V5i6.2479>
- Mushafiq, M., Sindhu, M. I., & Sohail, M. K. (2023). Financial Performance Under Influence Of Credit Risk In Non-Financial Firms: Evidence From Pakistan. *Journal Of Economic And Administrative Sciences*, 39(1), 25–42. <https://doi.org/10.1108/Jeas-02-2021-0018>
- Oktavian, E., & Handoyo, S. (2023). Effect Of Leverage, Profitability, Liquidity Ratio, And Inflation Towards Financial Distress. *International Journal Of Management Science And Application*, 2(1), 11–27. <https://doi.org/10.58291/Ijmsa.V2i1.111>
- Oktavianthie, N., & Utami, W. (2023). Determinants Of Integrity Of Financial Statements In Indonesian Manufacturing Companies. In *Ijefm.Co.In*. <https://ijefm.co.in/V6i3/Doc/24.Pdf>
- Putri Renalita Sutra Tanjung. (2023). The Effect Of Current Ratio, Return On Assets, And Debt To Equity Ratio On Financial Distress. *Epra International Journal Of Economic And Business Review*, 2015, 25–33. <https://doi.org/10.36713/Epra13893>
- Santosa, D. F., Anggraeni, L., & Pranowo, K. (2020). Determinan Financial Distress Perusahaan Subsektor Ritel Di Bursa Efek Indonesia. *Jurnal Aplikasi Bisnis Dan Manajemen*, 6(1), 128–141. <https://doi.org/10.17358/Jabm.6.1.128>
- Saringgih, P. (2023). The Effect Of Current Ratio, Return On Assets, And Debt To Equity Ratio On Financial Distress. *Epra International Journal Of Economic And Business Review*, 2015, 25–33. <https://doi.org/10.36713/Epra13893>
- Setiawan, C., & Rafiani, T. T. (2021). Financial Distress Prediction Models: Case Study Of Textile Industry In Indonesia. *International Journal Of Entrepreneurship*, 25(4), 9264.

- Soekapdjo, S., Nugroho, L., Badawi, A., & Utami, W. (2018). Bad Debt Issues In Islamic Bank : Macro And Micro Influencing (Indonesia Cases) Soeharjoto Soekapdjo Lucky Nugroho Ahmad Badawi Wiwik Utami Abstract And Finance And Finance Of Commerce Of Commerce International International. *International Journal Of Commerce And Finance*, 4(1), 10–26.
- Sudaryo, Y., Sofiaty, N. A., Kumaratih, I., Kusumawardani, A., & Hadiana, A. (2022). Dampak Profitabilitas, Rasio Likuiditas Dan Rasio Leverage Terhadap Financial Distress Pada Perusahaan Jasa Sub Sektor Property Dan Real Estate Di Indonesia. *Ekonomi: Jurnal Ekonomi, Akuntansi & Manajemen*, 4(1), 25–32. <https://doi.org/10.37577/Ekonam.V4i1.489>
- Susanti, M., & Samara, A. (2021). Analysis Of Profitability, Leverage, Liquidity, And Activity Of Financial Distress Basic Study Of Chemical Sub Sector Industry Listed On Bei. *Jurnal Ekonomi Lldikti Wilayah 1 (Juket)*, 1(1), 5–13. <https://doi.org/10.54076/Juket.V1i1.39>
- Utami, W. (2023). Analisis Informasi Akuntansi Dan Keuangan Untuk Keputusan Bisnis. *Repository.Mercubuana.Ac.Id*. <https://repository.mercubuana.ac.id/80207/>
- Utami, W., Setiany, E., Hidayah, N., & Azhar, Z. (2023). The Graphical Information In Sustainability Reports And Corporate Performance: A Southeast Asian Case Study. In *Jurnal Ilmiah Akuntansi*.
- Vio Dawa Faniko, D. I. (2022). Influence Of Liquidity, Profitability, Leverage And Activities On Financial Distress. 9(2), 199–208.
- Wangsih, I. C., Yanti, D. R., Yohana, Kalbuana, N., & Cahyadi, C. I. (2021). Influence Of Leverage, Firm Size, And Sales Growth On Financial Distress (Empirical Study On Retail Trade Sub-Sector Companies Listed In Indonesia Stock Exchange Period 2016-2020). *International Journal Of Economics, Business And Accounting Research (Ijebar)*, 5(4), 180–194.
- Wisnu, F., & Astuti, D. P. (2023). Financial Distress: Profitability Ratios And Liquidity Ratios, With Financial Statement Fraud As Moderating. *Economic Education Analysis Journal*, 12(2), 15–26. <https://doi.org/10.15294/Eeaj.V12i2.67570>
- Yahya, A. (2024). The Effect Of Profitability, Leverage, And Liquidity On Financial Distress Pengaruh Profitabilitas, Leverage, Dan Likuiditas Terhadap Financial Distress. *Costing: Journal Of Economic, Business And Accounting*, 7(3), 5179–5195. <https://doi.org/10.37366/Ekomabis.V5i02.1582>
- Yusril, Y., Hardiana, C. D., & Suparyati, S. (2022). The Effect Of Sales Growth, Profitability, Leverage And Liquidity On Financial Distress Conditions At Transportation Sub-Sector Companies Listed In Indonesia Stock Exchange (Idx). *Kontigensi: Jurnal Ilmiah Manajemen*, 10(2), 194–207. <https://doi.org/10.56457/Jimk.V10i2.289>
- Zakya, F. (2022). Pengaruh Profitabilitas, Aktivitas, Likuiditas, Wcta Terhadap Financial Distress Pada Emiten Industri Properti Dan Real Estate. *Jurnal Impresi Indonesia*, 1(11), 1168–1179. <https://doi.org/10.58344/Jii.V1i11.663>

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