

ANALYZING THE EFFECT OF FINANCIAL RATIO ON FINANCIAL DISTRESS USING THE LOGISTIC REGRESSION METHOD IN MANUFACTURING COMPANIES

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Abstract— Financial distress is a company that has difficulty paying its obligations, so it cannot carry out business as usual and may experience bankruptcy. This study aims to analyse the factors that influence the possibility of financial distress by considering financial ratios as indicators to predict the occurrence of financial distress in manufacturing companies in Indonesia. Four independent variables which are financial ratios include Current Ratio, Debt Ratio, Return on Assets (ROA), and Working Capital Turnover. In comparison, the dependent variable is financial distress. This study uses the Altman Z-score model and the data analysis method used is logistic regression analysis. Where logistic regression is one of the statistical analysis methods used to represent the relationship between independent variables and dependent variables containing nominal and ordinal data. The population used in this study includes manufacturing companies listed on the Indonesia Stock Exchange (IDX) in the 2015-2019 period. The sample was determined by the purposing sampling technique. The results showed that not all financial ratios can have a significant effect on the occurrence of Financial Distress. In the results that have been analysed, it is found that Current Ratio does not have a significant positive effect on Financial Distress, and the last financial ratio Working Capital Turnover has a significant negative effect on Financial Distress.

Keywords- Financial Distress, Current Ratio, Debt Ratio, Return on Asset (ROA), Working Capital Turnover

I. INTRODUCTION

Investments are vital for business growth and market expansion. Companies must have clear financial management and contingency strategies to avoid bankruptcy. Financial distress, leading to bankruptcy, can result from internal issues like poor management or external factors like natural disasters. Regular analysis of financial statements helps predict and prevent financial distress.

A corporation is a business entity aimed at profit, as defined by Indonesian Law No. 8 of 1997. Companies generally aim to maximize profit, benefit owners and shareholders, and increase share value. The Indonesia Stock Exchange (IDX) saw 181 manufacturing companies listed from 2015 to 2019, which faced competition due to the ASEAN Economic Community (AEC). Companies must maintain profits to anticipate global developments and avoid financial distress [1].

Businesses need to be able to anticipate financial difficulties to stay solvent and avoid going bankrupt. Financial ratios are frequently employed as important indicators to evaluate financial health, including the Current Ratio, Debt Ratio, Return on Assets (ROA), and Working Capital Turnover (WCTO) [15].

Each ratio sheds light on distinct facets of financial performance, including operational efficiency, profitability, leverage, and liquidity. According to earlier research, these indicators were selected for their theoretical and practical significance in spotting early warning indications of financial trouble [2].

Furthermore, the predictive power of financial ratios was established by Beaver, and Ohlson in their seminal studies, but more recent studies have shown improvements in using financial models and machine learning techniques to improve distress prediction [12].



Despite the substantial study on financial hardship, there are still unanswered questions about how particular financial ratios behave in various businesses and economic situations [13]. Most earlier research, including that done by Altman and Ohlson, concentrated on developed economies or more general industrial categories. The focus of this study is limited to manufacturing firms operating in Indonesia, a developing nation, between 2015 and 2019 [14].

The study fills a gap in localized financial crisis prediction models which are crucial for emerging markets by concentrating on this particular environment. Furthermore, whereas other studies have looked at the effects of financial ratios separately, this study attempts to offer a thorough analysis by using logistic regression to evaluate multiple ratios at once. This method broadens the use of prediction models in a dynamic and cutthroat industry environment while also validating current hypotheses.

II. LITERATURE REVIEW

A. Introduction of Financial Distress

A corporation is said to be in financial trouble if it is unable to pay its debts, which could result in bankruptcy. It may be the consequence of external forces like economic downturns or internal issues like ineffective management [3]. According to Vishny (1992), a corporation experiences financial difficulty when it is unable to pay its debts, which frequently leads to reorganization or acquisition [4]. Negative cash flow, dividend reductions, and debt default are all signs of financial crisis [5].

B. Introduction of Financial Ratio

A company's financial performance and health can be assessed over time using financial ratios. They make research and decision-making easier by condensing financial data into essential measures. The following ratios are used in this study:

• Current Ratio

Evaluates the liquidity and capacity of a business to meet short-term commitments. It is computed by dividing current liabilities by current assets. Because it may be a sign of inefficiencies, a high current ratio may not always avert financial disaster [7].

