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INTERNAL FACTOR AND EXTERNAL FACTOR TO PREDICT FINANCIAL DISTRESS

Ivan Sanjaya[1*], Henryanto Wijaya[2]

[1,2] Faculty of Economics and Business, Universitas Tarumanagara, Jakarta, Indonesia
Email: ivansanjya@gmail.com

*Corresponding Author

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ABSTRACT

The objective of this study is to examine how internal and external factors, such as leverage, liquidity, sales growth, and company size as internal variables, along with inflation and gross domestic product as external variables, impact the financial distress of property and real estate firms listed on the Indonesian Stock Exchange between 2020 and 2022. The sample, comprising 38 companies and 114 data points, was chosen through purposive sampling from secondary sources. Multiple linear regression tests were conducted using Eviews version 12 and Microsoft Excel. The findings indicate that internal factors only partially influence financial distress, and external factors have no significant impact on it. This underscores the necessity for companies to prioritize high-quality management practices to enhance their financial performance and ensure optimal business continuity.

Keywords: *External Factor, Financial Distress, Internal Factor*

1. INTRODUCTION

The property and real estate industry has a significant role in many countries, including Indonesia. However, in Indonesia, this sector is facing a decline due to high Kredit Pemilik Rumah (KPR), causing many people to postpone purchasing property. Companies in this sector need to pay attention to the impact of declining buyer interest because it can have a negative impact on company profits. The high level of competition and demands to be more creative, improve quality, and have good management add to the complexity of conditions, so companies need good adaptation to avoid the risk of financial distress. (Junior & Wijaya, 2022).

A company's inability to adapt can lead to failure and even bankruptcy. Therefore, it is important for companies to predict financial distress conditions. Financial distress refers to a situation wherein a company encounters severe financial challenges, typically characterized by an inability to meet its financial obligations, which can be measured by a decrease in profits, inability to pay off debts and obligations in financial statements. Predictive methods, such as Z-Score, can be used to provide management with information about the company's likelihood of bankruptcy. (Antoniawati & Purwohandoko, 2022).

The possibility of financial distress and company bankruptcy is a serious threat, especially for investors. Information regarding a company's financial health is crucial for users of financial reports, because it can minimize financial risks. Factors that can influence financial distress involve internal aspects of the company such as profits, liabilities and assets, as well as external factors such as macroeconomic conditions. High profit levels, good liability management, and efficient use of assets can be internal factors that help avoid financial distress, while external factors such as macroeconomic analysis help understand economic changes that can affect the company as a whole. (Amri & Aryani, 2021)

2. RESEARCH METHOD

Signalling Theory
Signaling theory According to Spence (1973), signaling theory, or signal theory, underlies management actions to provide information to shareholders and potential investors about the company's prospects without ignoring privacy. Management is interested in displaying news of the company's success to increase credibility, although it is not required. Financial reports are considered important for investors and business people because they reflect the company's future, influence investor decisions with quality information, and must be presented in a complete, timely, relevant and accurate manner. In general, companies can provide positive and trustworthy signals through financial reports, including management's achievements in realizing company policies as well as other information that describes the company's condition. Signal theory is useful in predicting financial distress, allowing shareholders and investors to see signals in financial reports regarding the company's current and future conditions.

Leverage and Financial Distress.
Based on signaling theory, a high leverage ratio can provide a negative signal for investors. If a company's leverage ratio is high, the risk of financial difficulties for that company is also higher. This is in line with research (Antoniawati & Purwohandoko, 2022), (Tania & Wijaya, 2021), and (Widhiari & Merkusiwati, 2015) which stated the leverage causes a positive effect to financial distress. However, had contradicts research conducted by (Wibowo & Susetyo, 2020), which states that leverage causes negative effects to financial distress.

Liquidity and Financial Distress
According to signaling theory, high company liquidity can provide a positive signal for investors. If the company can cover third party funds with current assets that are due, then the risk of financial difficulties for the company is very small. This is in line with research (Widhiari & Merkusiwati, 2015) which states that liquidity causes negative effects on financial distress. However, this contradicts research conducted by (Antoniawati & Purwohandoko, 2022), which stated this liquidity causes a positive effect to financial distress.

