

## The effect of profitability, liquidity, leverage, and activity on financial distress at PT Waskita Karya (Persero) Tbk

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<p>Submitted [14 December 2023]                      Revised [19 January 2024]                      Accepted [21 January 2024]                      Published [30 January 2024]</p>	<p>Tujuan dari penelitian ini adalah untuk mengetahui bagaimana profitabilitas, likuiditas, leverage, dan aktivitas berpengaruh secara parsial dan simultan terhadap financial distress. Untuk mengumpulkan sampel, peneliti menggunakan purposive sampling. Penelitian ini menggunakan data sekunder dari laporan keuangan triwulan PT Waskita Karya (Persero) Tbk periode 2013-2023. Penelitian ini menggunakan pendekatan deskriptif dan verifikasi yang mencakup uji deskriptif, uji asumsi klasik, analisis regresi linier berganda, analisis koefisien determinasi, dan uji hipotesis. Hasil uji koefisien determinasi menunjukkan bahwa profitabilitas, likuiditas, leverage, dan operasional mempengaruhi 90,20% financial distress, dan 9,80% dipengaruhi oleh faktor lain yang tidak dipertimbangkan dalam penelitian. Dapat diambil kesimpulan dari uji hipotesis bahwa secara parsial Profitabilitas, Likuiditas, dan Aktivitas memiliki pengaruh positif dan signifikan terhadap Financial Distress, sedangkan Leverage memiliki pengaruh negatif dan signifikan terhadap Financial Distress sedangkan secara simultan Profitabilitas, Likuiditas, Leverage, dan Aktivitas berpengaruh terhadap Financial Distress. Peneliti merekomendasikan untuk menggunakan objek penelitian yang berbeda dan sampel yang lebih besar, tidak hanya itu untuk penelitian selanjutnya disarankan agar menggunakan alat ukur yang memproyeksikan financial distress yang berbeda seperti menggunakan metode Springate, Zmijewski, atau Grover</p> <p>Kata kunci: profitabilitas; likuiditas; leverage; aktivitas; financial distress</p>
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<p>Corresponding author:                       Arini Ayatika  <a href="mailto:ariniayatika@student.inaba.ac.id">ariniayatika@student.inaba.ac.id</a></p>	<p>The aim of this study is to find out how profitability, liquidity, leverage, and activity have a partial and simultaneous effect on financial distress. To collect samples, the researchers used purposive sampling. This research uses secondary data from the triwulan financial report of PT Waskita Karya (Persero) Tbk for the period 2013-2023. The study uses a descriptive and verification approach that includes descriptive tests, classical assumption tests, double linear regression analysis, determination coefficient analysis, and hypothesis testing. The results of the determination factor tests show that profitability, liquidity, leverage, and operational influences 90.20% of financial distress, and 9.80% are influenced by other factors not considered in the study. It can be concluded from the hypothesis test that partially Profitability, Liquidity, and Activity have a positive and significant influence on Financial Distress, while Leverage has a negative and significant effect on Financial distress while simultaneously Profitability, liquidity, Leverage, and Aktivitas have an influence upon Financial Distress. Researchers recommend using different research objects and larger samples, not just that for further research it is recommended to use measuring tools that project different financial distress such as using the Springate, Zmijewski, or Grover methods.</p> <p>Keywords: profitability; liquidity; leverage; activity; financial distress</p>

### Introduction

Globalization-era developments in the global economy are transforming quickly. The strength of established economies, in keeping global demand, a decline in the uncertainty surrounding energy prices, and a reduction in inflationary pressures across the board are all indicators that the global economy is

currently starting out to recover. This, however, are unable to ensure that a corporation will always be stable in the face of escalating competition. An advancement of economy demands corporations be able to make the most of their capital. The companies who are capable of managing their finances in the current environment will be capable of surviving. The efficiency and performance of a company can increase along with the right policies in the operation of the company. Every company cannot be separated from the need for financial resources both from the inside as well as outside the company's borders. Retained earnings are frequently used by the business for internal funding, whereas debt or shares from creditors are the source of funding from outside the business.

