The Influence of Return On Assets (ROA), Return On Equity (ROE), Current Ratio (CR), Debt To Equity Ratio (DER), And Total Asset Turnover (TATO) On Financial Distress Conditions (Empirical Study on Food and Beverage Sub-Sector Companies Listed on the Indonesia Stock Exchange for the 2019-2023 Period)

Toni Yoyo¹⁾ toni.yoyo@ubd.ac.id

Agustinus Priyowidodo²⁾ agustinus.priyowidodo@ubd.ac.id

¹⁾²⁾Universitas Buddhi Dharma

ABSTRAK

This study aims to examine the effect of return on assets, return on equity, current ratio, debt to equity ratio, and total asset turnover on financial distress conditions in food and beverage sub-sector companies listed on the Indonesia Stock Exchange. The independent variables used are return on asset (ROA), return on equity (ROE), current ratio (CR), debt to equity ratio (DER), and total asset turnover (TATO). The bound variable used is financial distress which is proxied by the Altman Z"-Score Method. The population of this study is food and beverage sub-sector companies listed on the Indonesia Stock Exchange for the 2019-2023 period. The method used in this study is a quantitative method. The sampling technique uses a purposive sampling technique, with a total of 45 samples obtained from 9 companies for 5 years. The data used is secondary data, namely the annual financial statements of the sample companies for the 2019-2023 period. Data analysis techniques used descriptive statistical analysis, classical assumption test, multiple linear regression analysis, determination coefficient test, t-test, and F. Data processing was carried out using the SPSS (Statistical Product and Service Solutions) version 25 program. The results of this study prove that there is a significant influence of return on assets on financial distress, there is a significant influence of return on equity on financial distress, there is a significant influence of current ratio on financial distress, there is no significant influence of debt to equity ratio on financial distress, and there is no significant influence of total asset turnover on financial distress. The five independent variables (ROA, ROE, CR, DER, and TATO) simultaneously had a significant effect on financial distress.

Kata kunci: Return On Asset, Return On Equity, Current Ratio, Debt to Equity Ratio

INTRODUCTION

Food and beverage companies are manufacturing companies, namely processing industry companies that process raw materials into semi-finished goods or finished goods (<u>www.sahamok.net</u>). Food and beverage *industry* is one of the sub-sectors of the Consumer Goods Industry Sector on the Indonesia Stock Exchange (IDX). *Consumer Goods* itself is also part of the Manufacturing Sector. So the Manufacturing Sector is divided into 3 main sectors, namely the Consumer Goods Industry Sector, the Basic and Chemical Industry Sector, and the Miscellaneous Industry Sector (<u>www.sahamok.net</u>).

The growing and increasing number of food and beverage companies is a strong driver in business competition. This development has a great impact on economic progress and has an impact on the sustainability of food and beverage companies. Every company is required to think about business strategies, and continue to innovate so that the company can survive in the fierce competition and can get the maximum profit. The number of competitors makes companies have to continue to innovate by making new product innovations or developing existing products.

This will require large funds, but large funding will make the company experience financial distress if not managed properly. Companies that do not properly manage their financial statements will face the worst possibility, namely the problem of losses and bankruptcy. However, if the company manages its financial statements correctly, the worst will not happen. Because companies that manage their financial statements correctly, one of them has healthy and strong funding, will not experience financial distress.

Financial distress is a situation in which a company experiences a decline in financial condition. Financial distress can be caused by several factors such as high company expenditures that exceed budget, not reaching sales targets, no longer being able to pay their obligations due to insufficient funds, and incorrect company financial planning. Other factors that can affect financial distress are natural disasters, macroeconomic conditions such as inflation, the rupiah exchange rate, and rising loan interest rates.

In addition, the current pandemic situation can also cause the company to experience financial difficulties, because the sales target is not achieved, resulting in a decrease in revenue from sales results. One of the reasons for the decline in sales is due to low consumer purchasing power due to declining consumer income due to Termination of Employment (PHK) by companies during the pandemic.

Financial distress occurs before a company faces failure or bankruptcy. Therefore, detecting the potential for financial distress needs to be done early so that companies can take anticipatory actions before bankruptcy occurs (Muchtar, Rahmidani, & Siwi 2016, 87). Information about financial distress is needed for investors who will invest their capital and creditors who will provide loans. External parties do not want to do business with companies that are experiencing financial distress.