The current ratio can be calculated using the formula [6]:

$$Current Ratio = \frac{Current Assets}{Current Liabilities}$$
(1)

• Debt Ratio

Shows the percentage of a company's assets that are financed by debt. It is computed by dividing total debt by total assets. Greater financial risk is indicated by a high debt ratio [1]. The debt ratio can be calculated using the formula:

$$Debt Ratio = \frac{Total Debt}{Total Asset}$$
(2)

• Return on Asset (ROA)

Shows how well a business makes use of its resources to turn a profit. It is computed by dividing net income by total assets. Better asset efficiency is suggested by a higher ROA [1]. Return on assets can be calculated using the formula:

$$Return on Asset = \frac{Net \ Profit}{Total \ Asset}$$
(3)

• Working Capital Turnover (WCTO)

Evaluates how well a business uses its working capital to produce sales. It is computed by dividing average working capital by revenues. A low WCTO raises the possibility of financial difficulty by suggesting operational inefficiencies [8].

The formula can be used to determine the Working Capital Turnover:

$$WCTO = \frac{Net \, Sales}{Current \, Assets - Current \, Liabilities} \tag{4}$$

C. Altman Z-Score

Z-Score is a number derived from a standardized calculation that represents the likelihood of business bankruptcy. The research of Edward I. Altman's research looked for patterns in financial statistics that are often



utilized to predict the probability of a business filing for bankruptcy. The Altman Z-Score is determined using the formula below, per research by Altman is [3]:

$$Z_{-score} = 1,2\left(\frac{WC}{TA}\right) + 1,4\left(\frac{RE}{TA}\right) + 3,3\left(\frac{EBIT}{TA}\right) + 0,6\left(\frac{EQ}{TL}\right) + 1,0\left(\frac{S}{TA}\right)$$
(17)

Where:

:	
WC	: Working Capital
TA	: Total Assets
RE	: Retained Earning
EBIT	: Earning Before Interest & Tax
EQ	: Equity
TL	:Total Liabilities
S	:Sales

Developed by Altman (1968), the Z-Score model predicts bankruptcy using five financial ratios. Companies are classified into three categories:

- 1. **High risk** (≤ 1.81): Likely to face financial distress.
- 2. Grey area (1.81–2.99): Uncertain financial condition.
- 3. Safe zone (≥ 2.99): Financially stable.

The company taken as the sample was a company that had a Z-score ≤ 1.81 for 5 years that is from 2015-2019 and as a control also selected a company with $Z - score \geq 2,99$ in 2015-2019

D. Logistic Regression Method

Logistic regression analysis is one type of mathematical modeling that looks at the relationship between one or more independent variables and a binary categorical dependent variable. Financial distress is the anticipated binary categorical variable. Companies that show severe financial problems, such as defaulting on debt or having negative net income, are classified as "distressed" (1), while those that stay financially stable are classified as "not distressed" (0) [8].

The logistic regression method equation can be written using the formula [10]:

$$logit(P) = \ln\left(\frac{P(Y=1)}{1 - P(Y=1)}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 \dots + \beta_p X_p$$
(18)

Where:

Р	: Probability of success
Ln	: Natural logarithm function
logit(P)	: The logit of p which is defined as $\ln\left(\frac{P(Y=1)}{1-P(Y=1)}\right)$
β_0	: Intercept of model
$\beta_1, \beta_2, \dots, \beta_p$: Regression coefficient parameters
$X_1, X_2,, X_p$: Independent variables
14 . 1.4 . 1.4 . 1.4	6 1 1 1 1 1 1 1 1 1 1

The result obtained from the regression formula above can be returned in the form of probability with the equation:

$$P(Y=1) = \frac{1}{1 + e^{-(\beta_0 + \beta_1 X_1 + \dots + \beta_p X_p)}}$$
(19)

Logistic regression is used to examine the relationship between independent variables (financial ratios) and a binary dependent variable (financial distress). This method is particularly suited for the study because it models binary outcomes effectively, such as distinguishing between companies experiencing financial distress and those that are not. Unlike linear regression, which assumes a continuous dependent variable, logistic regression predicts the probability of an event occurring, making it more appropriate for classification problems like financial distress prediction. Additionally, logistic regression allows for the interpretation of coefficients as the influence of predictor variables on the log odds of the outcome, providing clear insights into the role of financial ratios in predicting distress. This methodological choice ensures robustness and interpretability, particularly in datasets with categorical or skewed distributions.