Basically, a company is established for a purpose, namely to gain an advantage to ensure the company's continued operation. These profits are used to meet all operational needs, pay obligations, and increase company efficiency. However, not all companies have the ability to manage a good business. In carrying out its commercial activities, every industry will not avoid financial problems. Economic conditions that are dynamic in nature can be predicted to cause difficulties for companies in maintaining finances in the midst of today's fierce competition, implementing businesses to experience difficulties in managing finances which can ultimately result in financial difficulties. A company that is in financial distress relates to a situation in which it is having trouble managing its financial responsibilities, its earnings are insufficient to pay all of its costs, and it is losing income on frequently. Decreased product quality and delays in payment of bank obligations are signs that a business is having trouble keeping control the company's finances. A situation like this must be resolved immediately so that the company does not enter more serious difficult period such as bankruptcy. Profitability, liquidity, leverage, and activity are just a few of the internal variables that might influence a company's financial distress state.

Management analyzes financial performance in order to evaluate whether it successfully adhered to and correctly implemented financial guidelines for its execution (Fahmi, 2018). During a certain period of time, financial performance describes the financial progress of the company, Good financial performance is an outcome of the company's growth and vice versa, the company will experience a decline if the company concerned is not doing well financially. Increasing the company's capacity in order to make earnings is the primary goal during difficulties with finance (Susanti & Takarini, 2022). The situation that indicates that a company's finances get into unhealthy condition before liquidation is called financial distress (Curry & Banjarnahor, 2018). Companies that are experiencing financial distress usually experience continuous deficits or have negative profitability ratio values.

Being aware of the company's overall financial situation is crucial, especially when predicting bankruptcy once the company is experiencing difficulties in managing finances. To predict bankruptcy the company must analyze the financial statements. The z-score method developed by Altman approach is some way to forecast bankruptcy. The Z-Score approach of Altman is a bankruptcy prediction method developed by Edward I Altman, this method is used to determine whether the company is in financial difficulty or not (Sutrisno & Zuhri, 2018).

Table 1. Financial Distress Criteria

No	Z-score Value	Description
1	$Z > 2,60$	That company is classified as being in a safe zone
2	$1,10 < Z < 2,60$	The company in question is classified as being in the gray zone
3	$Z < 1,10$	The company entered the bankrupty category

Source: Azizah & Yunita (2022)

If the calculation outcomes of the Z-Score method are low, there will be a greater possibility that the business would face financial difficulties. These conditions need to be addressed immediately to avoid more complex financial problems that can eventually lead to bankruptcy. Financial ratios can be used by companies to analyze financial statements in predicting financial distress.

Profitability is the capacity of an enterprise to produce earnings within a specific time frame. If a company can generate high profits, then it is thought that the company's standing has successfully operated. High profits protect the company from financial problems (Pratiwi & Sudiyatno, 2022). An assessment of the effectiveness of management in running business operations is given by the profitability ratio. The greater on the value of the profitability ratio, the more capable the business is to earn a profit. The ability of a business to fulfill its immediate obligations is known as liquidity. The ability of the corporation to pay off short-term debt and carry out its obligations is indicated by its liquidity ratio. One way to determine a measure of liquidity of an organization or company is to look at the relationship between current assets and

current liabilities (Hery, 2018). An indicator of how much debt is used to finance a company's assets is the solvency ratio, sometimes referred to as leverage. The capacity of a business to employ debt to fund operations is known as leverage (Hery, 2018), a company with high leverage indicates that it has a lot of debt, this increases the difficulty of the business obtaining additional financing. because it is likely that the company cannot cover its debts with the assets it has. Activity is a measurement used to assess how effective a corporation is in using its assets, including how efficiently the business uses its resources (Kasmir, 2019), The probability of bankruptcy decreases with more activity. If the company's assets aren't being utilized to their full potential, the income that will be obtained will not be maximized and will result in financial difficulties.