Financial statements can be used as a basis for information to find out the condition of financial distress in the company by analyzing the company's financial ratios. Financial ratio analysis can be used as a medium to predict and find out the financial distress conditions faced by companies (Widhiari & Aryani Merkusiwati 2015, 457) By analyzing financial ratios, companies can take actions to overcome or improve conditions that occur before they have the potential to experience financial distress.

The method of predicting financial distress uses the Altman Z"-Score method. The ratios used to determine the factors that affect the condition of financial distress in this study are Return On Asset (ROA), Return On Equity (ROE), Current Ratio (CR), Debt to Equity Ratio (DER), and Total Asset Turnover (TATO).

Return On Asset is a ratio to measure a company's ability to generate profits based on the use of assets. A high Return On Asset value indicates that the company's asset management is more efficient to generate profits. The higher the Return On Asset obtained, the less likely the company is to experience financial distress. On the other hand, if the Return On Asset value is low, it indicates that financial performance is not good, which will result in a decrease in the company's profits so that financial distress is more likely to occur.

Return On Equity is the company's ability to generate profits from its equity. How much equity contribution is to generate profits for the company. The value of Return On Equity reflects the efficiency of the company's capital management. The higher the Return On Equity, the higher the amount of profit the company generates, so the less likely the company is to experience financial distress.

Current Ratio is a ratio used to measure the level of a company's ability to pay its current debt or short-term liabilities with current assets (Andy & Megawati 2019, 22-34). The Current Ratio describes the level of liquidity and how much current assets are able to cover its current debt. The higher the Current Ratio, the higher the level of liquidity of a company. If the company has a high level of liquidity, the company is able to pay its short-term debts so as to avoid financial distress.

Debt to Equity Ratio is a ratio that measures the level of debt use to capital or equity owned by a company. This ratio serves to find out every rupiah of capital used as debt collateral and provide clues about the feasibility and financial risk of the company. If the Debt to Equity Ratio is high, it means that the amount of debt that must be repaid by the company is also high and can reduce the amount of profit that the company will receive, so that the potential risk of the company experiencing financial distress is high.

Total Assets Turnover is how fast a company's assets turnover to generate sales. This ratio describes the level of efficiency of the company in managing its assets to earn revenue. A high Total Asset Turnover shows that the company is more effective in managing its assets to generate sales. The greater the revenue received from the sales is expected to provide a large profit, this shows that the financial performance achieved is better so that the company is likely to avoid financial distress.

From several things that have been described, the researcher intends to conduct research using the financial ratios that have been described above, namely Return On Asset (ROA), Return On Equity (ROE), Current Ratio (CR), Debt to Equity Ratio (DER), and Total Asset Turnover (TATO) as independent variables and Financial Distress as dependent variables. In addition, the researcher used Food and Beverage Sub-Sector companies listed on the Indonesia Stock Exchange for the 2019-2023 period as the object of research. **Kerangka Pemikiran**





Research Hypothesis

- H1: Return On Asset berpengaruh terhadap Financial Distress
- H2: Return On Equity affects Financial Distress
- H3: Current Ratio berpengaruh terhadap Financial Distress
- H4: Debt to Equity Ratio berpengaruh terhadap Financial Distress
- H5: Total Asset Turnover affects Financial Distress
- H6: Return On Asset, Return On Equity, Current Ratio, Debt to Equity Ratio, Dan Total Asset Turnover berpengaruh secara bersama-sama (simultan) terhadap Financial Distress

RESEARCH METHODS

Type of Research

The type of research used is a type of research with a quantitative method. This method is a scientific method in the form of numbers and analysis using concrete/empirical, objective, measurable, rational, and systematic statistics.

Research Object

The object of research is the object of concern in the research. The objects used are *return on assets, return on equity, current ratio, debt to equity ratio,* and *total asset turnover* as independent variables, and *financial distress* as a bound variable that analyzes the financial statements of companies in the food and beverage sub-sector.

Research Population and Sample

The population in this study is all food and beverage sub-sector companies listed on the Indonesia Stock Exchange for the 2019-2023 period, totaling 19 companies. The sample technique used is *the purposive sampling technique* which totals 45 samples from 9 companies in the food and beverage sub-sector for the 2019-2023 period (5 years).

Teknik Analisis Data

Peneliti menganalisis dan mengolah data menggunakan *software* SPSS versi 25, berikut teknik analisis yang digunakan dalam penelitian ini :

1. Descriptive Statistical Analysis

Statistics used to analyze data by describing or describing data that has been collected as it is without intending to make generalized conclusions or generalizations (Sugiyono 2018, 147). Descriptive statistical analysis includes *mean*, *standard deviation*, maximum and minimum values of each variable studied.

