

# THE IMPACT OF NPM, ROI, ROE AND CASH RATIO ON FINANCIAL DISTRESS (Study Of Manufacturing Companies In The Consumption Goods Industrial Sector Listed On The Indonesia Stock Exchange In 2019 - 2021)

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## ABSTRACT

Several factors, both internal and external to the organization, can be used to gauge financial performance. In order to determine whether the four ratio variables have an impact on financial distress at a firm, this study will examine how to measure the company's financial performance using NPM, ROI, ROE, and Cash Ratio. Multiple linear regression analysis and descriptive statistical analysis are both used in this study. The population is the financial statements of several manufacturing companies in the consumer goods industry sector, such as PT. Unilever Indonesia Tbk, PT. Mayora Indah Tbk, and PT. Kino Indonesia Tbk for three years on the official website [idx.co.id](http://idx.co.id) starting in 2019, 2020, 2021, and using a saturated sample where the entire population is sampled, which are the financial statements of the three companies from 2019 to 2021, calculated by quarterly reports. The research results show that Net Profit Margin has no significant impact on financial distress with the test results obtained the t-count value is -1.095 with a significance of 0.282 while the t-table is 1.69552 with a significance of 0.05. Return on Investment significantly positive impact on financial distress with the results of testing the t-count value of 2.886 with a significance of 0.007 with a t-table of 2.03951 with a significance of 0.05. Return on Equity significant negative impact on financial distress with the results of the t-count test -2.897 with a significance of 0.007 with a t-table of 1.69552 with a significance of 0.05. Cash ratio have a significant positive impact on financial distress in several manufacturing companies in the consumer goods industry sector for the period 2019 - 2021 with a t-count test result of 10.625 a significance of 0.001 with a t-table of 2.03951 a significance of 0.05. The results of the F-table test = 2.67 and an error rate of 5%, obtained an F-count value of 50.596 > F-table 2.67 with a significance of 0.002 < 0.05, meaning that statistical testing simultaneously shows Net Profit Margin, Return on Investment, Return on Equity, and Cash Ratio all of which have a significant impact on financial distress in several manufacturing companies in the consumer goods industry sector for the period 2019 - 2021

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## 1. INTRODUCTION

For sure, any business in every industry will go through ups and downs, especially from a financial standpoint. It is obvious that a corporation may incur potential bankruptcy if its financial performance consistently worsens over a particular period of time. Financial distress is the designation for the condition of decreased performance. Unlike the overall drop in profits, the consequent nominal loss represents financial distress that is severe enough to have a significant impact on firm continuation (Riadi, 2017). In general, this can be brought on by bad money management, having too many illiquid assets, having high costs, and having returns that are at risk.

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The Covid-19 pandemic, which quickly transformed the global business environment into one full of difficulties and dealt a serious blow to the company's operational and financial conditions, is one of the most significant causes of financial distress. Companies in the consumer goods sector were particularly hard hit. It is clear from the news on Katadata that once the PSBB (Large-Scale Social Restrictions) were put into place on June 29, 2020, people's consumption and income patterns saw significant adjustments, which reduced their purchasing power. Theoretically, if consumer spending falls, this will affect the capital and earnings of businesses. Of course, the Covid-19 pandemic has had an impact on Indonesia's major corporations.

The following is a research phenomenon that occurs in three companies' goods sector consumption listed on the IDX during the period 2019-2021 which is researched on a quarterly basis. These companies are PT. Unilever Indonesia Tbk, PT. Mayora Indah Tbk, and PT. Kino Indonesia Tbk :

