

The Effect of Debt to Asset Ratio (DAR) and Total Assets Turnover (TATO) on Financial Distress Conditions at PT Gajah Tunggal Tbk.

Intan Sari Budhiarjo

Faculty of Economics and Business, Universitas Pamulang **Corresponding Author:** Intan Sari Budhiarjo <u>dosen02128@unpam.ac.id</u>

A R Q I CLEINFO

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ABSTRACT

The purpose of this study is to ascertain how PT Gajah Tunggal Tbk's financial distress conditions are impacted by the debt to asset ratio (DAR) and total assets turnover (TATO). The research methodology employed in this studv is quantitative descriptive, meaning that the issues the organization faces are discussed together with a financial situational analysis given in numerical form. The financial ratios under investigation include the activity ratio, which is proxied by total asset turnover (TATO), and the solvency ratio, which is proxied by debt to asset ratio (DAR). Secondary data from PT Gajah Tunggal Tbk's income statement and balance sheet was utilized. time frame acquired from the Indonesia Stock Exchange (IDX). The partial calculation of the analysis's data indicates that the Debt to Asset Ratio (DAR) has a substantial negative effect on financial hardship, with a significance value of 0.021 < 0.05 and a ttable (-2.974 > -2.365). Financial hardship is significantly positively influenced by Total Assets Turnover (TATO) when fcalculate > ttable (3,229 > 2.365) with a significance value (0.014 < 0.05). Then, based on the test coefficient of determination (R Square) of 0.905, analyze concurrently Fcalculate > Ftable (33.295 > 4.74)with a significance value (0.000 > 0.05), indicating that there is a simultaneous significant effect between Debt to Asset Ratio (DAR) and Total Assets Turnover (TATO) on financial distress. This result indicates a 90% percentage, with other factors influencing the remaining 10%.

INTRODUCTION

Research Background

The automobile sector faces intense competition in this age of globalization, as the market for battery-powered, environmentally friendly vehicles or electrification grows. The IMF projects that economic growth would decline sharply from 6.1 percent in 2021 to 3.2 percent in 2022 and 2.9 percent in 2023 due to the global economy's fierce competitiveness. Global company operations were impacted by the crisis, and some even filed for bankruptcy. such as businesses with locations in Indonesia, Asia, and Western Europe.For Indonesian businesses, the global economic crisis has created a number of challenges. Corporate limitations may make it difficult for the business to continue operating or successful in doing so. Financial troubles, or what is commonly referred to as financial hardship, can be an indicator of company collapse. https://www.kominfo.go.id is the source.

Formulation of the Problem

Based on the background stated above, the author provides the following problem formulation:

- 1. Is there an effect of Debt to Asset Ratio (DAR) on financial distress?
- 2. Is there an effect of Total Assets Turnover (TATO) on financial distress?
- 3. Is there a simultaneous effect of Debt to Asset Ratio (DAR) dan Total Assets Turnover (TATO) on financial distress?

LITERATURE REVIEW

Management

Financial Management

Understanding Financial Management

"Financial management is planning, organizing, directing, and controlling financial activities such as procurement and utilization of business funds," state Purba et al. (2021: 114). Meanwhile, financial management is described by Irfani (2020: 11) as "business financial management activities related to searches for and effective uses of funds to achieve company objectives."

Debt To Asset Ratio (DAR)

Debt To Asset Ratio (DAR) Definition

The debt to asset ratio (DAR), according to Brigham and Huston (2019: 135) "is a ratio used to quantify the degree of debt utilization to the total assets possessed. greater debt utilized to purchase assets will result in greater loan interest paid by the business, which will be problematic since it will reduce the amount of profit that can be made."

Factors Affecting Debt to Asset Ratio (DAR)

"Factors that affects the debt to asset ratio (DAR), among others" include the following, according to Hery (2017: 295):

a. Creditors see the debtor's equity as a margin of security. A low capitalization ratio of the debtor firm implies a high risk for the creditor.

- b. The debtor will continue to have control over the business. if debt loans are the source of funding.
- c. The proceeds from the issuing and sale of shares will provide shareholders power over the business, if not outright control.
- **d.** The surplus will boost returns if the firm makes more money than it borrows and the interest it must pay creditors.