2. Classical Assumption Test Analysis

The classical assumption test is a statistical requirement that aims to provide certainty that the regression equation obtained has estimation accuracy, is not biased, and is consistent. The classical assumption test consists of a normality test, a multicoloniality test, a heterokedasticity test, and an autocorrelation test.

- 3. Statistical Test
 - a) Coefficient of Determination Test

The determination coefficient is the ability of the independent variable to affect the bound variable. The results of the coefficient test are determined by *the adjusted value* of R2. Where if the value is obtained closer to 1 (one) means that the free variable is able to provide almost all the information needed to predict the bound variable, and if the value is closer to 0 (zero) it means that the weaker the free variable is in predicting the bound variable.

b) Multiple Linear Regression Analysis

Multiple linear regression analysis is a regression model analysis in which the bound variable does not depend on two or more independent variables.

ANALYSIS AND DISCUSSION Descriptive Statistical Analysis Test Results Table 1

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	45	-,0186	,2787	,091273	,0614974
ROE	45	-,6414	,2812	,126169	,1367770
CR	45	,4898	5,1130	2,355643	1,1401043
DER	45	,1443	5,2015	,891360	,7931456
TATO	45	,0991	3,1048	1,161457	,6953052
Financial Distress	45	-1,3432	19,0665	5,556482	4,3157997
Valid N (listwise)	45				

Descriptive Statistics

Based on the results of the test above, it is known that column N is the number of samples in this study, which is 45 samples from 9 companies over a period of 5 years (2019-2023) and contains minimum values, maximum values, average values, and standard deviations. The independent variables used are Return On Asset (ROA), Return On Equity (ROE), Current Ratio (CR), Debt to Equity Ratio (DER), and Total Asset Turnover (TATO). Meanwhile, the bound variable used is Financial Distress.

Results of the Classic Assumption Test Normality Test Results



Source: SPSS Data Processing Results version 25

Based on the image of the Normal P-P Plot graph above, it can be seen that the distribution of the points is squeezed and most of them follow a diagonal line, so it can be said that the regression model distributes normal data.

One-Sample Kolmogorov-Smirnov Test					
		Unstandardized Residual			
Ν		45			
Normal Parameters ^{a,b}	Mean	,0000000			
	Std. Deviation	1,11193828			
Most Extreme	Absolute	,085			
Differences	Positive	,063			
	Negative	-,085			
Test Statistic		,085			
Asymp. Sig. (2-tailed)		,200 ^{c,d}			

Table 2

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Source: SPSS Data Processing Results version 25

Based on the results of the Kolmogorov-Smirnov One-Sample test, the Asymp value was obtained. Sig. (2-tailed) of 0.200 > 0.05, it can be said that the regression model distributes normal data.

Multicoloniality Test Results

Table 3						
Coefficients ^a						
Collinearity Statistics						
Model	Tolerance VIF					
1	ROA	,381	2,625			
	ROE	,604	1,655			
	CR	,465	2,150			
	DER	,575	1,739			
	TATO	,640	1,562			

a. Dependent Variable: Financial Distress Source: SPSS Data Processing Results version 25

Based on the results of the multicoloniality test, the five independent variables in this study have a *tolerance value* of < 0.1 and a VIF value of > 10.0, so it can be said that the data does not experience multicoloniality.

Heterokedasticity Test Results

Picture 3 Heterokedastisitas



Source: SPSS Data Processing Results version 25

Based on the graph image above, it can be seen that the data points do not form a clear pattern and the dots spread above and below the number 0 (zero) on the Y axis, so it can be said that the data does not experience heterokedasticity.

Autocorrelation Test Results

Table 4								
Model Summary ^b								
	Adjusted R Std. Error of the							
Model	R	R Square	Square	Estimate	Durbin-Watson			
1,966 ^a ,934,925,1,1810675,1,644								
a. Predictors: (Constant), TATO, DER, ROE, CR, ROA								
b. Depen	b. Dependent Variable: Financial Distress							

Source: SPSS Data Processing Results version 25

Based on the table above, the Durbin-Watson value was obtained at 1.644. This value is between -2 to +2 or -2 < 1.644 > +2, so it can be said that the data does not experience autocorrelation problems.