Financial distress is significantly impacted by profitability, according to Susilowati et al. (2019), Maulana et al. (2021), Dance & Made (2019), and Lumbantobing (2020). The ratio of profitability measured by ROA negatively impact the condition of financial distresses and the earnings ratio significantly positively affects the possibility of financial distress. Septiani et al. (2021) claim that it has an effect on the profitability of financial distress. Financial distress is influenced by profitability, as stated by Sudaryo et al. (2019), and Iskandar & Prihanto (2019) claim that financial distress is influenced by the return on assets. On the other hand, the claim runs counter to a study by Azizah & Yunita (2022) that found Profitability does not significantly impact on Financial Distress. Return On Asset has no effect with a negative value on Financial Distress according to Dahruji & Muslich (2022), Susanti & Takarini (2022) stated that profitability cannot affect the forecast of financial distress, Profitability does not significantly affect financial distress, according to Pratiwi & Sudiyatno (2022) and Antoniwati (2022) are among the other statements made by these authors.

Financial distress is impacted by liquidity, according to Yuriani et al. (2020) are among the earlier studies that address this link and are pertinent to the current investigation. According to Susanti & Takarini (2022), Financial distress is significantly influenced by liquidity, according to Azizah & Yunita (2022), liquidity has a significant adverse effect on financial distress. According to Dance & Made (2019), the status of corporate financial distress is negatively affected by the liquidity ratio. According to Lumbantobing (2020), liquidity ratios have a substantial negative impact on the possibility of financial distress, but Amanda & Tasman (2019) find that liquidity has a negligible negative impact on financial distress. This statement, however, is at inconsistent with research by Pratiwi & Sudiyatno (2022), Susilowati et al. (2019), Antoniwati (2022), and Jannah et al. (2021) that conclude that liquidity as measured by the current ratio has absolutely no impact on financial distress.

Jannah et al. (2021) found that Leverage proxied by the debt to asset ratio affects the occurrence of Financial Distress, which is consistent with other study on the association between leverage and financial distress. Leverage reflected by DAR has a considerable impact on financial distress, according to Antoniwati (2022) and Amanda & Tasman (2019), who both find that leverage has a favorable and significant impact on financial distress. This claim, however, is at contradiction with research by Septiani et al. (2021), Faldiansyah et al. (2020), and Iskandar & Prihanto (2019), which conclude that leverage has no discernible impact on financial distress and that debt ratio has no bearing on financial distress.

This research generates upon previous studies on the correlation between Activity and Financial Distress. Specifically, Yuriani et al. (2020), Azizah & Yunita (2022), have identified a positive connection between Activity and Financial Distress, while Susilowati et al. (2019) have found a significant negative relationship. This statement, however, is in contradiction to the research by Susanti & Takarini (2022), which claims that activity cannot affect financial distress forecasts Maulana et al. (2021), Sudaryo et al. (2019), Lumbantobing (2020), and Dance & Made (2019), which indicates that operating cash flow ratios have no bearing on the state of the company's financial distress as well as the assertion that leverage has no bearing on financial distress.

Differences in output resulting from some of these studies are due to differences in measurement used against each variable. So in this research aim to be able to provide new results of several indicators of financial ratio namely Profitability, Liquidity, Leverage, and Activity. Another thing that distinguishes this study from previous studies is data analysis techniques that use logistic regression analysis, panel regression data analysis, and ordinal regression analyses, but in this study use double linear regression analytics. In previous studies, the method of financial distress analysis used the x-score model (Zmijewski), but in this study used the modified altman z-score model for non-manufacturing companies.

Research for this study was conducted at PT Waskita Karya (Persero) Tbk. To obtain information, researchers downloaded quarterly financial reports from PT Waskita Karya (Persero) Tbk's official website, investor.waskita.co.id. According to the data gathered of the third quarter of 2023, as reported by researchers, the company's z-score graph fluctuates and tends to decrease with a z-score value  $< 1.1$  (-0.31

< 1.1). This condition shows that PT Waskita Karya (Persero) Tbk is experiencing instability in maintaining financial conditions. This is likely due to the company's inability to make a profit. To ascertain PT Waskita Karya (Persero) Tbk's financial situation, the financial data of PT Waskita Karya (Persero) Tbk is displayed in the graph below from 2013 to 2023.