E. Conceptual Framework

Based on this, a theoretical framework can be presented to describe the relationship of the independent variables, namely current ratio, debt ratio, return on assets, and sales growth to the dependent variable, namely financial distress as follows:



Figure 2. Conceptual Framework

III. ANALYSIS AND RESULTS

Manufacturing businesses frequently need to make large capital investments in inventory, machinery, and equipment, which raises debt levels and necessitates working capital for daily operations. Due to the distinct operating features of the manufacturing sector, financial ratios may have a different impact on financial distress in manufacturing enterprises than in other sectors. Long production cycles and dependence on variable raw material prices can also affect profitability and liquidity indicators like ROA and the current ratio. Manufacturing firms may experience financial crises in a different way than service-oriented or technology-driven businesses due to these features, which make them more susceptible to operational inefficiencies and shifts in the economy.

A. Descriptive Statistics

The process of gathering, condensing, and presenting data to effectively and broadly characterize data is known as descriptive statistics. Data from manufacturing firms listed between 2015 and 2019 on the Indonesia Stock Exchange (IDX) are used in this study. Purposive sampling was used to choose the sample to guarantee that it was pertinent to the study's goals. The current ratio, debt ratio, return on assets (ROA), and working capital turnover (WCTO) indicators were obtained from publicly available financial statements and corporate reports. A thorough grasp of the sample distribution is ensured by descriptive statistics, which provide a summary of the dataset's salient features, including metrics like the minimum, maximum, mean, and standard deviation for each financial ratio.

The following table provides an overview of the data that was used in the study:

STATISTICS DESCRIPTIVE					
	Ν	Min	Max	Mean	Standard Dev
Current Ratio	155	0.003523	11.704516	2.954781	2.403827
Debt Ratio	155	0.2607	1.7175	0.6609	0.2249635
Return on Assets	155	0.2238	2.9475	0.3882	0.2606192
Working Capital	155	0.2303	8.8715	2.0503	1.300864
Turnover					

TABLE 1

Source: R studio version 4.3.2

 Table 1 presents an overview of the independent variables' descriptive statistics, which can be described as follows:

 1.
 Current Ratio

The current ratio can be as low as 0.003523 or as high as 11.704516. The descriptive statistics table above displays the mean current ratio value of 2.954781 and the standard deviation value of 2.403827. Since the mean value is higher than the standard deviation number (2.954781 > 2.403827), it can be said that



the mean value accurately represents the whole data set and that there are no gaps in the current ratio data distribution.

2. Debt Ratio

The debt ratio can range from 0.2607 at the minimum to 1.7175 at the greatest. The descriptive statistics table displays a mean debt ratio of 0.6609 and a standard deviation value of 0.2249635. Since the mean value is higher than the standard deviation value (0.6609 > 0.2249635), the debt ratio data distribution is considered gap-free, and the mean value can be interpreted as a representation of the whole data set.

3. Return on Assets

There is a minimum value of 0.2238 and a maximum value of 2.9475 for asset returns. The standard deviation is 0.2606192 and the average return of the asset is 0.3882 in the descriptive statistical table. Since the average value exceeds the standard value of the deviation (0.3882 > 0.266192), then the distribution of the data return on assets is considered free of gaps, and the mean value can be interpreted as a representation of the entire data set.

4. Working Capital Turnover

The working capital turnover ranges from 8.8715 to 0.2303 at the lowest and largest values. The mean working capital turnover value of 2.0503 and the standard deviation value of 1.300864 are displayed in the descriptive statistics table. Given that the mean value is higher than the standard deviation value 2.0503 > 1.300864, it can be said that there are no gaps in the working capital turnover data distribution and that the mean value accurately captures the entirety of the data.

B. Normalization Test

A statistical technique called the normalcy test is utilized to determine whether the variables or data acquired are distributed properly or abnormally [11]. The Shapiro-Wilk test was the normalcy test employed in this study.

NORMALIZATION TEST RESULT			
Shapiro Wilk Normality	W	P-value	
Test			
X1	0.99133	0.4665	
(Current Ratio)			
X2	0.99482	0.8609	
(Debt Ratio)			
X3	0.98371	0.06479	
(ROA)			
X4	0.98659	0.1414	
(WCTO)			

TABLE 2
NORMALIZATION TEST RESULT

Source: R studio version 4.3.2

It can be seen from Table 2 using the Shapiro-Wilk test that the probability value generated by the data is greater than alpha, which is 0.05. Because the p-value is greater than alpha (0.05), it can be concluded that the research's data is regularly distributed.