Sales Growth and Financial Distress
According to signaling theory, a company's high sales growth can furnish a positive signal for investor. If the company gets an increase in profits every year, then the risk of financial difficulties for the company is very small. This is in line with research (Widhiari & Merkusiwati, 2015) and (Junior & Wijaya, 2022), which stated that sales growth causes negative effects on financial distress. However, this contradicts research conducted by (Aninda Fitri & Juliana Dillak, 2020), which states that sales growth causes a positive effect to financial distress.

Inflation and Financial Distress
According to signaling theory, high levels of inflation can furnish a negative signal for investor. If the inflation rate is high, the costs of running a business will also rise, which can make it difficult for companies to make a profit. This is in line with research (Rifky Irwandi & Rahayu, 2019), which states that inflation causes a positive effect on financial distress. However, this contradicts research conducted by (Nur Kholisoh & Dwiarti, 2020), which states that inflation causes negative effects to financial distress.

Gross Domestic Product and Financial Distress
Based on signaling theory, if a country's GDP grows and develops well, it can provide a positive signal that the companies in that country are in good health. This is in line with research (Charalambakis, 2014), which states that gross domestic product causes a negative effect on financial distress. However, this contradicts research conducted by (Santosa et al., 2020), which states that gross domestic product causes a positive effect to financial distress.

Firm Size and Financial Distress
According to signaling theory, large companies tend to be considered to have sufficient resources to guarantee third party funds, so this gives a positive signal to investors. This aligns with the research. (Mahera & Hartono, 2022), which states that firm size causes a negative effect on financial distress. However, this contradicts research conducted by (Gilang & Darsono, 2019), which states that firm size causes a positive effect on financial distress.

The research framework In this study, the following is observed:

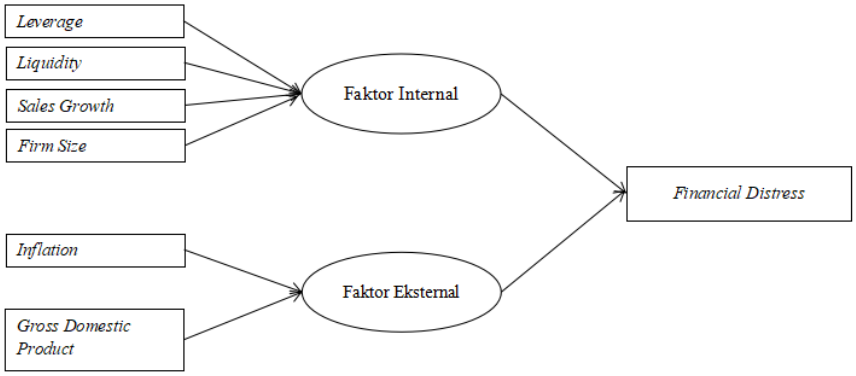

Figure 1. Research Framework

Research Hypothesis
H1: Leverage has a positive and significant impact to financial distress.
H2: Liquidity has a negative and significant impact to financial distress.
H3: Sales growth has a negative and significant impact to financial distress.
H4: inflation has a positive and significant impact to financial distress.
H5: Gross domestic product has a negative and significant impact to financial distress.
H6: Firm size has a negative and significant impact to financial distress.

Population and Sampling Techniques
This research employs quantitative methods and utilizes secondary data sourced from the Indonesian Stock Exchange spanning the years 2020 to 2022. The sample selection process involves purposive sampling, focusing on property and real estate firms meeting specific criteria: being listed on the Indonesia Stock Exchange during the aforementioned period, having undergone an Initial Public Offering (IPO), and providing comprehensive financial report data for the same period. A total of 38 companies fulfill these criteria and comprise the sample for the study.

The variables used in this research are financial distress as the dependent variable, and the independent variables used are leverage, liquidity, sales growth, inflation, gross domestic product and firm size.

Variables and Measurement Methods

Table 1. Variable Operationalization

Variabel	Pengukuran	Sumber	Skala
Financial Distress (Y)	Z = .012X1+ .014Xz +.033X3 +.006X4 +.999X5		Rasio
Leverage (X1)	$Debt\ to\ Asset\ Ratio = \frac{Total\ Debt}{Total\ Asset}$	(Widhiari & Merkusiwati, 2015)	Rasio
Liquidity (X2)	$Current\ Ratio = \frac{Current\ Asset}{Current\ Liabilities}$	(Widhiari & Merkusiwati, 2015)	Rasio
altm(Altman, 1968)*Sales Growth* (X3)	$Sales\ Growth = \frac{Sales\ Year\ t - Sales\ Year\ t1}{Sales\ Year\ t1}$	(Widhiari & Merkusiwati, 2015)	Rasio
Inflation (X4)	Rasio Inflasi $= \frac{Sum\ of\ Inflation\ \%\ per\ Month}{12}$	(Sari et al., 2019)	Rasio
Gross Domestic Product (X5)	$GDP = \mathrm{Ln}\ (\text{GDP riil})$	(Santosa et al., 2020)	Rasio
Firm Size (X6)	$Size = \mathrm{Ln}\ (Total\ Assets)$	(Gilang & Darsono, 2019)	Rasio