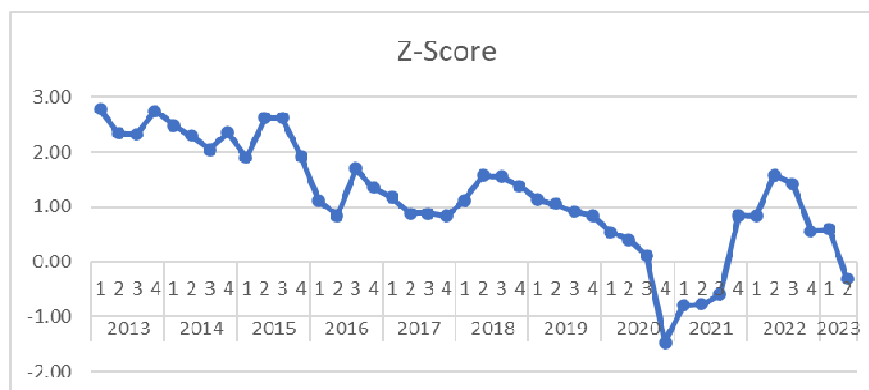


Figure 1. Financial Distress Chart Projected by Z-Score

Based on the research gap and the phenomena that have been found regarding profitability, liquidity, leverage, and activity that are thought to affect financial decline, additional research is needed to find out how profitability, liquidity, leverage, and activity affect financial distress.

**Research methods**

Researchers conducted research at PT Waskita Karya (Persero) Tbk. Secondary information or data in the format of quarterly financial reports is the kind of information collected for the period 2013-2023 which was conducted from August to December 2023. Secondary data is data that is collected indirectly, this data is obtained from various sources that support researchers in data collection (Sugiyono, 2019).

The following are the methods used to acquire data for this study:

1. Literature review  
In this technique, the researcher conducts a literature study by reviewing and examining the theory through references such as books, literature, and scientific papers that have to do with the variables to be studied.
2. Documentation  
In this approach, documentation studies are carried out by collecting all information regarding the variables that will be examined, especially from the quarterly financial reports of PT Waskita Karya (Persero) Tbk from 2013-2023 through the company's official website.

Purposive sampling, the sampling method applied to this study, select how many samples to collect based on the researcher's intended criteria (Sugiyono, 2019). The following criteria were applied by the researcher to select the sample:

1. Complete quarterly financial reports for the period 2013-2023.
2. Quarterly financial reports that contain research variables for the period 2013-2023.
3. Quarterly financial reports that show companies falling into the bankruptcy category in the 2013-2023 period.

Based on criteria above, the researcher determined the sample size for this research as many as 42 samples, namely based on the quarterly financial reports of PT Waskita Karya (Persero) Tbk during the 2013-2023 period which contained research variables. Profitability (X1), Liquidity (X2), Leverage (X3), Activity (X4), and Financial Distress (Y) are the variables that were employed in this research.

Table 2. Operational Variables

Variable	Indicator	Scale
Profitability	$ROA = \frac{\text{Earning After Tax}}{\text{Total Asset}} \times 100\%$	Ratio
Liquidity	$CR = \frac{\text{Current Assets}}{\text{Current Liabilities}}$	Ratio
Leverage	$DAR = \frac{\text{Total Debt}}{\text{Total Assets}}$	Ratio
Activity	$TATO = \frac{\text{Sales}}{\text{Total Assets}}$	Ratio
Financial Distress	$Z = 6,56X_1 + 3,26X_2 + 6,72X_3 + 1,05X_4$	Ratio

Source: processed data, 2023

The data testing used in this study includes descriptive analysis, classical assumption tests, multiple linear regression test, coefficient of determination analysis, and hypothesis testing used is t Test and F Test. The research methods used by the researchers in this research are using quantitative methods. The data is then processed using multiple linear regression analysis with the following equations:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

where: Y= Financial Distress,  $\alpha$ = Constant numbers,  $\beta$ = Regression coefficient, X1= Profitability, X2= Likuidity, X3= Leverage, X4= Activity,  $\epsilon$ = Residual error

### Results and discussion

Table 3. Results of Descriptive Analysis Test

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Profitability	42	-.070	.042	.00710	.020112
Liquidity	42	.675	2.125	1.26036	.315190
Leverage	42	.618	.875	.76883	.060780
Activity	42	.025	1.102	.25442	.257881
Financial Distress	42	-1.47	2.78	1.1843	1.02064
Valid N (listwise)	42				