C. Multicollinearity Test

The multicollinearity test is used to determine whether the regression model found a correlation between the independent variables. The variance (VIF) and margin of error value provide information about the multicollinearity test [11].



TABLE 3 Multicollinearity test result

Variable	Tolerance	VIF
X1	0.7814829	1.279619
(Current Ratio)		
X2	0.7297274	1.370375
(Debt Ratio)		
X3	0.9510439	1.051476
(ROA)		
X4	0.9587736	1.042999
(WCTO)		

Source: R studio version 4.3.2

From Table 3 it can be said that multicollinearity does not occur in the data, because from the results obtained the VIF < 10 and tolerance > 0.01.

D. Autocorrelation Test

To determine whether the regression model predicts a link between one period and another, the autocorrelation test is used, and if the regression model correlates, it is called autocorrelation [11]. The Durbin-Watson test is used in the autocorrelation test.

AUTOCORRELATION TEST RESULT			
Darbin-Watson	DW test	P-value	
Test			
X1	1.8041	0.0952	
(Current Ratio)			
X2	1.8059	0.09727	
(Debt Ratio)			
X3	1.8077	0.1007	
(ROA)			
X4	1.8058	0.0971	
(WCTO)			

 TABLE 4

 AUTOCORRELATION TEST RESULT

Source: R studio version 4.3.2

From Table 4, It is evident that there is no autocorrelation in the data because the p-value of all variables is greater than alpha (> 0.05).

E. Heteroscedasticity Test

The heteroscedasticity test is used to determine whether the regression model exhibits variance inequality between observations. It is referred to as homoscedasticity if the resulting variance is fixed and heteroscedasticity if it is not [11]. The heteroscedasticity test is carried out using the Studentized Breusch-Pagan test.

AUTOCORRELATION TEST RESULT			
Breusch-Pagan Test	BP test	P-value	
X1	0.089062	0.7654	
(Current Ratio)			
X2	1.2334	0.2668	
(Debt Ratio)			
X3	1.2786	0.2582	
(ROA)			
X4	0.0042097	0.9483	
(WCTO)			

 TABLE 5

 AUTOCORRELATION TEST RESULT

Source: R studio version 4.3.2



Table 5, shows that the data does not experience heteroscedasticity because the p-value of all variables is greater than alpha (> 0.05).

F. Hosmer and Lemeshow's Goodness of Fit test

The chi-square test developed by Hosmer and Lemeshow's is utilized to forecast whether the regression model is feasible. This test's objective is to confirm the following hypothesis:

 H_0 : The hypothesized model matches the observed data

 H_1 : The hypothesized model is unable to explain the data

Following the Hosmer and Lemeshow's test, the following outcomes were found:

TABLE 6	
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GOODNESS OF FIT TEST RESULT

Hosmer and	Chi-square	Significance
Lemeshow Test		
> 0.05	4.3616	0.8231
Source: R studio version 4.3.2		

In Table 6, the results show a chi-square value of 4.3616 with a significance value of 0.8231. These results demonstrate that the significance value is greater than 0.05, indicating acceptance of H_0 , the hypothesis that the data fit the model. Consequently, additional analysis may be done using this regression model.

G. Likelihood Value Test

Finding out if the independent variables can influenza the dependent variable concurrently of jointly is the goal of the statistical likelihood ratio test [11].

LIKELIHOOD VALUE TEST RESULT			
Likelihood Value Test	Deviance	P-value	
X1	0.25883	0.6109	
(Current Ratio)			
X2	0.04867	0.8254	
(Debt Ratio)			
X3	0.71133	0.3990	
(ROA)			
X4	0.01718	0.8957	
(WCTO)			

TABLE 7
LIKELIHOOD VALUE TEST RESULT

Source: R studio version 4.3.2

It can be seen in Table 7, that the significance value obtained in the Likelihood test is greater than the alpha value (> 0.05). Then there is not enough evidence to state that the model is feasible to predict financial distress.

H. R square Test

The model deviance is measured using the R-square test a better model is indicated by a greater R-square value, which also indicates a lower model's departure.