Total Asset Turnover (TATO)

Understanding Total Asset Turnover (TATO)

Utilizing Total Asset Turnover (TATO) to calculate the activity ratio, "Total assets turnover is comparison between sales and total assets of a company where the ratio it describes the speed of turnover of total assets in a period certain," states Syamsudin in Azizah (2018: 20). "Total asset turnover is a ratio that measures the turnover of all company assets, and is calculated by divide sales by total assets," state Brigham and Houston (2015: 139).

Factors Affecting Total Asset Turnover (TATO)

Some factors that affect total asset turnover (TATO) are:

- a. Financial ratios, for example sales:
 - 1) Seller's Conditions and Capabilities
 - 2) Market Conditions
 - 3) Capital
 - 4) Organizational Conditions of the Company
- b. Total assets consisting of:
 - a. Current Asset
 - Cash
 - Marketable securities
 - Account Receivable (accounts receivable)
 - Inventories
 - b. Fixed Asset
 - Land & building
 - Machine

Financial Distress

Understanding Financial Distress

When a business is in financial hardship, it means it cannot fulfill its longterm and short-term commitments. "Financial distress is a stage of deteriorating financial condition that occurs before bankruptcy or liquidation," claim Platt and Platt, referenced in (Fahmiwati, et al, 2017:90).

Financial Distress Indicators

Financial hardship may be caused by a number of factors, according to Fahmi (2013:164).

- a. One of these factors is firm debt in an excessive leverage situation, which puts the company's debt in jeopardy.
- b. The substantial quantity of debt and several bills that are due, such as trade debt, business partner loans, bank loans, leasing, and past-due bond

interest payments that need to be made as soon as possible, in addition to other commitments.

- c. The corporation has lost money both now and in the future as a result of implementing the wrong strategic plans.
- d. The corporation can no longer be stabilized by asset ownership alone since too many assets have been sold, and even if the remaining assets are sold, it still won't be enough.
- e. Profits and sales have declined both consistently and irregularly.
- f. The business frequently takes out short-term loans from several creditors
- g. Company management has been known to perpetrate fraud in the past, including corruption and giving investors and shareholders misleading information.
- h. Unexpected shifts in consumer preferences lead to a loss of customers and a drop in income. To counteract this, businesses must continuously predict client demands and develop goods that meet those needs.
- i. In order to compete with other businesses in satisfying client wants, organizations must constantly develop themselves due to the fiercely competitive nature of the business world. Companies must always improve the quality of their products to provide customers with greater value in light of the fiercer competition.
- j. A bad connection with creditors can also be harmful to the existence of the business. In particular, Law No. 4 of 1998 allows creditors to force a corporation into bankruptcy. The business must manage its debts effectively and cultivate positive relationships with creditors in order to foresee this.
- k. Companies must also constantly predict the state of the global economy. with the economy becoming more intertwined with other nations.
- H₁: The Debt to Asset Ratio has a negative impact on financial distress.
- H₂: Total Asset Turnover has a positive impact on financial distress.

H₃: Debt to Asset Ratio and Total Asset Turnover both affect financial distress.

METHODOLOGY

Types of Research

This study employed quantitative research using a descriptive methodology. One sort of study whose requirements are methodical, premeditated, and well-structured from the outset to the creation of the research design is quantitative research methodologies. The source of the quantitative research is Sugiyono (2019: 16). When doing research on particular populations or samples, quantitative research methods can be seen as positivist research methodologies. To test established hypotheses, quantitative data analysis and data collecting employing research instruments are employed."

Population

Sugiyono (2019: 126) states, "A population is a broad category made up of items or subjects with certain numbers and attributes chosen by researchers to be investigated and conclusions made from. The Financial Statements of PT Gajah Tunggal Tbk, which have been posted on the Indonesia Stock Exchange for the years 2012 through 2021, are the population being discussed here."