Table 1. Research Phenomenon

*(in Rupiah)*

Quarter	Total Asset	Total Equity	Total Liability	Current Period Income	Operating Revenue	
2021	I	21,645,929,000	6,560,787,000	15,085,142,000	1,698,080,000	2,226,128,000
	II	20,274,146,000	4,013,823,000	16,260,323,000	3,045,892,000	4,037,802,000
	III	20,206,771,000	5,326,215,000	14,880,556,000	4,378,794,000	5,812,474,000
	IV	19,068,532,000	4,321,269,000	14,747,263,000	5,758,148,000	7,679,451,000
2020	I	21,543,649,000	7,219,221,000	14,324,428,000	1,862,681,000	2,389,456,000
	II	21,351,803,000	8,807,885,000	12,543,918,000	3,619,635,000	4,739,543,000
	III	21,079,223,000	6,485,953,000	14,593,270,000	5,438,339,000	7,095,552,000
	IV	20,534,632,000	4,937,368,000	15,597,264,000	7,163,536,000	9,451,012,000
2019	I	22,039,978,000	9,062,375,000	12,977,603,000	1,748,520,000	2,363,388,000
	II	21,827,321,000	5,075,213,000	16,752,108,000	3,697,232,000	5,023,239,000
	III	20,813,938,000	6,887,584,000	13,926,354,000	5,509,603,000	7,526,861,000
	IV	20,649,371,000	5,281,862,000	15,367,509,000	7,392,837,000	10,120,906,000
2021	I	21,057,319,885,801	12,120,959,537,745	8,936,360,348,056	844,962,055,275	7,335,437,188,672
	II	20,190,174,137,050	12,234,584,474,068	7,955,589,662,982	959,801,885,046	13,153,712,842,781
	III	20,130,677,507,079	11,067,398,619,026	9,063,278,888,053	1,005,270,327,972	19,887,755,100,875
	IV	19,917,653,265,528	11,360,031,396,135	8,557,621,869,393	1,211,052,647,953	27,904,558,322,183
2020	I	19,474,546,511,239	10,846,852,689,295	8,627,693,821,944	949,829,206,540	5,379,573,546,423
	II	18,350,730,146,868	10,861,627,504,684	7,489,102,642,184	962,566,553,728	11,082,314,424,465
	III	19,002,549,750,564	10,813,160,816,087	8,189,388,934,477	2,035,802,094,374	17,580,971,431,517
	IV	19,777,500,514,550	11,271,468,049,958	8,506,032,464,592	2,098,168,514,645	24,476,953,742,651
2019	I	17,398,873,769,906	9,025,094,210,970	8,373,779,558,936	480,083,209,805	6,013,762,833,073
	II	17,681,962,890,881	9,378,518,589,099	8,303,444,301,782	833,653,744,855	12,058,493,837,320
	III	18,198,122,469,616	9,012,163,133,374	9,185,959,336,242	1,128,938,955,823	17,959,316,058,229
	IV	19,037,918,806,473	9,899,940,195,318	9,137,978,611,155	2,039,404,206,764	25,026,739,472,547
2021	I	5,379,483,590,669	2,597,564,146,906	2,781,919,443,763	17,018,742,717	964,262,778,150
	II	5,348,329,084,780	2,600,783,866,002	2,747,545,218,778	38,626,234,573	1,934,417,017,867
	III	5,319,295,533,948	2,636,036,790,624	2,683,258,743,324	81,835,612,689	2,931,697,381,131
	IV	5,346,800,159,052	2,663,631,503,097	2,683,168,655,955	100,649,538,230	3,976,656,101,508
2020	I	5,040,467,975,547	2,794,156,832,828	2,246,311,142,719	57,951,403,249	1,113,042,446,480
	II	5,266,005,357,054	2,707,960,834,075	2,558,044,522,979	117,712,611,350	2,193,705,763,624
	III	5,323,967,062,825	2,763,462,552,052	2,560,504,510,773	160,764,630,573	3,110,686,092,880
	IV	5,255,359,155,031	2,577,235,546,221	2,678,123,608,810	113,665,219,638	4,024,971,042,139
2019	I	4,223,593,478,790	2,553,196,349,184	1,670,397,129,606	303,978,018,496	1,002,000,534,898
	II	4,603,632,865,380	2,565,296,188,002	2,038,336,677,378	360,969,656,580	2,222,699,994,204
	III	4,657,926,597,762	2,645,898,223,222	2,012,028,374,540	441,745,465,434	3,483,814,313,482
	IV	4,695,764,958,883	2,702,862,179,552	1,992,902,779,331	515,603,339,649	4,678,868,638,822

Sumber : idx.co.id

If we look back at the trend of the last 3 years based on the financial statements of PT. Unilever Indonesia Tbk. there was an increase in liabilities of 1.4 trillion that occurred in the last quarter of 2019 and reached 1.1 trillion in 2020. Nonetheless, PT. Unilever Indonesia Tbk experienced a slight increase in profits with an average of around IDR 1.5 trillion in the fourth quarters of 2019, 2020 and 2021. The company's poor financial performance was impacted by the slowing growth in household consumption.

The company's poor financial performance was impacted by the downturn in household consumption growth. In 2021, the net profits of the three issuers declined in accordance with their respective percentages: 19.6% for UNVR, 14% for KINO, and 42.2% for MYOR (Indonesia Stock Exchange, 2022). Sales in the food and beverage industry were down, which contributed to the reduction in MYOR's earnings. Operating costs and raw materials for the division increased from Rp 1.17 trillion to IDR 1.21

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trillion. The company's profits are also impacted by hefty delivery expenses. Due to the rising cost of goods sold that came along with the fall in the company's net profit performance, the issuers KINO and UNVR also saw a decline in profits.

Financial problems frequently exist prior to a company filing for bankruptcy. As a result, proactive measures are required to avoid bankruptcy, one of which is tracking and analyzing financial accounts. Financial reports play a key role in monitoring financial success, including forecasting a company's financial future. The report's financial information is used to inform decision-making. Calculating the financial ratios in the financial statements will allow one to determine the outcomes of bankruptcy prediction and financial distress for the three consumer goods firms, PT. Unilever Indonesia Tbk, PT. Mayora Indah Tbk, and PT. Kino Indonesia Tbk. These financial ratios enable a thorough examination of the company's financial performance information, including an examination of its profitability, solvency, activity, and liquidity.