The descriptive analysis results show that Profitability as measured by Return on Assets produces the lowest value = 0.070, the largest value = 0.042, the average value = 0.00710, and the standard deviation = 0.020112. Liquidity as measured by Current Ratio produces the lowest value = 0.675, the largest value = 2.125, the average value = 1.26036, and the standard deviation = 0.315190. Leverage as measured by Debt to Asset Ratio produces a minimum value = 0.618, the largest value = 0.875, average value = 0.76883, and standard deviation = 0.060780. Activity as measured by Total Asset Turn Over (TATO) produces the lowest value = 0.025, the largest value = 1.102, the average value = 1.1843, and the standard deviation = 0.257881. Financial Distress as measured by Z-score produces the lowest value = -1.47, the largest value = 2.78, the average value = 1.1843, and the standard deviation = 1.0206.

### Verificative Analysis

1. Classic Assumption Test
  - a. Normality Test

The purpose of the normality test is to determine whether the regression models for the independent and dependent variables have a normal distribution (Ghozali, 2018).

Table 4. Normality Test Results  
**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		42
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	.31984969
Most Extreme Differences	Absolute	.114
	Positive	.114
	Negative	-.062
Test Statistic		.114
Asymp. Sig. (2-tailed)		.193 <sup>c</sup>

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.

The distribution of the data is distributed with normally, according to the Kolmogorov-Smirnov test results. A Test Statistic of 0.114 and an Asymp.Sig (2-tailed) value of less than 0.05 (0.193>0.05) were obtained from the test results.

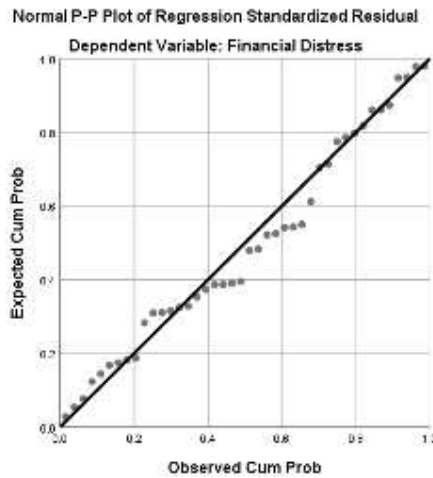


Figure 2. Normality Test Output

b. Multicollinearity Test

The aim of multivariate tests is to define if correlations between independent variables have been identified by a model of regression. In an ideal regression model, there should be no correlation between the independent variables (Ghozali, 2018).

Table 5. Results of the Multicollinearity Test

		Coefficients <sup>a</sup>				Collinearity Statistics		
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	4.482	.837		5.356	.000		
	Profitability	8.613	3.306	.170	2.605	.013	.625	1.599
	Liquidity	1.745	.170	.539	10.236	.000	.958	1.044
	Leverage	-7.552	.992	-.450	-7.610	.000	.760	1.316
	Activity	.973	.237	.246	4.100	.000	.738	1.356

a. Dependent Variable: Financial Distress

From the above table, it can be concluded that there is no multicollinearity problem where:

- 1) Profitability variable (X1), has a tolerance value  $> 0,10$  ( $0,626 > 0,10$ ) and the variance impact factor (VIF) value  $< 10$  ( $1,599 < 10$ ).
- 2) Liquidity variable (X2), has a tolerance value  $> 0,10$  ( $0,958 > 0,10$ ) and the variance impact factor (VIF) value  $< 10$  ( $1,044 < 10$ ).
- 3) Leverage variable (X3), has a tolerance value  $> 0,10$  ( $0,760 > 0,10$ ) and the variance impact factor (VIF) value  $< 10$  ( $1,316 < 10$ ).
- 4) Activity variable (X4) has a tolerance value  $> 0,10$  ( $0,738 > 0,10$ ) and the variance impact factor (VIF) value  $< 10$  ( $1,356 < 10$ ).

c. Heteroscedasticity Test

The heteroscedasticity test seeks to determine whether the variance of the residuals varies unequally between observations (Ghozali, 2018).