	TABLE 8		
	R SQUARE TEST RESULT		
	R Square Test		
	0.006419535		
Source: R studio version 4.3.2			

Table 8 shows that the size of the model fit, or R Square result, is 0.006419535. The model's variables have an impact on the dependent variable Y by 0.641953%, with variables outside the model influencing the remaining portion.

I. Partial Test (t-test)

The purpose of the partial test is to ascertain the extent to which the independent variable affects the dependent variable (t-test). Ha is accepted and H0 is rejected if the final p-value is smaller than 0.05, which indicates that the



independent variable has a substantial impact on the dependent variable. Ha is rejected and H0 is accepted if the final p-value is greater than 0.05, which indicates that the independent variable does not have a substantial effect on the dependent variable. The results obtained from the partial test (t-test) are as follows:

Variable	Estimate	t-value	P-value		
Intercept	0.42828	1.629	0.105		
X1	0.01155	0.158	0.874		
(Current Ratio)					
X2	-0.15450	-0.210	0.834		
(Debt Ratio)					
X3	0.24902	0.701	0.484		
(ROA)					
X4	-0.01835	-0.104	0.918		
(Working Capital					
Turnover)					

TABLE 9
PARTIAL TEST (T-TEST) RESULT

Source: R studio version 4.3.2

From Table 9, it can be concluded that:

- The effect of Current Ratio (X1) on Financial Distress
 Table 9 shows that the p-value of the current ratio > 0.05 is 0.874 and the coefficient is 0.01155. So
 H0 is accepted and Ha is rejected. Thus, it can be said that there is a somewhat significant positive
 relationship between financial distress and the current ratio.
- The effect of Debt Ratio (X2) on Financial Distress
 In Table 9, the p-value of the debt ratio > 0.05 is 0.834 and the coefficient value is -0.15450. So, Ha
 is rejected and H0 is approved. The debt ratio is found to have a marginally significant negative
 impact on financial distress.
- 3. The effect of Return on Assets (X3) on Financial Distress In Table 9, the p-value of return on assets > 0.05 is 0.484 and the coefficient is 0.24902. So that H0 is accepted and Ha is rejected. Thus, it can be said that financial distress is positively impacted by return on assets to a partially meaningful extent.
- 4. The effect of Working Capital Turnover (X4) on Financial Distress Based on Table 9, the p-value of working capital turnover > 0.05 is 0.918 with a coefficient of -0.01835. So that H0 is accepted and Ha is rejected. It can be concluded that working capital turnover has a partially significant negative effect on financial distress.

J. Simultan Test (F-test)

The purpose of the simultaneous test (F-test) is to assess the simultaneous influence of independent factors on the dependent variable. If the result is smaller than 0.05, it can be said that Ha is accepted and H0 is rejected, meaning that the independent variable concurrently influences the dependent variable in a significant way. However, since the independent variable does not simultaneously significantly affect the dependent variable, if the result is greater than 0.05, it can be claimed that H0 is accepted and Ha is rejected. The result of the Simultan test is:

SIMULTAN TEST (F-TEST) RESULT				
F-value	P-value			
0.2423	0.9139			
Source: R studio version 4.3.2				

TADLE 10

In Table 10, the p-value obtained is 0.9139. Because the F-test value is > 0.05, then H0 is accepted but Ha is rejected. Thus, it can be said that all dependent variables are jointly and significantly influenced by the independent variables.

K. Logistic Regression Test



Based on Table 9, we can conclude that the equation for the regression model is between the following variables:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 \dots + \beta_p X_p$$

= 0.42828 + 0.01155X1 - 0.15450X2 + 0.24902X3 - 0.01835X4

The conclusion of the regression model is as follows:

- 1. The regression model's findings indicate that the value of the dependent variable will be 0 if the independent variable's current ratio, debt ratio, return on assets, and working capital turnover are all 0, namely financial distress, will be -0.42828.
- 2. The regression coefficient for the Current Ratio (X1) is 0.01155, which implies that if the Current Ratio value increases by 1 unit, while the other independent variables' values stay constant, the Current Ratio value will increase by 0.01155. We conclude that financial distress is significantly impacted by the current ratio in a partially favorable way.
- 3. The regression coefficient for Debt Ratio (X2) is -0.15450, It implies that if the value of the other independent variables stays constant and the Debt Ratio value rises by 1 unit, the Debt Ratio value will decrease by 0.15450. In conclusion, the Debt Ratio has no significant effect partially on financial distress.
- 4. The regression coefficient for Return on Assets (X3) is 0.24902, This indicates that if the other independent variables' values stay the same and the ROA value rises by 1 unit, the ROA value will increase by 0.24902. In conclusion, ROA has a partially positive significant effect on financial distress.