## **2. LITERATURE REVIEW**

### **The Impact of Net Profit Margin on Financial Distress**

Net Profit Margin aims to measure the ability to generate net profit in a company. A high NPM rating shows that the company's operational performance is strong and productive, indicating a low probability that the company would experience financial distress. Conversely, a low NPM indicates that the company tends to be in financial distress. (Assaji and Mahmudah, 2017). According to Kasmir (2016:200) If the situation does not get better as soon as possible when NPM falls below 20%, the company will experience financial distress

### **The Impact of Return on Investment on Financial Distress**

Return on Investment (ROI) is used to measure effectiveness of a business on achieving profitability in order to pay back the investment that has been made. According to Sutrisno (2019), the more the profitability ratio grows, this refers to the small possibility that the company will go bankrupt. Likewise, if the lower this ratio indicates the worse the condition of a company.

### **The Impact of Return on Equity on Financial Distress**

Return on Equity (ROE) demonstrates the importance of the percentage return on investment, particularly for potential shareholders and investors, as rising ROE will result in rising share prices. (Kasmir, 2014: 202). How big is the contribution of equity to generate profits for the company. A high ROE indicates that the company is making more profit, which lowers the risk of financial distress.

### **The Impact of Cash Ratio on Financial Distress**

Cash ratio is used in measuring the amount of cash availability for the purpose of paying debts (Syamsuddin, 2016:58) A company's capacity to make cash payments can be determined by its current cash availability. Financial distress is unlikely to occur as a result of an increase in the cash ratio because it also results in a rise in liquidity.

### **The Impact of Financial Distress**

Financial distress is the result of a company's overall financial performance declining steadily over time, including failure, insolvency, and the inability to pay debts. The inability of a corporation to pay off debt is regarded as having a negative impact on performance, and liquidity issues might arise as a result. According to Emrinaldi (2017), the condition of a company that is most easily identified as experiencing financial distress is a breach of debt payment obligations, including failure to pay dividends to investors. However, according to Whitaker (2015), financial distress can happen when the company's long-term debt obligations surpass their cash flow value. In conclusion, financial distress can be caused by various factors.

One source of information guidance to determine the possible level of financial distress is an analysis of the company's financial statements. According to Platt and Platt (2018), the following is the use of financial statements in measuring financial distress:

1. Acceleration of management actions in order to prevent bankruptcy,
2. Policy Merger with other companies, so that it can assist in paying debts and improving the performance of company management
3. Early warning for companies before bankruptcy in the future.

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### 3. METHOD

#### Approach & Type of Research

This Study method uses quantitative data types, namely components financial ratios published in financial report listed on the Indonesia Stock Exchange, as well using a descriptive statistical analysis approach & ratio analysis:

1. Descriptive statistical analysis, describing the data analysis of each research variable without drawing the usual conclusions.
2. Ratio analysis, in This study consists of: Net Profit Margin (NPM), Return on Investment (ROI), Return on Equity (ROE) & Cash Ratio

This study is done on the financial statements of several manufacturing companies in the consumption goods industrial sector listed on the IDX in 2019 - 2021 researched on a quarterly basis, namely PT. Unilever Indonesia Tbk, PT. Mayora Indah Tbk, and PT. Kino Indonesia Tbk. Research implementation begins in May 2022.

The population is a combination of all research objects or a group that has been formulated by researchers. This study uses a population of financial statements of PT. Unilever Indonesia Tbk, PT. Mayora Indah Tbk, and PT. Kino Indonesia Tbk. for 3 years on the official site [idx.co.id](http://idx.co.id) starting in 2019, 2020, 2021, and using saturated sample, where the entire population is used as a sample, which is the financial statements of the 3 companies from 2019 to 2021, calculated by quarterly reports.

The types and sources of data needed in this study are as follows:

1. Type of data: Research uses quantitative data, which is a number or information conveyed in the form of a number.
2. Data source: Based on the source, we use secondary data, which is obtained from the company's financial reports for 3 years starting from 2019, 2020, 2021, on the official website [idx.co.id](http://idx.co.id), as well as other journals that contain relevant information.

This research uses modified Altman Z-Score model as a measurement in estimating financial distress / bankruptcy using variations in financial ratios in financial statements.

#### Multiple Linear Regression Analysis

Positive or negative linear relationship between several independent variables on the dependent variable is the result of this analysis. The equation for the relationship between the two variables can be seen below:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

$X_1$  = Net Profit Margin

$X_2$  = Return on Investment

$X_3$  = Return on Equity

$X_4$  = Cash Ratio

$b_1 - b_7$  = Regression coefficient

$a$  = constant

$e$  = error

$Y$  = Financial Distress

#### Data Analysis Technique

##### Classic Assumption Test

##### 1. Normality Test

The normality test is a test in which the dependent and/or independent variables are normally distributed in the regression model. If the variable is not distributed normally, then the results of statistical tests have decreased. Here are the test criteria *One Sample Kolmogorov Smirnov*:

1. If value significance > 5% or 0.05 then the data is distributed normally.
2. If value significance < 5% or 0.05, the data is not distributed normally

##### 2. Autocorrelation Test

The autocorrelation test is useful for determining the residual correlation conditions in the t period within the t-1 period. When observing events that occur sequentially, autocorrelation occurs (Ghozali, 2016). One of the bases for autocorrelation test decision making is the Durbin Watson Test.