3. RESULTS AND DISCUSSIONS

Descriptive Statistics

Descriptive statistical tests show financial distress (Y) which is calculated using the Altman Z-Score. Financial distress (Y) has an average value (mean) of 0.1394. The maximum financial distress value is 0.3286 obtained from the company Maha Properti Indonesia Tbk. (MPRO) in 2020. The minimum financial distress value is 0.0198 obtained from the Urban Jakarta Propertindo Tbk company. (URBN) in 2022. The standard deviation value for financial distress is 0.0738. Leverage is calculated using the Debt to Asset Ratio (DAR) formula. Based on the test results above, leverage has an average (mean) value of 0.4142. The maximum leverage value is 0.9047 obtained from the company Urban Jakarta Propertindo Tbk. (URBN) in 2022. The minimum leverage value is 0.0487 obtained from the Bekasi Asri Pemula Tbk company. (BAPA) in 2022. The standard deviation value for leverage is 0.1963. Liquidity is calculated using the Current Ratio (CR) formula. Based on the test results above, liquidity has an average value (mean) of 1.9588. The maximum liquidity value is 4.6519 obtained from the Pakuwon Jati Tbk company. (PWON) in 2022. The minimum liquidity value is 0.1007 obtained from the company Maha Properti Indonesia Tbk. (MPRO) in 2022. The standard deviation value for liquidity is 1.0371. Sales growth is calculated using the sales growth ratio formula. Based on the test results above, sales growth has an average value (mean) of 0.0290. The maximum sales growth value is 1.2720 obtained from the Gowa Makassar Tourism Development Tbk company. (GMTD) in 2022. The minimum sales growth value is -0.8126 obtained from the company Trimitra Propertindo Tbk. (LAND) in 2020. The standard deviation value for sales growth is 0.4297. Inflation is calculated using the Inflation Ratio formula. Based on the test results above, inflation has an average (mean) value of 0.0260. The maximum inflation value is 0.0421 obtained in 2022. The minimum inflation value is 0.0156 obtained in 2021. The standard deviation value for inflation is 0.0116. Gross domestic product is calculated using the ln real GDP formula. Based on the test results above, gross domestic product has an average (mean) value of 27.8010. The maximum value of gross domestic product is 27.9087 which was obtained in 2022. The minimum value of gross domestic product is 27.6893 which was obtained in 2020. The standard deviation value for gross domestic product is 0.0900. Firm size is calculated using

the formula ln total assets. Based on the test results above, firm size has an average value (mean) of 29.1947. The maximum firm size value is 31.8054 obtained from the company Bumi Serpong Damai Tbk. (BSDE) in 2022. The minimum firm size value is 25.6318 obtained from the Bekasi Asri Pemula Tbk company. (BAPA) in 2022. The standard deviation value for firm size is 1.5340.

Multicollinearity Test

The multicollinearity test conducted on the variables leverage (X1), liquidity (X2), sales growth (X3), inflation (X4), gross domestic product (X5), and firm size (X6) concerning financial distress (Y) reveals correlation values below 0.8. Therefore, it can be inferred that these six variables do not exhibit multicollinearity issues.

Normality Test

The Normality Test assesses whether the residual data within the regression model follows a normal distribution, indicating that it's drawn from a population with a normal distribution. A well-fitting regression model typically exhibits residual data that conforms to normality, suggesting it accurately represents the population. The Jarque-Bera test is employed to determine normality, with a significance value (Sig) above 0.05 indicating normal distribution. In this instance, the normality test yielded a probability value of 0.276715, greater than 0.05, thus confirming that the residual data adheres to a normal distribution.