Sample

According to Sugiyono (2019: 127) "Samples are part of the number and characteristics of the population. So the samples used in this study are the statement of financial position (balance sheet) and income statement at PT Gajah Tunggal Tbk. with the period 2012 - 2021."

Altman Z-Score Model Analysis

According to Rudianto (2013:255), the ratios used in Altman Z-Score are as follows:

- a. Working Capital to Total Assets
- b. Retained Earnings to Total Assets
- c. Earnings Before Interest and Tax (EBIT) to Total Assets
- d. Market Value of Equity to Book value of Debt
- e. Sales to Total Assets

Descriptive Statistical Analysis

When analysing data, descriptive statistics are used to describe or depict the data as it was obtained, with no intention of making broad generalisations or inferences. Sugiyono, 2019, p. 206 The purpose of this analysis is to give a summary or variable-based description of the data using metrics like mean, minimum, maximum, and standard deviation. Important numerical metrics for sample data are presented using descriptive statistics, which facilitates readers' contextual understanding.

Normality Test

The One Sample Kolmogorov Smirnov Test is the model used to detect normality in this study. Ghozali (2018:161) defines the normality test as a test that functions to examine whether or not the data in the independent variable and dependent variable in regression equations are normally distributed.

Partial Significance Test (t-test)

The degree to which a single independent variable contributes to the statistical explanation of a dependent variable's fluctuation is demonstrated by the t-test. (Ghozali, 2017:57) The effect of growth prospects, cash conversion cycles, capital expenditures, and institutional ownership in explaining individual variances in cash holdings is evaluated using the t-test. The following criteria apply to the decision-making t-test:

- 1. Ho is rejected and Ha is approved if the computed value of tis is greater than ttable. This indicates that there is a relationship between the independent and dependent variables.
- 2. Ho is approved and Ha is denied if the computed value of tis is greater than ttable. This indicates that there is no relationship between the independent and dependent variables.

Simultaneous Significance (Test F)

To find out if all of the independent variables in the model together have an effect on the dependent variable, apply the F statistic test. This test, which looks at whether Y is linearly connected to X1 and X2, is sometimes referred to as the overall significance test for the regression line (Ghozali, 2017:56). The following are the conditions in the F test that are utilised to make decisions:

- 1. The alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected if the F count is greater than the F table. This indicates that the dependent variable is greatly influenced by all of the independent factors together.
- 2. The null hypothesis (Ho) is accepted and the alternative hypothesis (Ha) is rejected if the F count > F table. This indicates that there is no discernible relationship between the independent factors and the dependent variable.

RESEARCH RESULTS

Altman Z-Score Model Analysis

Years	X1	X2	X3	X4	X5	Z-Score	Kategori	Standar Financial
2012	0,1211	0,2455	0,3518	0,3113	0,9754	2,0052	Grey Area	
2013	0,1812	0,2073	0,0337	0,2498	0,8031	1,4750	Grey Area	
2014	0,1408	0,2042	0,0791	0,2258	0,8091	1,4591	Grey Area	
2015	0,1183	0,1709	-0,0589	0,1870	0,7393	1,1566	Financial Distress	
2016	0,1217	0,1885	0,1372	0,1912	0,7277	1,3662	Grey Area	7-142
2017	0,1092	0,1948	0,0182	0,1911	0,7761	1,2895	Grey Area	2~1,45
2018	0,1046	0,1763	-0,0135	0,1784	0,7772	1,2230	Financial Distress	
2019	0,1018	0,1964	0,0754	0,2075	0,8436	1,4248	Grey Area	
2020	0,1159	0,2261	0,0832	0,2635	0,7540	1,4428	Grey Area]
2021	0,1399	0,2201	0,0147	0,2549	0,8300	1,4596	Grey Area	

Table 1. Altman Z-score Model Ratio Analysis Results

The financial standing of PT Gajah Tunggal Tbk may be ascertained in accordance with Altman's criteria by using the Altman Z-Score computation above. The following requirements apply:

1. Z > 29 signifies that the business is in good standing and is not going through financial difficulties.

- 2. If 123 < Z < 29, the business is either in jeopardy or in a grey region.
- 3. A value of Z < 123 suggests that the business is having financial difficulties.