##### 3. Heteroscedasticity Test

The test for heteroscedasticity is used to determine whether variances occur in residuals between observations in a multiple linear regression model. Scatterplot chart can be used to measure heteroscedasticity (Ghozali, 2016).

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1. If pattern formed regularly, then heteroscedasticity occurs.
2. If the pattern forms scattered dots around the number 0 on the y-axis, there is no heteroscedasticity.

#### 4. Multicollinearity Test

The multicollinearity test is used to test whether there is a correlation between independent variables in a regression model. If it doesn't show a correlation between the independent variables, it is a good regression model (Ghozali, 2016). To find multicollinearity conditions, it can be seen from the tolerance value & Variance Inflation Factor (VIF).

1.  $VIF < 10$  or  $Tolerance > 0.01$ , means no multicollinearity
2.  $VIF > 10$  or  $Tolerance < 0.01$ , means there is multicollinearity.

#### R-Square Test ( $R^2$ )

R-Square test measures how much the ability percentage of models in explaining dependent variable. R-Square value is between zero and one ( $0 < R^2 < 1$ ) that meets the following criteria:

1. If the adjusted  $R^2$  close to 0, then the percentage of variable latency that is independent in explaining dependent variable variation is very low..
2. If the value close to 1, the independent variables explain almost all of the dependent variation (Ghozali, 2014).

#### Research Hypothesis Test

##### 1. T Test (Partial)

T-test is used whether there is significance relationship between independent and dependent variables, using the following criteria:

1. Sig value  $< \alpha$  and t-count  $>$  t-table, there is significant influence between financial ratios on financial distress.
2. Sig value  $> \alpha$  and t-count  $<$  t-table, there is no significant impact between financial ratios on financial distress

##### 2. F Test (Simultaneous)

This test aims to determine simultaneously whether there is a relationship of independent variables to dependent variable at a significance level of 0.05 ( $\alpha=5\%$ ). This test is carried out with the following criteria :

1. If F-count  $>$  F-table, there is significant influence of independent variables simultaneously to dependent variable.
2. If F-count  $<$  F-table no significant influence between independent variable and dependent variable simultaneously.

#### 4. RESULT AND DISCUSSION

##### Descriptive Statistics

Descriptive statistical analysis is used to explain the acquisition of data for each research variable without making broad conclusions. The table below contains descriptive statistics for the dependent and independent variables of PT. Unilever Indonesia Tbk, PT. Mayora Indah Tbk, and PT. Kino Indonesia Tbk for the years 2019, 2020, and 2021:

Table 1 Descriptive Statistical Analysis

	N Valid	Minimum	Maximum	Mean	Std. Deviation
<b>Net Profit Margin</b>	36	0.0176	0.3034	0.110375	0.0638503
<b>Return On Investment</b>	36	0.0032	0.3580	0.103428	0.0972064
<b>Return on Equity</b>	36	0.0066	1.4509	0.319322	0.4115403
<b>Cash Ratio</b>	36	0.0261	0.7296	0.224278	0.2107324
<b>Financial Distress</b>	36	0.5101	7.1456	3.923011	2.0560144

The table displays descriptive analysis of dependent & independent variables:

1. The whole research sample are 36 financial reports for 3 consecutive years, namely 2019, 2020 & 2021, calculated with quarterly reports, with 4 independent variables using ratio scale measurements.

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2. Net Profit Margin variable : minimum value 0,0176, maximum value 0.3034. Results average value (mean) 0.110375 with standardsrdeviation 0.0638503
3. Return on Investment variable: minimum value 0.0032, maximum value 0.3580. Results average value (mean) 0.103428 with a standard deviation 0.0972064.
4. Return on Equity variable : minimum value 0.0066, maximum value 1.4509. Results average value (mean) 0.319322 with standardsrdeviation 0.4115403.
5. Cash Ratio variable : minimum value 0.0261, maximum value 0.7296. Results average value (mean) 0.224278 with a standard deviation 0.2107324
6. Financial Distress variable : minimum value 0.5101, maximum value 7.1456. Average value resultsa(mean) 3.923011 withstandard deviation of 2.0560144.

### Classic Assumption Test

#### Normality Test

This test is used to test the dependent and independent variables normally distributed in the regression model.