Multiple Linear Regression Test

The results of the multiple regression test show that the regression equation in the research is as follows:

$$Y = 2.112391 - 0.014890X1 + 0.005391X2 + 0.044525X3 + 0.956705X4 - 0.083264X5 + 0.010660X6 + E$$

Table 2. Result of Multiple Linear Regression Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.112391	1.292320	1.634573	0.1051
DAR	-0.014890	0.041564	-0.358229	0.7209
CR	0.005391	0.005199	1.036916	0.3021
SG	0.044525	0.007277	6.118544	0.0000
INF	0.956705	0.332757	2.875086	0.0049
GDP	-0.083264	0.045867	-1.815322	0.0723
SIZE	0.010660	0.006931	1.538007	0.1270

F-Test

The F-Test is a statistical method employed to evaluate the collective impact of the independent variable (X) on the dependent variable (Y). With a significance value of F less than 0.05, specifically 0.000, it indicates that all independent variables (X) concurrently exert a significant influence on the dependent variable (Y) at a 95% confidence level. Thus, it can be inferred that factors such as leverage (X1), liquidity (X2), sales growth (X3), inflation (X4), gross domestic product (X5), and company size (X6) jointly contribute significantly to the occurrence of financial distress (Y).

Adjusted R-Square

The coefficient of determination test yielded an adjusted R-squared value of 0.360041. Since this value approaches zero, it suggests that leverage (X1), liquidity (X2), sales growth (X3), inflation (X4), gross domestic product (X5), and firm size (X6) collectively account for explaining financial distress (Y) at a rate of 36.0041%. The remaining 63.9959% of the variation in financial distress (Y) is attributable to factors beyond those examined in the study.

4. CONCLUSIONS AND SUGGESTIONS

According to research results, it can be concluded that leverage (X1), liquidity (X2), sales growth (X3), inflation (X4), gross domestic product (X5), and firm size (X6) together has a significants effect to financial distress (Y). Leverage (X1) partly has a negative and insignificant impact to financial distress (Y). That means the companies with large funding from third parties can increase the risk of financial distress, but wise management and having sufficient liquidity can reduce this impact. Liquidity (X2) partially has a negative and significant effect to financial distress (Y). That means the companies with large funding from third parties can't decrease the risk of financial distress, but wise management and having sufficient liquidity can reduce this impact. Sales growth (X3) partially has a positive and significant effect on financial distress (Y). This means that fast but inconsistent sales can pose a risk of financial distress. Company management needs to identify the causes of financial distress risks that may arise despite sales growth. In addition, they must evaluate the financial structure and implement risk management policies to avoid financial distress. Inflation (X4) have a positive and significant impact to financial distress (Y). That means the balanced inflation can cause the value of money to decrease, which has an impact on company liabilities. However, high or uncontrolled inflation can create uncertainty and financial problems. This can reduce people's purchasing power and increasing the risk of financial distress because it creates economic instability. Gross domestic product (X5) have a negative and significant effect to financial distress (Y). This means that a decrease in economic activity can result in a decrease in income and demand, increasing the risk of financial distress. However, companies that are efficient and can adapt to market changes may still be able for survive in this condition of financial distress. Firm size has a positive and insignificant impact to financial distress. That means the company's large size can be an advantage in attracting capital, helping to overcome potential financial distress. However, large size does not always reflect good efficiency, so some large companies may face difficulties in managing high operational costs to adapt to market changes, which can increase the risk of financial distress.

According the findings of the conducted research, the research has several limitations. The first limitation is that the sample in the research only consists of the 2020-2022 period, so the research can only focus on conditions for three years and does not cover conditions as a whole. The second limitation is that this research only uses several independent variables, namely leverage (X1), liquidity (X2), sales growth (X3), inflation (X4), gross domestic product (X5) and firm size (X6) on the dependent variable financial distress. (Y). Each of these studies only uses one proxy, and does not cover all variables that influence financial distress. The third limitation is that the research is only limited to property and real estate companies, so it cannot provide an overview of the overall condition of companies in various other sectors.

Suggestions that can be given for developing research on the same topic, firstly, are that further research can add a research period or replace it with a period from the latest year, so that differences in the results of the latest research can be seen. The second suggestion, further

research can add independent variables or other proxies so that it can be known whether there are other variables that influence financial distress so that the adjusted R2 value can have a higher presentation. The third suggestion is that further research can use companies from sectors that are different from the property and real estate sector, so that increased diverse and extensive research results can be obtained.

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