Descriptive Statistical Analysis

Descriptive Statistics							
N Minimum Maximum Mean Std. Deviation							
DAR (X1)	10	.574	.702	.65262	.041911		
TATO (X2)	10	.729	.977	.80517	.071374		
FINANCIAL DISTRESS (Y)	10	1.162	2.013	1.43665	.230666		
Valid N (listwise)	10						

1. The following is a description of the variable debt to asset ratio (DAR): the debt to asset ratio (DAR) has the following values: the minimum is0.574;

the maximum is0.702; the average is 0.65262; and the standard deviation is 0.041911.

- 2. The minimum value of the total asset turnover (TATO) variable is 0,729, the maximum value is 0,977, the average value is 0,80517, and the standard deviation is 0.071374.
- 3. Based on the available data, the financial distress variables are as follows: the standard deviation of financial distress is 0.230666, the average financial distress value is 1.43665, the highest financial distress value is 2,013, and the minimum financial distress value is 1,162.

Normality Test

On	e-Sample Kolmogorov-Smi	rnov Test		
		Unstandardized Residual		
N		10		
Normal Parameters ^{a,b}	Mean	.0000000		
	Std. Deviation	.07114179		
Most Extreme Differences	Absolute	.227		
	Positive	.227		
	Negative	138		
Test Statistic		.227		
Asymp. Sig. (2-tailed)		.156		
a. Test distribution is Normal.				
 b. Calculated from data. 				
c. Lilliefors Significance Correct	ion.			

Table 3. Kolmogorov-Smirnov Normality Test Results

From the above output, it can be determined that the significance value of Asymp Sig (2-tailed) is 0156 Therefore, it can be said that the tested residual data is normally distributed because the Kolmogorov-Smirnov significance value is greater than 0,05, which is (0,156 > 0,05).

Multicolliearity Test

Coefficients ^a									
		Unstan	udardized	Standardized			Collinea	rity	
Coefficients			ficients	Coefficients			Statisti	ics	
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF	
1	(Constant)	1.814	.952		1.905	.098			
	DAR (X1)	-2.713	.912	493	-2.974	.021	.494	2.023	
TATO (X2) 1.730 .536 .535 3.229 .014 .494							2.023		
a. Dep	a. Dependent Variable: FINANCIAL DISTRESS (Y)								

Table 4. Test Results for Multicollinearity

The result above indicates that the VIF value is 2,023, which is less than 10 (2,023 < 10) and the tolerance value for the independent variable X1 is 0,494, which is larger than 0,10 (0,494 > 0,10). For the independent variable X2, the tolerance value is also 0,494 > 0,10 (0,494 > 0,10), and the VIF value is 2,023, which is less than 10 (2,023 < 10). Thus, it may be said that all independent variables (X1 and X2) do not exhibit multicollinearity.

Autocorrelation Test

Model Summary ^b								
			Adjusted R	Std. Error of the	Durbin-			
Model	R	R Square	Square	Estimate	Watson			
1	.951ª	.905	.877	.080590	2.139			
a. Predictors: (Constant), DAR (X1), TATO (X2)								
b. Dependent Variable: Financial Distress								

 Table 5. Durbin Watson Autocorrelation Test Result

According to the output above, it can be determined from the Durbin-Watson test results for n = 10 and k = 2 that:

dL = 06972 dU = 16413 4 - dL = 33028 4 - dU = 23587

The result is that dU < d < 4 - dU (16413 < 2139 < 23587), meaning that the null hypothesis is accepted and there is no autocorrelation

Partial Significance Test (t-test)

Table 6. Partial Significance Test Results (Test t)

Coefficients*								
Unstandardized Coefficients Standardized Coefficients								
Model		в	Std. Error	Beta	t	Sig.		
1	(Constant)	1.814	.952		1.905	.098		
	DAR (X1)	-2.713	.912	493	-2.974	.021		
TATO X2) 1.730 536 .535						.014		
a. Depen	dent Variable:	FINANCIAL DI	STRESS (Y))				

The following conclusions can be drawn from the t-test results above:

- 1. The partial test result of the variable (DAR) indicates that, at a significance level of 0,021, which is less than 0,05 (0,021 < 0,05), the calculated t-value of -2,974 is greater than the tabled t-value of -2,365 (-2,974 > -2,365). Thus, it may be said that H2 is accepted, suggesting that the variable (DAR) has a considerable negative impact on financial hardship.
- 2. The computed t-value of 3,229 is shown in the partial test results for the variable (TATO), and it is higher than the tabulated t-value of 2,365 (3,229 > 2,365). At 0,014, the significance value is less than 0,05 (0,014 < 0,05). Thus, it may be said that H1 is accepted, indicating that the variable (TATO) significantly positively influences financial hardship.

Simultaneous Significance (Test F)

			ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.			
1	Regression	.433	2	.217	33.295	.000 ^b			
	Residual	.046	7	.007					
	Total	.479	9						
a. Dependent Variable: FINANCIAL DISTRESS (Y)									
b. Predic	b. Predictors: (Constant), DAR (X2), TATO (X1)								

Table 7. Significance Test Simultaneous (F Test)

From the table above, it can be seen that the F_{count} of 3,3295 is greater than the tabled F_{value} of 4,74 (3,3295 > 4,74) with a significance value of 0,000, which means that the statistical F value is less than 0,05 Therefore, it can be concluded that there is a significant simultaneous effect between the independent variables and the dependent variable.

Coefficient of Determination (R²)

	Model Summary ^b								
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate					
1	.951*	.905	.878	.080667					
a. Predictors: (Constant), TATO (X2), DAR (X1)									
b. Dependent Variable: FINANCIAL DISTRESS (Y)									

Table 8. Coefficient of Determination Test Result (R²)

The result of the coefficient of determination analysis yielded an R Square value of 0905 This result can be concluded that the amount of variation in the independent variables influencing the regression equation model is 90%, while the remaining 10% is influenced by other factors not included in the regression model

DISCUSSION

The Influence of Debt to Asset Ratio (X1) on Financial Distress (Y)

The results of the solvency ratio measured using the Debt to Asset Ratio (DAR) have a calculated t-value of -2,974, which is greater than the table t-value of -2,365 (-2,974 > -2,365), and the significance value of the Debt to Asset Ratio (DAR) is 0,021, which is less than 0,05 (0,021 < 0,05) based on the hypothesis test using partial test (t-test). Thus, it can be said that financial hardship is significantly impacted negatively by the debt to asset ratio (DAR).

The Influence of Total Asset Turnover (X2) on Financial Distress (Y)

The activity ratio measured using Total Asset Turnover (TATO) has a calculated t-value of 3,229, which is greater than the critical t-value of 2,365 (3,229 > 2,365). The significance value is 0,014, which is less than 0,05 (0,014 < 0,05) based on the hypothesis test using partial test (t-test). Thus, it may be concluded that H1 is accepted, suggesting that the Total Asset Turnover (TATO) has a noteworthy positive impact on financial distress.

The Influence of Debt to Asset Ratio (X1) and Total Asset Turnover (X2) on Financial Distress (Y)

The study's findings demonstrate that the Debt to Asset Ratio (DAR) and Total Asset Turnover (TATO) both affect financial distress at the same time. This is demonstrated by utilising the simultaneous test (F-test) for hypothesis testing, where the computed F value of 3,3295, with a significance level of 0,000 (F statistic < 0,05), is more than the crucial F value of 4,74 (3,3295 > 4,74). Thus, it can be said that the Debt to Asset Ratio (DAR) and Total Asset Turnover (TATO) have a major simultaneous impact on financial distress.