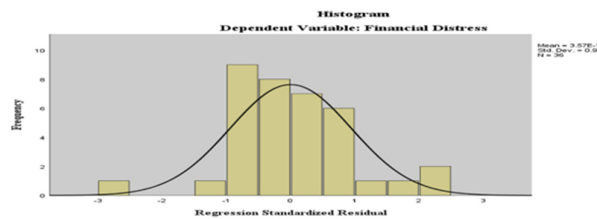


Figure 1. Normality Test

The graph above creates a mountainous curve, so it can be concluded that the variable pattern has a normal distribution.

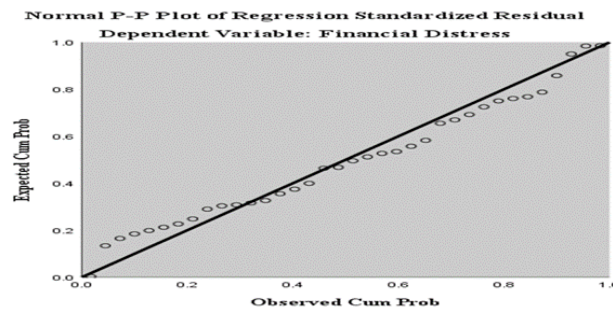


Figure 2. P-Plot graph

The results of the normality test using the P-Plot graph produce a diagonal line, so it can be concluded that the pattern is normally distributed.

Table 2. Kolmogorov-Smirnov test  
**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		36
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	.74932813
	Most Extreme Differences	
	Absolute	.095
	Positive	.087
	Negative	-.095
Test Statistic		.095
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>

a. Test distribution is Normal.  
b. Calculated from data.  
c. Lilliefors Significance Correction.  
d. This is a lower bound of the true significance.

Based on table 2, asymp. Sig value > 0.05, so it can be concluded that the distribution of residuals is normal, and vice versa. The Kolmogorov-Smirnov test results obtained a significant 0.200, indicating that the residual variables have a normal distribution.

### Autocorrelation Test

The autocorrelation test is useful for determining the residual correlation conditions in the t period within the t-1 period. When observing events that occur sequentially, autocorrelation occurs. One of the bases for autocorrelation test decision making is the Durbin Watson Test.

Table 3. Durbin Watson Test.  
**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.931 <sup>a</sup>	0.867	0.850	0.7962056	1.7323

a. Predictors: (Constant), Cash Ratio, Net Profit Margin, Return on Equity, Return on Investment  
b. Dependent Variable: Financial Distress

The result indicates that the Durbin-Watson value is 1.7323, where the position is below  $4-dU = 2.2755$  and above  $dU = 1.7245$ , so the hypothesis is accepted since there is no evidence of autocorrelation.

### Heteroscedasticity Test

The test for heteroscedasticity is used to determine whether variances occur in residuals between observations in a multiple linear regression model.

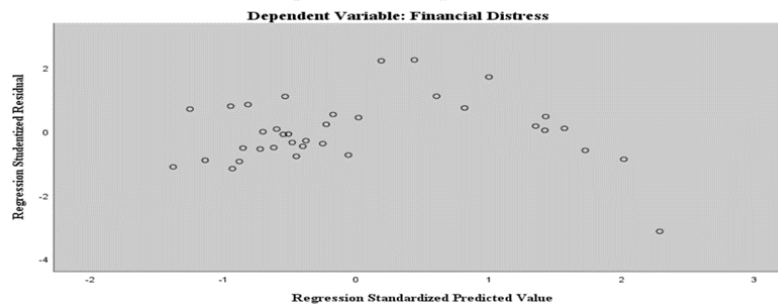


Figure 3. scatterplot graph

The test results appear on the scatterplot graph generate a random/scattered dot scatter pattern around the number 0 on the Y axis, it is possible to conclude that there is no heteroscedasticity and that the regression model is feasible to use.

### Multicollinearity Test

The multicollinearity test is used to test whether there is a correlation between independent variables in a regression model.

Table 4. multicollinearity test

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
		B	Std. Error				Tolerance	VIF
1	(Constant)	1.925	0.347		5.546	0.000		
	Net Profit Margin	-2.927	2.674	-0.091	-1.095	0.282	0.621	1.609
	Return On Investment	18.312	6.346	0.866	2.886	0.007	0.048	2.101
	Return on Equity	-4.285	1.479	-0.858	-2.897	0.007	0.049	2.045
	Cash Ratio	8.006	0.754	0.821	10.625	0.001	0.718	1.392

Dependent Variable: Financial Distress

From the test results above show that tolerance value is 0.718 and VIF 1.392, it can be concluded that the independent variables do not indicate multicollinearity.

### Research Data Analysis

#### Altman Z-Score Analysis

The modified Altman Z-Score model is used as a measurement medium in this study to estimate financial distress using variations of financial ratios.