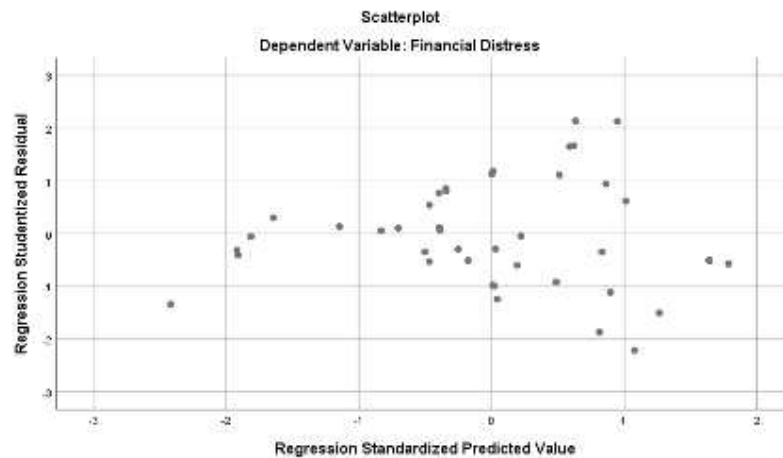


Figure 3. Results of the Heteroscedasticity Test

Looking at the graph above, we can conclude that the pattern points are randomly distributed on the y-axis above and below the number 0, so the regression model contains no heteroscedasticity, which means the regression model is eligible for the further analysis.

d. Autocorrelation Test

The purpose of autocorrelation test is to define if there is a correlation between the disturbance error in period t and the disturbance error in period t-1 (before) in a linear regression model (Ghozali, 2018).

Table 6. The Autocorrelation Test's Outcomes

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.950 <sup>a</sup>	.902	.891	.33670	.743

a. Predictors: (Constant), Activity, Liquidity, Leverage, Profitability

b. Dependent Variable: Financial Distress

The durbin watson value for model 1 regression was 0.743 based on the autocorrelation test data using Durbin Watson as seen in the summary model. If  $n = 42$  and  $K = 4$ , then  $dU = 1,7202$  and  $4-dU = 2,2798$  are obtained. There is no autocorrelation when  $dU < d < 4 - dU$  ( $1,7202 < 0,743 < 2,2798$ ), which leads to the research conclusion.

e. Multiple Linear Regression Test

Double linear regression analysis is the analytical model that is being utilized to evaluate the hypothesis. Financial distress is examined in relation to profitability, liquidity, debt, and activity using double linear regression analytics.

Tabel 7. Test Outcome of Multiple Linear Regression  
**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
1 (Constant)	4.482	.837		5.356	.000
Profitability	8.613	3.306	.170	2.605	.013
Liquidity	1.745	.170	.539	10.236	.000
Leverage	-7.552	.992	-.450	-7.610	.000
Activity	.973	.237	.246	4.100	.000

a. Dependent Variable: Financial Distress

The value of the constant and coefficient of regression were determined using the table above, and the resulting regression model equation is as follows:

$$Y = 4,482 + 8,613X_1 + 1,745X_2 - 7,552X_3 + 0,973X_4$$

The above multiple regression equation can be explained as follows:

1. The constant value (a) is 4,482. Z-Score for Financial Distress is 4,482 if all of the variable's Profitability, Liquidity, Leverage, and Activity are zero (0) or constant.
2. With a profitability variable regression coefficient of 8,613 and a positive value, the Financial Distress variable (Z-Score) will enhance in value by 8,613 for every unit of profitability and other constant variables added. In contrast, the financial distress variable will drop by 8,613 for every unit fall in a lucrative variable and another constant variable.
3. The financial distress variable (Z-Score) will enhance by 1,745 for every unit of liquidity added, according to the liquidity variable regression coefficient, which has a positive value of 1,745. In contrast, the financial distresses variable will decrease by 1,745 for every unit decrease in liquidities and other constants.
4. The leverage variable's regression coefficient is -7,552, and a negative value indicates that the financial distress variable (Z-Score) will rise by -7,552 for every unit drop in the leverage variable while the other variables remain constant. In comparison, the Financial Distress variable drops by -7,552 with each addition of one unity of the Leverage variables and other constant variables.
5. The activity variable's regression coefficient is 0.973. A positive value represents that the Financial Distress variable (Z-Score) will grow by 0.973 for each unit added to the Active variable and other constant variables. In contrast, the Financial Distress variable will fall by 0.973 for every unit of activity and other constant variable that is decreased.

f. Coefficient of Determination Analysis (R2)

The determination coefficient is a tool used to quantify or ascertain the extent to which a bound variable's change is explained or dictated by its independent variable (Sugiyono, 2019). Determination coefficient analysis is employed in this research to measure the variables Profitability, Liquidity, Leverage, and Activity's capacity to withstand financial distress.