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to ascertain how well the debt to asset ratio (DAR) and total asset turnover (TATO) predicted PT Gajah Tunggal Tbk's financial crisis between 2012 and 2021. Multiple linear regression analysis was employed in this investigation. The Altman Z-Score algorithm was utilised to approximate the dependent variable of financial distress. The following is the research's conclusion, based on the analysis and debate that have been presented:

- PT Gajah Tunggal Tbk's financial hardship is significantly impacted negatively by a partial debt to asset ratio (DAR) between 2012 and 2021. This result was achieved using a partial test (t-test), where the Debt to Asset Ratio (DAR) has a significance value of 0,021, which is less than 0,05 (0,021 < 0,05) and the computed t-value of -2974 is more than the tabular t-value of -2,365 (-2,974 > -2,365). Consequently, the alternative hypothesis (Ha) is accepted and the null hypothesis (H0) is rejected.
- 2. PT Gajah Tunggal Tbk's financial crisis is significantly improved by partial total asset turnover (TATO) between 2012 and 2021. With a computed t-value of 3,229, which is higher than the crucial t-value of 2,365 (3,229 > 2,365), and a significance value of 0,014, which is less than 0,05 (0,014 < 0,05), this result was produced via a partial test (t-test). Consequently, the alternative hypothesis (Ha) is accepted and the null hypothesis (H0) is rejected.
- **3.** Total asset turnover (TATO) and the debt to asset ratio (DAR) both have a major impact on financial distress at the same time. The simultaneous test (F test) findings demonstrate that the statistical F value is less than 0,05 because the computed F value of 3,3295 is more than the tabular F value of 4,74 (3,3295 > 4,74), with a significance value of 0,000. The average *z*-score for PT Gajah Tunggal Tbk from 2012 to 2021 is 1,43, according to Altman's *z*-score methodology, indicating that the business is in a susceptible (grey) category.

REFERENCES

- Anwar, M. (2019). Fundamentals of Corporate Financial Management. Jakarta: Gold
- Brigham, Eugene F. and Joel F. Houston. (2019). Fundamentals of Financial Management, 15th Ed. Cengage Learning, Inc.
- Fahmi, Irham. (2013). Performance Management. Third printing. Bandung. Alphabeta.
- Ghozali, I. (2017). Application of Multivariate Analysis with SPSS Program. Semarang: UNDIP Publishing Agency.
- Hanafi, Mamduh. M., Halim, Abdul. (2016). Financial Statement Analysis 5th Edition. Yogyakarta: UPP STIM YKPN.
- Harahap, Sofyan Syafri. (2015). Critical Analysis of Financial Statements. Editions 1-10.
- Hery. (2015). Financial Statement Analysis. Yogyakarta: CAPS (Center for Academic Publishing Service).
- Irfani, A. S. (2020). Financial and Business Management: Theory and Applications. Gramedia Main Library. Jakarta: Rajawali Press.
- Kasmir. (2016). Financial Statement Analysis. Jakarta: PT Raja Grafindo Persada.
- Sartono, Agus. (2016). Financial Management: Theory and Applications. Fourth Edition. Yogyakarta: BPFE.
- Suartini, Sri and Hari Sulistyo. (2017). Financial Statement Analysis. Jakarta:Partners Media Discourse.
- Sugiyono. (2019). Quantitative and Qualitative Research Methodology and R&D. Bandung: Alfabeta, CV.
- Sujarweni, V. Wiratna. (2017). Financial Statement Analysis. Yogyakarta: Library New.
- Ambarwati, U., Sudarwati, S., & Widayanti, R. (2017). Financial distress analysis on PT Tunas Baru Lampung Tbk on the Indonesia Stock Exchange. Journal Organization and Management, 13(2), 129–141.
- Asfali, I. (2019). Effects of profitability, liquidity, leverage, activity, Sales growth against financial distress of chemical companies. Journal of Economics and Management, Vol. 20, No. 2, June 2019 ISSN: 1411-5794.
- Ayu, Handayani, & Topowijono. (2017). Effects of Liquidity, Leverage, Profitability, and Company Size Against Financial Distress Study in Basic Industrial and Chemical Sector Manufacturing Companies that Listed on Indonesia Stock Exchange in 2012-2015). Journal of Accounting & Auditing Indonesia, 43(1), 138–147.
- Damajanti, A., Wulandari, H., & Rosyati, R. (2021). Effect of Financial Ratios Against Financial Distress in Retail Trading Sector Companies On the Indonesia Stock Exchange in 2015-2018. Solutions, Vol. 19, No. 1, January 2021 e-ISSN: 2716-2532.
- Dewi, I. K., & Budhiarjo, I. S. (2023). The Effect of DER, TATO, and Firm Size on ROA at PT Elnusa Tbk for the 2011-2021 Period. Journal of Madani: Science, Technology, and Humanities, 6(2), 59-66.
- Fahmiwati, N., Luhgiatno, L., & Widaryanti, W. (2017). INFLUENCE ANALYSIS FINANCIAL TO FINANCIAL DISTRESS RATIO (Case Study in Retail