Table 5. Financial Distress Level With Altman Z-Score PT. Unilever Indonesia Tbk

Quarter	X1	X2	X3	X4	Z' Score	Note	
2019	I	-0.0447	0.4027	0.1057	0.6983	2.4634	Grey Area
	II	-0.2288	0.2239	0.2271	0.3030	1.0729	Distress Zone
	III	-0.1451	0.3219	0.3539	0.4946	2.9950	Safe Zone
	IV	-0.2196	0.2467	0.4795	0.3437	2.9468	Safe Zone
2020	I	-0.1217	0.3264	0.1086	0.5040	1.5243	Grey Area
	II	-0.0356	0.4037	0.2156	0.7022	3.2688	Safe Zone
	III	-0.1382	0.2988	0.3292	0.4444	2.7467	Grey Area
	IV	-0.2206	0.2313	0.4484	0.3166	2.6525	Grey Area
2021	I	-0.1275	0.2944	0.1007	0.4349	1.2572	Grey Area
	II	-0.2549	0.1887	0.1946	0.2468	0.5101	Distress Zone
	III	-0.1823	0.2543	0.2803	0.3579	1.8926	Grey Area
	IV	-0.2519	0.2168	0.3931	0.2930	2.0040	Grey Area

Source : Processed data

Calculations show a level of financial distress at PT. Unilever Indonesia, Tbk. from 2019 to 2021. The majority of their financial circumstances are unhealthy (safe zone). This can be seen in the number of measurements using the Altman Z-Score method. In the first quarter of 2019, the Z-Score value was 2.4634, then decreased to 1.0729 in the second quarter, then increased slightly beyond the safe zone at the end of the year. Meanwhile, in 2020, the acquisition of value The Z-Score decreased to 2.6525, then continued up in 2021 where it touched 0.5101 and increased to 2.0040. With the acquisition of the Z-Score ratio mentioned, it can be stated that the company is in a state of financial difficulty.

Table 6. Financial Distress Level With Altman Z-Score PT. Mayora Indah Tbk

Quarter	X1	X2	X3	X4	Z' Score	Note	
2019	I	0.465	0.478	0.037	1.078	5.994	Safe Zone
	II	0.504	0.490	0.062	1.129	6.502	Safe Zone
	III	0.436	0.456	0.083	0.981	5.934	Safe Zone
	IV	0.475	0.482	0.142	1.083	6.781	Safe Zone
2020	I	0.484	0.519	0.065	1.257	6.624	Safe Zone
	II	0.493	0.551	0.067	1.450	7.003	Safe Zone
	III	0.481	0.530	0.107	1.320	6.992	Safe Zone
	IV	0.473	0.532	0.136	1.325	7.144	Safe Zone
2021	I	0.478	0.539	0.052	1.356	6.666	Safe Zone
	II	0.498	0.567	0.061	1.538	7.146	Safe Zone
	III	0.405	0.514	0.065	1.221	6.048	Safe Zone
	IV	0.371	0.534	0.078	1.327	6.094	Safe Zone

Source : Processed data

Table Displays the financial distress measurement results at PT. Mayora Indah Tbk. from 2019 to 2021 using the Altman Z-Score method. For the past three years, the financial situation has been very stable and healthy, with the Z-Score value rising steadily from 5.994 in the first quarter of 2019 to 7,146 in the second quarter of 2021. With the gathering of ratio values. The Z-Score indicates that the company is in a position to avoid financial distress.

Table 7. Financial Distress Level With Altman Z-Score PT. Kino Indonesia Tbk

Quarter		X1	X2	X3	X4	Z' Score	Note
2019	I	0.094	0.248	0.075	1.528	3.5341	Safe Zone
	II	0.155	0.230	0.085	1.259	3.6583	Safe Zone
	III	0.166	0.245	0.107	1.315	3.9900	Safe Zone
	IV	0.172	0.250	0.135	1.356	4.2751	Safe Zone
2020	I	0.144	0.244	0.015	1.244	3.1459	Safe Zone
	II	0.117	0.223	0.029	1.059	2.7947	Grey Area
	III	0.108	0.228	0.037	1.079	2.8306	Grey Area
	IV	0.079	0.200	0.026	0.962	2.3537	Grey Area
2021	I	0.074	0.198	0.003	0.934	2.1300	Grey Area
	II	0.133	0.200	0.007	0.947	2.5694	Grey Area
	III	0.145	0.210	0.020	0.982	2.8006	Grey Area
	IV	0.151	0.212	0.024	0.993	2.8822	Grey Area

Source : Processed data

Table displays the financial distress measurement results at PT. Kino Indonesia Tbk. for the three years from 2019 to 2021 using the Altman method Z-Scores. The Z-Score in 2019 is 3.5341, and it continued until the first quarter of 2020, when it reached 3.1459, indicating that finances are in good condition, but it gradually declines until 2021, when it reaches 2.5694 and 2.8822. The Z-Score ratio indicates that the company can be classified as being in a potential state of financial distress.

### Multiple Linear Regression Analysis

The result of this analysis is to determine the positive or negative linear relationship between several independent variables on the dependent variable.