Table 5	
Runs Test	

	Standardized Residual
Test Value ^a	,01127
Cases < Test Value	22
Cases >= Test Value	23
Total Cases	45
Number of Runs	24
Z	,003
Asymp. Sig. (2-tailed)	,997
a. Median	

Source: SPSS Data Processing Results version 25

Based on the results of the autocorrelation test with the Runs Test, the Asymp value was obtained. Sig. (2-tailed) is 0.997 > 0.05, so it can be said that the data in this regression model does not experience autocorrelation problems.

Statistical Test Results

Determination Coefficient Test Results

Table 6							
	Model Summary ^b						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	,966ª	,934	,925	1,1810675			
a. Predictors: (Constant), TATO, DER, ROE, CR, ROA b. Dependent Variable: Financial Distress							
Source: SPSS Data Processing Results version 25							

Based on the results of the test above, it is seen from the *adjusted R2* value of 0.925. This value is close to the number 1 (one) which means that the independent variable is able to provide almost all the information needed to predict the bound variable. So ROA, ROE, CR, DER, and TATO are able to provide 92.5% of the information needed to predict *financial distress*. While the remaining 7.5% (100% \u2012 92.5%) are explained or predicted by other factors other than ROA, ROE, CR, DER, and Tato.

Table 7 Coefficients ^a				
	Unstandar	dized Coefficients		
Model B Std. Error				
1 (Constant)	-2,277	,717		
ROA	41,814	4,691		
ROE	-5,685	1,675		
CR	1,860	,229		
DER	-,148	,296		
TATO	,418	,320		

Multiple Linear Regression Analysis Test Results

a. Dependent Variable: Financial Distress (FD)

Source: SPSS Data Processing Results version 25

Based on the results of the above test, the regression equation is obtained as follows:

- $FD = -2,277 + 42,814ROA 5,685ROE + 1,860CR 0,148DER + 0,418TATO + \epsilon$
- 1. A constant value of -2.277 means that if the ROA, ROE, CR, DER, and TATO are valued at 0 (zero), then *the Financial Distress* (Y) value is -2.277.
- 2. An ROA value of 41.814 means that if the ROA increases by 1 unit, then *financial distress* will increase by 41.814 assuming other independent variables are considered constant.
- 3. An ROE value of -5.685 means that if ROE increases by 1 unit, then *financial distress* will decrease by 5.685 assuming other independent variables are considered constant.
- 4. A CR value of 1.860 means that if CR increases by 1 unit, then *financial distress* will increase by 1.860 assuming other independent variables are considered constant.
- 5. A DER value of -0.148 means that if the DER increases by 1 unit, then *the financial distress* will decrease by 0.148 assuming that other independent variables are considered constant.
- 6. A TATO value of 0.418 means that if the TATO increases by 1 unit, then *the financial distress* will increase by 0.418 assuming other independent variables are considered constant.

Hypothesis Testing Partial Test Results (t-Test)

Coefficients ^a							
		Unstandardi	zed Coefficients	StandardizedCoefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	-2,277	,717		-3,177	,003	
	ROA	41,814	4,691	,596	8,914	,000	
	ROE	-5,685	1,675	-,180	-3,395	,002	
	CR	1,860	,229	,491	8,121	,000	
	DER	-,148	,296	-,027	-,500	,620	
	TATO	,418	,320	,067	1,307	,199	

Table 8 Coefficients

a. Dependent Variable: Financial Distress

Source: SPSS Data Processing Results version 25

Based on the results of the partial test (t-test) above, it can be concluded as follows:

1. The effect of return on assets (ROA) on financial distress

Based on the results, the calculated t-value of 8.914 is greater than the t-table, namely tcount 8.914 > ttable 2.01410 and the value (sig.) $0.000 < \alpha 0.05$. It can be concluded that

return on assets has a significant effect on financial distress. Thus the first hypothesis (H1) proposed was accepted.