Tabel 8. Coefficient of Determination Analysis (R2) Result  
**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.950 <sup>a</sup>	.902	.891	.336695

a. Predictors: (Constant), Activity, Liquidity, Leverage, Profitability



The aforementioned table indicates that the R Square value is 0.902. The determination coefficient value displayed by the R Square value. Therefore, it may be said that 0.902 (90.20%) is the KD value. This indicates that 90.20% of Financial Distress is driven by characteristics such as profitability, liquidity, leverage, and activity, with the other half 9.80% being dependent on elements not covered in the study.

**Hypothesis Testing**

1. Parsial Test (t Test)

The purpose of the partial test is to figuring out which the independent variable (X) influences the dependent variable (Y). For this particular significance test, t table = 2.02619 with  $df = n - k - 1 = 42 - 4 - 1 = 37$ .

Table 9. Partial Test Results  
**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
1 (Constant)	4.482	.837		5.356	.000
Profitability	8.613	3.306	.170	2.605	.013
Liquidity	1.745	.170	.539	10.236	.000
Leverage	-7.552	.992	-.450	-7.610	.000
Activity	.973	.237	.246	4.100	.000

a. Dependent Variable: Financial Distress

From the data presented, it would be concluded that:

- a. The profitability variable's t count value = 2,605, t table value = 2,02619, with t count > t table (2,605 > 2,02619) with a significant < 0,05 (0,013 < 0,05). H0 is rejected and H1 is approved as a result of the t counting value of the t table. so, profitability has a somewhat positive and large impact on financial distress.
- b. The liquidity variable's t count value = 10,236, t table value = 2,02619, where the t count is greater than the t table (10,236 > 2,02619) with a significant < 0,05 (0,013 < 0,05). H0 to be rejected and H1 to be accepted. as a result, there is a considerable and partially positive affect on liquidity on financial distress.
- c. The leverage variable's t count value = -7,610, t table = -2,02619, where -t count < -t table (-7,610 < -2,02619) with a significant < 0,05 (0,013 < 0,05). H0 is rejected and H1 is approved, as a result, leverage has a considerable and partially negative impact on financial distress.
- d. The activity variable's t count = 4,100, t table = 2,02619, where the t counts > t table (4,100>2,02619) with a significant < 0.05 (0,013 < 0,05). H0 is rejected and H1 is accepted. as a result, activity has a big and beneficial impact on financial distress to some extent.

2. Simultaneous Test (F Test)

Tests were run simultaneously to examine the effects of activity, profitability, liquidity, and leverage on financial distress.

Table 10. Simultaneous Test Results  
**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38.515	4	9.629	84.937	.000 <sup>b</sup>
	Residual	4.194	37	.113		
	Total	42.710	41			

a. Dependent Variable: Financial Distress

b. Predictors: (Constant), Activity, Liquidity, Leverage, Profitability

Based on the F-count value of 84,937 obtained from the above table and a significant 0,000 less than 0.05 (0,000<0,05) value, it can be concluded that H1 is accepted and H0 is rejected, indicating that profitability, liquidity, leverage, and activity all significantly influence financial distress on PT Waskita Karya (Persero) Tbk from 2013 to 2023.

### **The effect of Profitability on Financial Distress**

According to the first theory, financial difficulty is significantly influenced by profitability. T count  $> t$  table, or equal to  $2,605 > 2,02619$ , was produced based on the test findings of the hypothesis, and a significant value of  $0,013 < 0,05$  was achieved. The profitability indicator in this study, which is determined by return on asset (ROA), predicts financial distress significantly and favorably. The study's findings are consistent with those of studies by (Susilowati et al., 2019), Maulana et al., (2021), (Dance & Made (2019), Lumbantobing (2020), Septiani et al. (2021), Sudaryo et al. (2019) and Iskandar & Prihanto (2019) which found a substantial relationship between profitability and financial distress. Nevertheless, this study differs from the research done by Dahruji & Muslich (2022), Azizah & Yunita (2022), Susanti & Takarini (2022), Pratiwi & Sudyatno (2022), Antoniwati (2022) which found no significant relationship between profitability and financial distress.