Table 8. multiple regression

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	1.925	0.347		5.546	0.000
	Net Profit Margin	-2.927	2.674	-0.091	-1.095	0.282
	Return On Investment	18.312	6.346	0.866	2.886	0.007
	Return on Equity	-4.285	1.479	-0.858	-2.897	0.007
	Cash Ratio	8.006	0.754	0.821	10.625	0.001

Dependent Variable: Financial Distress

By using the following multiple regression equation

$$Y = -3.196 - 0,178X_1 + 10.217X_2 + 0.017X_3 + 7.442X_4 + e$$

It can be concluded from the table above that:

1. a 1,925, when all independent variables are 0, then financial distress is equal to 1.925, the same as the constant level.
2. NPM has a regression coefficient of -2.927, so that if NPM ( $X_1$ ) experienced a growth of 1 unit then the financial distress rate decreased by 2.927, with the constant condition of the other independent variable. From these results it is concluded that the NPM variable has a negative impact on financial distress.
3. ROI has a regression coefficient of 18.312, so if the ROI ( $X_2$ ) grows 1 unit, then the financial distress rate experienced a growth of 18.312, with the record that other independent variables are constant. From these results it is concluded that the ROI variable has a positive impact on financial distress.
4. ROE has a regression coefficient of -4.285, so that if ROE ( $X_3$ ) experienced a growth of 1 unit level financial distress will decreased by 4.285, provided that the other independent variables are constant. From these results it is concluded that the ROE variable has a negative impact on financial distress.
5. CR has a regression coefficient of 8.006, so if Cash Ratio ( $X_4$ ) grows by 1 unit then financial distress experienced a growth of 8.006, with the record that other independent variables are constant. From these results it was concluded that the Cash Ratio variable had a positive impact on financial distress.

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## R-Square Test

Table 9. R-Square

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.931 <sup>a</sup>	0.867	0.850	0.7962056

b. Predictors: (Constant), Cash Ratio, Net Profit Margin, Return on Equity, Return on Investment

From table it is found that the magnitude of R-Square is 0.867, so it is concluded that 0.867 or 86.7% of financial distress latency can be influenced by independent variables (NPM, ROE, ROI & Cash Ratio) while the remaining 13.3% is explained by other variable which is not tested in this research.

## Research Hypothesis Test

With the aim of testing the research hypothesis whether the independent variable has an impact on the dependent variable.

### T-test (Partial)

Table 10. T-Test

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	
	B	Std. Error				
1	(Constant)	1.925	0.347		5.546	0.000
	Net Profit Margin	-2.927	2.674	-0.091	-1.095	0.282
	Return On Investment	18.312	6.346	0.866	2.886	0.007
	Return on Equity	-4.285	1.479	-0.858	-2.897	0.007
	Cash Ratio	8.006	.754	0.821	10.625	0.001

Dependent Variable: Financial Distress

With a probability level of 0.05 at Df residual =  $n-k-1 = 12-4-1 = 31$ , the results of partial hypothesis testing can be concluded:

1. Net Profit Margin variable has t-count -1,095 and significance of 0.282 with t-table 1.69552 and significance of 0.05 so it can be concluded that the t-count value is  $1.095 < t\text{-table } 1.69552$  and significance  $0.282 > 0.05$ , then the decision is Net Profit Margin variable had no significant impact partially to financial distress
2. Return on Investment variable has t-count value of 2.886 with a significance of 0.007 with t-table of 2.03951 with a significance of 0.05 so that it can be concluded that the value t-count  $2.886 > t\text{-table } 2.03951$  and significance  $0.007 < 0.05$ , then the decision is Return on Investment has partial significant impact on financial distress.
3. Return on Equity variable has t-count value -2.897 and significance of 0.007 with t-table 1.69552 has a significance of 0.05 so it can be concluded that the value t-count  $2.897 > t\text{-table } 1.69552$ , and significance  $0.007 < 0.05$ , then the decision is Return on Equity has a partially significant impact on financial distress.
4. Cash Ratio variable has a t-count value of 10.625 with a significance of 0.001 with a t-table of 2.03951 with a significance of 0.05 so that it can be concluded that the value t-count  $10.625 > t\text{-table } 2.03951$ , and significance  $0.001 < 0.05$ , then the decision is Cash Ratio has partial significant impact on financial distress.

### F-Test (Simultaneous)

Table 11. F-Test

### ANOVA<sup>a</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	128.300	4	32.075	50.596	0.002 <sup>b</sup>
	Residual	19.652	31	0.634		
	Total	147.952	35			

a. Dependent Variable: Financial Distress

b. Predictors: (Constant), Cash Ratio, Net Profit Margin, Return on Equity, Return On Investment

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By using F-table = 2.67 and a 5% error rate, it is obtained that F-count 50.596 > F-table 2.67 and a significance probability of 0.002 < 0.05, indicating that the variables Net Profit Margin, Return on Investment, Return on Equity, and Cash Ratio all have a significant impact on financial distress.