- 2. The effect of return on equity (ROE) on financial distress Based on the results, the t-calculated value of -3.395 is smaller than the t-table, namely t-3.395 < ttable 2.01410 and the value (sig.) $0.002 < \alpha 0.05$. It can be concluded that return on equity has a significant effect on financial distress. Thus the second hypothesis (H2) proposed was accepted.
- 3. Pengaruh current ratio (CR) terhadap financial distress Based on the results, the calculated t-value of 8.121 is greater than the t-table, namely tcount 8.121 > ttable 2.01410 and the value (sig.) $0.000 < \alpha 0.05$. It can be concluded that the current ratio has a significant effect on financial distress. Thus the third hypothesis (H3) proposed was accepted.
- 4. Pengaruh debt to equity ratio (DER) terhadap financial distress Based on the results, the calculated t-value of -0.500 is smaller than the t-table, namely t-0.500 < ttable 2.01410 and the value (sig.) $0.620 > \alpha 0.05$. It can be concluded that the debt to equity ratio does not have a significant effect on financial distress. Thus the fourth hypothesis (H4) proposed was rejected.
- 5. The effect of total asset turnover (TATO) on financial distress Based on the results, the calculated t-value of 1.307 is smaller than the t-table, namely tcount 1.307 < ttable 2.01410 and the value (sig.) $0.199 > \alpha 0.05$. It can be concluded that total asset turnover has no significant effect on financial distress. Thus the fifth hypothesis (H5) proposed was rejected.

Simultaneous Test Results (Test F)

ANOVA ^a									
Model		Sum of Squares	df	Mean Square	F	Sig.			
1	Regression	765,148	5	153,030	109,705	,000 ^b			
	Residual	54,402	39	1,395					
	Total	819,550	44						
a Dono	Dependent Variable: Financial Distrosc								

Table 9

a. Dependent Variable: Financial Distress
b. Predictors: (Constant), TATO, DER, ROE, CR, ROA

Source: SPSS Data Processing Results version 25

Based on the results of the test table above, it was obtained that the F value of 109.705 was greater than the F table, namely 109.705 > 2.42 and the value (sig.) $0.000 < \alpha 0.05$. It can be concluded that return on assets, return on equity, current ratio, debt to equity ratio, and total asset turnover have a significant effect on financial distress together. Thus the sixth hypothesis (H6) proposed is accepted.

DISCUSSION

1. Effect of Return On Asset (ROA) on Financial Distress

Based on the results of hypothesis testing, it shows that there is a significant influence of return on asset on financial distress conditions. This can be seen from the calculation value of 8.914 which means that the magnitude of the effect of return on assets on financial distress is 89.14% with a value (sig.) of 0.000 where the value is less than α 0.05. So it can be concluded that Ho was rejected and Ha was accepted.

The results of this study support the research results of Muhammad Abdul Muis (2020) and Cindy Cornely (2020) who stated that return on assets has an influence on financial distress conditions.

2. The Effect of Return On Equity (ROE) on Financial Distress

Based on the results of hypothesis testing, it shows that there is a significant influence of return on equity on financial distress conditions. This can be seen from the tcal value of - 3.395 which means that the magnitude of the effect of return on equity on financial distress is 33.95% with a value (sig.) of 0.002 where the value is smaller than α 0.05. So it can be concluded that Ho was rejected and Ha was accepted.

The results of this study support the research results of Muhammad Abdul Muis (2020) and Silvia Sarina, Aprilia Lubis, Linda (2020) who stated that return on equity has an influence on financial distress conditions.

3. Pengaruh Current Ratio (CR) terhadap Financial Distress Based on the results of hypothesis testing, it shows that there is a significant influence of the current ratio on financial distress. This can be seen from the calculation of 8.121 which means that the magnitude of the influence of the current ratio on financial distress is 81.21% with a value (sig.) of 0.000 where the value is less than α 0.05. So it can be concluded that Ho was rejected and Ha was accepted.

The results of this study support the results of research by Silvia Sarina, Aprilia Lubis, Linda (2020), and Anita Damanjanti, Hasnita Wulandari, and Rosyati (2021) who stated that the current ratio has an influence on financial distress conditions.

4. Pengaruh Debt to Equity Ratio (DER) terhadap Financial Distress Based on the results of hypothesis testing, it shows that the debt to equity ratio does not have a significant influence on financial distress. This can be seen from the calculation of -0.500 with a value (sig.) of 0.620 where the value is greater than α 0.05. So it can be concluded that Ho was accepted and Ha was rejected.

The results of this study are in accordance with Muhammad Abdul Muis (2020) who stated that the debt to equity ratio does not have a significant influence on financial distress.

5. The Effect of Total Asset Turnover (TATO) on Financial Distress Based on the results of the hypothesis test, it shows that total asset turnover has no effect on financial distress. This can be seen from the calculation of 1.307 with a value (sig.) of 0.199 where the value is greater than α 0.05. So it can be concluded that Ho was accepted and Ha was rejected.

The results of this study are in accordance with Cindy Cornely (2020) and Anita Damanjati, Hasnita Wulandari, and Rosyati (2021) who stated that total asset turnover has no effect on financial distress.