Trading Sector Companies on the Indonesia Stock Exchange Period 2012-2015). Journal of Accounting & Business, 3(01).

- Febriana, H., & Budhiarjo, I. S. (2021). The Effect of Current Ratio (CR) and Debt to Asset Ratio (DAR) on Return on Equity Ratio (ROE) at PT Sampoerna Agro Tbk for the 2010-2020 Period. Journal of Madani: Science, Technology, and Humanities, 4(2), 100-108.
- Fitri, R. A., & Syamwil, S. (2020). Effects of liquidity, activity, profitability and Leverage Against Financial Distress (Case Study on Companies Manufacturing Listed on the Indonesia Stock Exchange for the 2014-2018 Period). Journal of Economic Education, Vol. 3 No.1, March 5, 2020 ISSN: Online 2654-8429.
- Hanifa, R. U. (2019). Effects of Liquidity, Profitability, Leverage, and Activity Against Corporate Financial Distress (Empirical Study on Companies Manufacturing Listed on Indonesia Stock Exchange in 2016-2018), (Doctoral dissertation, Universitas Islam Indonesia) Scientific Journals. Binaniaga Vol. 14, No. 01, June 2018 ISSN: 0216-4094.
- Harahap, D. R. S. (2021). Effect of Financial Ratios Altman Z-Score Model ON FINANCIAL DISTRESS AT PT. JASA MARGA (PERSERO) Tbk 2012-2019, (Doctoral dissertation, State Islamic University of North Sumatra).
- Lubis, N. H., & Patrisia, D. (2019). Effect of Activity Ratio, Leverage and Firm Growth Against Financial Distress (Empirical Study on Companies Manufacturing listed on IDX for the period 2013-2017). Journal of Studies Management and Entrepreneurship, Vol. 1, No.1, 2019 ISSN: Online 2655-6499.
- Novelieta, C., & Komala, A. R. (2018). Effect of activity ratio and ratio Leverage against financial distress. Journal of Accounting Research/Vol X/No.2 October 2018 p-ISSN: 2337-3350.
- Oktaviani, N. D. D., & Lisiantara, G. A. (2022). The influence of profitability, liquidity, Activity, Leverage, and Sales Growth Against Financial Distress. Owner: Accounting Research and Journal, Vol. 6, No. 2, 2022 e-ISSN: 2548-9224.
- Purba et al. 2021. The Effect of Cash Turnover and Accounts Receivable Turnover on Return On Asset. Indonesian College of Economics. STEI. Jakarta.
- Rahayu, Fitriyani. Suwendra, I Wayan. Yulianthini, Ni Nyoman. (2016). Analysis Financial distress using the Altman Z-Score method, Springate, and Zmijewski at telecommunications companies. Journal Indonesia Management. Vol 4, No 1 (2016). Journal.
- Wahyuni, S. F., & Rubiyah, R. (2021). Financial Distress Analysis Using Altman Z-Score, Springate, Zmijeski and Grover Method on Plantation Sector Companies Listed on the Indonesia Stock Exchange. Maneggio: Scientific Journal of Master of Management, 4(1), 62-72.
- Yuriani, Y., Merry, M., Jennie, J., Ikhsan, M., & Rahmi, N. U. (2020). Influence Ownership, Liquidity, Leverage, and Activity Structure (TATO) Against Financial Distress of Consumer Goods Industry Companies It is available on the Indonesia Stock Exchange. COSTING: Journal of Economics, Business and Accounting, Vol. 4 No. 1, December 2020 e-ISSN: 2597-5234.