### **The effect of Liquidity on Financial Distress**

According to the second theory, financial distress is significantly influenced by liquidity. T count  $> t$  table, or equal to  $10,236 > 2,02619$ , was produced based on the test findings of the hypothesis, and a significant value of  $0,000 < 0,05$  was obtained. In this study, financial hardship is positively predicted by liquidity as shown by the current ratio (CR), yielding substantial results. The study's findings are consistent with research by Yuriani et al. (2020), Susanti & Takarini (2022), Azizah & Yunita (2022), and Dance & Made (2019), Lumbantobing (2020), Amanda & Tasman (2019), Septiani et al. (2021), Sudaryo et al. (2019), Iskandar & Prihanto (2019) which found a substantial relationship between liquidity and financial distress. However, this study contradicts research by Antoniwati (2022), Susilowati et al. (2019), Pratiwi & Sudyatno (2022) Jannah et al. (2021) which found no relationship between liquidity and financial distress.

### **The effect of Leverage on Financial Distress**

According to the third theory, financial distress is significantly influenced by leverage. The hypothesis was tested, and the findings showed that  $-t$  count  $< -t$  table, or  $-7,610 < -2,02619$ , and a significant value of  $0,000 < 0,05$ , were obtained. According to this study, financial distress is significantly predicted by leverage as shown by the debt to asset ratio (DAR), with a negative direction. The findings of this investigation are consistent with those of Jannah et al. (2021), Antoniwati (2022), and Amanda & Tasman (2019) studies, which indicated that leverage significantly affects financial hardship. This study, however, contradicts the findings of Faldiansyah et al. (2020), Septiani et al. (2021), and Iskandar & Prihanto (2019), which found that leverage had no effect on financial distress.

### **The effect of Activity on Financial Distress**

According to the fourth theory, financial distress is significantly influenced by activities. Obtain t count  $> t$  table, or equal to  $4,100 > 2,02619$ , and a significant value of  $0,000 < 0,05$  based on the hypothesis' test results. In this study, financial distress was positively predicted by activity as assessed by total asset turnover (TATO), with substantial results. The study's findings are consistent with research by Yuriani et al. (2020), Azizah & Yunita (2022), and Susilowati et al. (2019) that found a relationship between activity and financial distress. Nevertheless, research conducted by Susanti & Takarini (2022), Maulana et al. (2021), Dance & Made (2019), Sudaryo et al. (2019), and Lumbantobing (2020) contradicts this finding, stating that activity has no effect on financial distress.

## **Conclusion**

The main purpose of this research is to determine how PT Waskita Karya (Persero) Tbk's financial distress is affected by activity, profitability, liquidity, and leverage between 2013 and 2023. The researchers have concluded that there is a positive and significant relationship between profitability and financial distress. Specifically, higher profitability is associated with higher values of financial distress, which in turn reduces the likelihood of financial distress for the company. These findings are supported by the research described above. Financial distress is significantly impacted negatively by leverage; the higher the leverage ratio, the lower the financial distress score, indicating a high likelihood of financial trouble for the company. Financial distress is positively and significantly impacted by activity. Profitability, liquidity, leverage, and activity all have a big impact on PT Waskita Karya (Persero) Tbk's financial distress at the same time.

The study has been carried out in compliance with scientific protocols, but it still has certain limitations. For example, it only looks at the influences of profitability, liquidity, leverage, and activity; therefore, it needs to be expanded to look at other factors that may affect financial distress. Additionally, the research object is limited to a single company, with a total sample of 42 forms of Triwulan financial reports. In order to gain more insight into the financial distress that occurs in each industry, it is advised that researchers use larger samples and diverse research objects in their future investigations. Furthermore, it is advised that measuring instruments that predict various financial distresses, such as the Grover, Zmijewski, or Springate approaches, be used in future studies.

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