## Research Results

### The Impact of Net Profit Margin on Financial Distress

The results of multiple linear regression analysis of Net Profit Margin produce t-count -1.095 with a significance of 0.282, t-table 1.69552 with a significance of 0.05 so that it can be concluded that the t-count value is 1.095 < t-table 1.69552, and significant 0.282 > 0.05, means Net Profit Margin has no significant impact to financial distress partially.

According to Imam and Indah's research (2021), Net Profit Margin has no significant impact on financial distress. Due to the numerous causes of changes in net sales each year, it is possible that investors do not always refer to the existing NPM information. Management efficiency is also an important company benchmark for increasing net profit.

### The Impact of Return on Investment on Financial Distress

Multiple linear regression test results of Return on Investment variable produces a t-count value of 2.886 with a significance of 0.007 with a t-table of 2.03951 with a significance of 0.05 so that it can be concluded that the t-count value is 2.886 > t-table 2.03951, and significance 0.007 < 0.05, meaning that the variable Return on Investment has a partial positive impact on financial distress.

Liana (2014) and Moch Bustanul (2017) also emphasized that Return on Investment has no impact on financial distress. This is due to the fact that, even though the company's profits have decreased, obligations and other costs can still be met by utilizing the company's internal and external funds, thereby reducing the company's financial difficulties. However, if the company's capital is used properly, revenue growth can lead to increased profits and reduced financial difficulties.

### The Impact of Return on Equity on Financial Distress

The results of multiple linear regression analysis of Return on Equity has a t-count of -2.897 with a significance of 0.007 with a t-table of 1.69552 with a significance of 0.05 so that it can be concluded that the t-count value 2.897 > t-table 1.69552, and a significant 0.007 < 0.05, meaning that Return on Equity has significant negative impact on financial distress.

This study confirms the findings of Haq et al. (2017) and Rahmania & Hermanto (2013) that Return on Equity has a negative impact on financial distress, which means that the higher a company's Return on Equity, the greater its ability to reduce financial distress. As the value of the Z-Score rises, the likelihood of financial distress decreases. ROE has a high value, which means it benefits capital owners.

### The Impact of Cash Ratio on Financial Distress

Multiple linear regression test results of Cash Ratio produce a t-count of 10.625 with a significance of 0.001 with a t-table of 2.03951 with a significance of 0.05 so that it can be concluded that the t-count value 10.625 > t-table 2.03951, and significant 0.001 < 0.05, means variable Cash Ratio has a partially significant positive impact on financial distress.

Munthe's (2018) and Koes et al (2020) research both confirmed that Cash Ratio has a positive and significant influence on financial distress. These findings indicate that the amount of funding that is not used optimally can also be a result of the size cash ratio, which indicates that the company's performance is less capable of generating profits and capital is also reduced, which has an impact on financial distress.

## 5. CONCLUSION

The results of multiple linear regression analysis t-count -1.095 with a significance of 0.282 and t-table 1.69552 with 0.05 significance, which can be concluded that t-count is 1.095 < t-table 1.69552, and significant 0.282 > 0.05, means during the period 2019 - 2021, partial statistical tests show that NPM variable has no significant impact on financial distress in several manufacturing companies in the consumer goods industry sector. Multiple linear regression test results of Return on Investment variable produces a t-count value of 2.886 with a significance of 0.007 with a t-table of 2.03951 with a significance of 0.05 so it can be concluded that t-count value 2.886 > t-table 2.03951, and significance 0.007 < 0.05, implying that the partial statistical test proves Return on Investment variable has a partial positive impact on financial distress in several manufacturing companies industry sector consumer goods in 2019

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- 2021. The results of multiple linear regression analysis of Return on Equity has a t-count of -2.897 with a significance of 0.007 with a t-table of 1.69552 with a significance of 0.05 so that it can be concluded that the t-count value is  $2.897 > t\text{-table } 1.69552$ , and a significant  $0.007 < 0.05$ , meaning that partial statistical testing proves Return on Equity has significant negative impact on financial distress in several companies manufacture goods industry sector consumption in 2019 - 2021. Multiple linear regression test results of Cash Ratio produce a t-count of 10.625 with a significance of 0.001 with a t-table of 2.03951 with a significance of 0.05 so that it can be concluded that the t-count value is  $10.625 > t\text{-table } 2.03951$ , and significant  $0.001 < 0.05$ , means the partial statistical test shows that Cash Ratio variable has a partially significant positive impact on financial distress in several manufacturing companies in the consumer goods industry sector in 2019 - 2021. The results of the F-table test = 2.67 and an error rate of 5%, obtained F-count  $50.596 > F\text{-table } 2.67$  with a significance of  $0.002 < 0.05$ , meaning that statistical test simultaneously shows the NPM, ROI, ROE and CR variables have a significant impact on financial distress in several manufacturing companies in the consumer goods industry sector in 2019 - 2021.

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