The regression coefficient for Working Capital Turnover (X4) is -0.01835, that is, if Working Capital Turnover rises by 1 unit but the remaining independent variables' values remain constant, the value of working capital turnover will decrease by 0.01835. Thus, it may be said that working capital turnover has no significant effect partially on financial distress.

The logistic regression analysis's results highlight a number of shortcomings that open up new study directions. The results of this study can't be applied to other industries with different financial structures because of its narrow emphasis on manufacturing firms. Furthermore, possible effects of recent worldwide economic disruptions, like the COVID-19 pandemic, are not included in the data period of 2015–2019. Additionally, the study was limited to four financial ratios, which may have left out other important variables like corporate governance indicators or macroeconomic conditions. In order to improve future research, studies should include more explanatory factors, a longer time frame, a wider industry scope, and dynamic modeling approaches like machine learning to better account for temporal fluctuations and increase predicted accuracy.

IV. CONCLUSION

Examining the connection between manufacturing companies listed on the Indonesia Stock Exchange (IDX) and financial difficulty between 2015 and 2019 is the aim of this study. Specifically, the study will focus on the current ratio, debt ratio, return on assets (ROA), and working capital turnover. The conclusion is drawn from the results obtained:

- 1. The Current ratio has a negative effect on Financial Distress The findings of the analysis show this which show that the current ratio has a negative coefficient direction, namely 0.01155 and the resulting significant value is smaller than the required significant level, namely 0.874 > 0.05. These findings imply that the first hypothesis which holds that the "Current Ratio has a negative effect on Financial Distress" is rejected.
- 2. Debt ratio has a positive effect on Financial Distress
- The debt ratio has a positive regression coefficient direction of -0.15450, and the resulting significant value is less than the necessary significance threshold, which is 0.834 > 0.05, as can be seen from the study findings. From these findings, it can be said that the second hypothesis which says that "Debt Ratio has a positive effect on Financial Distress" is rejected.
- Return on Assets (ROA) has a negative effect on Financial Distress
 The analysis results demonstrate this, with ROA exhibiting a negative regression coefficient direction of
 0.24902 and a significant value that exceeds the necessary significance level of 0.484 > 0.05. Thus, it can
 be said that the third hypothesis that is, that "ROA has a negative effect on Financial Distress" is rejected.
- 4. Working Capital Turnover has a negative effect on financial distress Working capital turnover has a positive regression coefficient direction of -0.01835, and the resulting significant value is bigger than the necessary significance threshold, namely 0.918 > 0.05, as can be seen



from the analysis findings. This suggests that the fourth hypothesis, which claims that "Working Capital Turnover has a negative effect on Financial Distress," is accepted.

The study concludes that financial ratios provide varying degrees of influence on financial distress:

- 1. Current Ratio: A high current ratio does not necessarily prevent financial distress, highlighting the need for efficient management of liquidity.
- 2. Debt Ratio: High debt levels increase financial risk, suggesting companies should optimize their capital structure to balance debt and equity.
- 3. Return on Assets (ROA): A higher ROA demonstrates better utilization of assets, emphasizing the importance of asset efficiency.
- 4. Working Capital Turnover (WCTO): Low turnover indicates operational inefficiencies, underlining the need for effective working capital management.

Practical Recommendations:

- 1. Liquidity Management: Companies should monitor their current ratio to ensure sufficient liquidity while avoiding excessive idle assets. Adopting cash flow forecasting tools can improve liquidity planning.
- 2. Debt Optimization: Firms should aim to maintain a balanced capital structure by minimizing reliance on debt and exploring equity financing options to reduce financial risk.
- 3. Asset Efficiency: Regular performance evaluations of asset utilization should be conducted to identify and address inefficiencies, potentially through technology adoption or process improvements.
- 4. Working Capital Strategies: Enhance working capital management by improving inventory turnover and receivables collection processes to maintain operational stability. By implementing these recommendations, companies can proactively address financial risks and improve their financial health, reducing the likelihood of financial distress.

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