6. Pengaruh Return On Asset, Return On Equity, Current Ratio, Debt to Equity Ratio, dan Total Asset Turnover terhadap Financial Distress

Based on the results of hypothesis testing, it shows that return on asset, return on equity, current ratio, debt to equity ratio, and total asset turnover have a simultaneous effect on financial distress. This can be seen from the F calculation of 109.705 which is greater than the F table, namely F 109.705 > F table 2.42 and the value (sig.) of $0.000 < \alpha 0.05$.

The magnitude of the influence can be seen from the results of the Adjustested R2 test in the Model Summary table of 0.925 which means that the influence of ROA, ROE, CR, DER, and TATO in predicting financial distress is 92.5% while the remaining 7.5% is predicted by other factors outside the independent variables in this study. So it can be concluded that Ho was rejected and Ha was accepted.

CONCLUSION

Based on the results of the tests and discussions that have been described above, the following conclusions can be drawn:

- 1. There is a significant influence of Return On Asset on Financial Distress conditions, with a calculated value of 8.914 > table 2.01410. The magnitude of the influence was 89.14% and a value (sig.) was obtained of $0.000 < \alpha 0.05$. Thus the hypothesis (H1) proposed is accepted.
- 2. There is a significant influence of Return On Equity on Financial Distress conditions, with a calculated value of -3.395 < ttable 2.01410. The magnitude of the influence was 33.95% and a value (sig.) was obtained of $0.002 < \alpha 0.05$. Thus the hypothesis (H2) proposed is accepted.
- 3. There is a significant influence of the Current Ratio on the condition of Financial Distress, with a calculated value of 8.121 < ttable 2.01410. The magnitude of influence was 81.21% and a value (sig.) was obtained of $0.000 < \alpha \ 0.05$. Thus the hypothesis (H3) proposed is accepted.
- 4. There was no significant effect of Debt to Equity Ratio on Financial Distress conditions with a calculated value of -0.500 < a ttable of 2.01410 and a value (sig.) of 0.620 > a 0.05. Thus the hypothesis (H4) proposed was rejected.
- 5. There was no significant effect of Total Asset Turnover on Financial Distress conditions with a calculated value of 1.307 < ttable 2.01410 and a value (sig.) of $0.199 > \alpha 0.05$. Thus the hypothesis (H5) proposed was rejected.
- 6. There is an effect of return on assets, return on equity, current ratio, debt to equity ratio, and total asset turnover together (simultaneously) on financial distress conditions, with a value of 109.705 > 2.42 in the table. The magnitude of the influence was 92.5% of the Adjusted R2 acquisition and a value (sig.) of $0.000 < \alpha \ 0.05$ was obtained. Thus the proposed hypothesis (H6) is accepted.

REFERENSI

- Andy, & Megawati, M. (2019). Analysis of Liquidity, Profitability and Solvency Ratios to Assess the Financial Performance of Companies in Cigarette Industries Listed on the Indonesia Stock Exchange. 1(1).
- Cornely, C. (2020). Pengaruh Rasio Keuangan Dalam Memprediksi Kondisi Financial Distress. In National Conference of Applied Sciences, Engineering, Business and Information Technology, Politehnik Negeri Padang. UNIVERSITAS ISLAM NEGERI MAULANA MALIK IBRAHIM.
- Ghozali, I. (2018). Aplikasi Analisis Multivariaete dengan Program IBM SPSS 25 (9 ed.). Badan Penerbit Universitas Diponegoro.
- Hery. (2017). Analisis Laporan Keuangan Integrated and Comprehensive Edition (3 ed.). PT GRASINDO.
- Kasmir. (2016). Analisis laporan keuangan~Kasmir: Analisis laporan keuangan. PT RAJA GRAFINDO PERSADA.
- Muchtar, B., Rahmidani, R., & Siwi, M. K. (2016). Bank dan Lembaga Keuangan Lain (1 ed.). Kencana.
- Sirait, P. (2019). Analisis Laporan Keuangan (2 ed.). Ruko Jambusari 7A Yogyakarta 55283.
- Sugiyono. (2018). Metode Penelitian Kuantitatif, Kualitatif, dan R&D (Cetakan 26). ALFABETA, cv.
- Widhiari, N., & Aryani Merkusiwati, N. (2015). Pengaruh Rasio Likuiditas, Leverage, Operating Capacity, Dan Sales Growth Terhadap Financial Distress. E-Jurnal Akuntansi Universitas Udayana, 11(2), 456–469.