THE EFFECT OF LIQUIDITY, ACTIVITY AND SOLVENCY ON THE PERFORMANCE OF COMPANIES IN THE AGRICULTURAL SECTOR LISTED ON THE INDONESIA STOCK EXCHANGE

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Abstrak

This research aims to determine the effect of the Liquidity Ratio, Activity Ratio and Solvency Ratio on Profitability partially or simultaneously in Agricultural Sector Companies Listed on the Indonesia Stock Exchange in 2018-2021.The populations used in this study were 26 companies, a sample of 6 companies with 3.5 years of observation. The type of research is Quantitative Descriptive. This data processing uses SPSS Software Version 24 which is used as a tool to analyze data using multiple linear regression models. The results indicated simultaneously the Liquidity Ratio (CR), Activity Ratio (TATO) and Solvability Ratio (TIE) had a significant effect on Profitability (ROA). Partially, TIE has a significant effect on the ROA variable, while CR and TATO have no significant effect on ROA

.Keywords: Liquidity (CR), Activity (TATO), Solvability (TIE), Profitability (ROA)

INTRODUCTION

During the Covid-19 pandemic, the agricultural sector was able to increase the purchasing power of farmers. BPS noted that the Farmer's Exchange Rate (NTP) in the livestock sub-sector increased by 0.27% or 96.66 in May 2020. The agricultural sector was the highest contributor to Indonesia's national economic growth with an achievement of 16.24% (q to q) and year on year year (y-o-y) the agricultural sector continued to contribute positively, growing 2.19% during the pandemic.

Harahap, (2011) profitability describes a company's ability to gain profit or profit through all existing capabilities and resources, for example cash, sales activities, number of employees, capital, number of branches, and others. There are several methods or steps taken to get value from the level of liquidity, solvency, activity and profitability of a company, namely by assessing financial performance. Various things that can influence the results of financial performance in companies that can be analyzed in this study include Current Ratio (CR), Total Asset Turn Over (TATO) and Time Interest Earning Ratio (TIE), as Independent Variables. The ratio used to calculate financial performance in conducting this research is Return On Assets (ROA) as the Dependent Variable.

The agricultural sector is able to boost and contribute significantly to national economic growth. According to Ketut Kariyasa, Head of the Center for Data and Information, Ministry of Agriculture, if this is taken into account with the agro industry and the supply of food and beverages based on agricultural raw materials, the contribution can reach 25.84 percent. Moreover, this has an impact on the national scale economy. The agricultural sector is also becoming increasingly important in national economic growth. This is also illustrated by the controlled food inflation, the number of poor people in rural areas has decreased and the welfare of farmers has improved. With the ability of sectors in the

agricultural industry to make progress in good land management, it can be assumed that the development of this industry will develop continuously.

LITERATURE REVIEW

Financial Ratios

By looking at the financial ratios owned by a company can be one method to find out whether the company's performance is good or bad. Financial ratios can be seen through financial reports. Financial statements can be viewed from year to year, and this is used by investors to see the performance of a company from previous periods. Investors can compare it by looking at the achievements achieved by the company. Comparing with similar companies can also be a reference to indicate whether the company's performance is good or vice versa. Munawir, (2010) Financial ratio analysis is an analysis that describes the ratio or balance between a certain amount and another amount, and using the ratio as an analytical tool that can provide an overview to the analyst about the financial condition of a company, good or bad, especially when the ratio is compared with the ratio of the comparison ratio used as a standard.

Current Ratio

The current ratio is useful for a company to find out its ability to fulfill all short-term obligations that must be paid off immediately according to maturity or it can be said how much current assets the company has can cover short-term obligations that will soon be due. The size of this ratio is often considered a good or good measure of the level of liquidity of a company. Hanafi Halim, (2009) to calculate the current ratio by dividing current assets by current liabilities. The current ratio shows how much cash is owned by the company along with assets that can be converted into cash within one year, but relative to how much debt is due in the near future or not more than one year as the date stated on the balance sheet.

Total Asset Turn Over

The purpose of the activity ratio is to measure how long it takes to collect receivables in a period or how often the funds invested in these receivables rotate in a period to calculate the average number of days of receivables collection where the results of this calculation show how many days (how many days) the average account cannot be collected, calculate how many days the average inventory is in stock, measure how often the funds invested in working capital rotate in one period or how many sales are possible to achieve with each working capital used (turnover working capital), measures how often funds invested in fixed assets rotate in a period, measures the reuse of company assets compared to sales. Hery, (2017) states that Total Asset Turnover (TATO) is a ratio that measures a company's efficiency in using assets, including measuring a company's efficiency in using existing resources. This ratio is also used when evaluating the day-to-day operations of a company.

Time Interest Earning Ratio

This ratio is useful for investors to provide information on whether the company is able to meet its annual interest expense, because the more value obtained from this ratio means that it indicates that the company is getting more profits, this indicates that the company can meet interest expenses in accordance with the maturity date determined. Brigham (2012: 144) in G/Tsadik et al., (2020) Times Interest Earned (TIE) is used as a measuring tool for companies to find out how far the company has experienced a decline in operating profits before the company cannot pay its annual interest costs.Brigham (2012: 144) dalam G/Tsadik et al., (2020) Times

Interest Earned (TIE) dijadikan alat ukur bagi perusahaan untuk mengetahui seberapa jauh perusahaan mengalami penurunan terhadap keuntungan operasi sebelum perusahaan tidak dapat membayar biaya bunga tahunannya.

Return On Asset

Return On Assets describes the profit a company obtains from its assets. Wild, Subramanyam, and Halsey (2005:65) the results of the calculation of Return On Assets describe the company's return that comes from all the funding or assets that the company has obtained. Sugiyono, (2013) hypothesis is a temporary answer to the problem formulation. Because it is still temporary, it needs to be verified through empirical data collected.

Framework
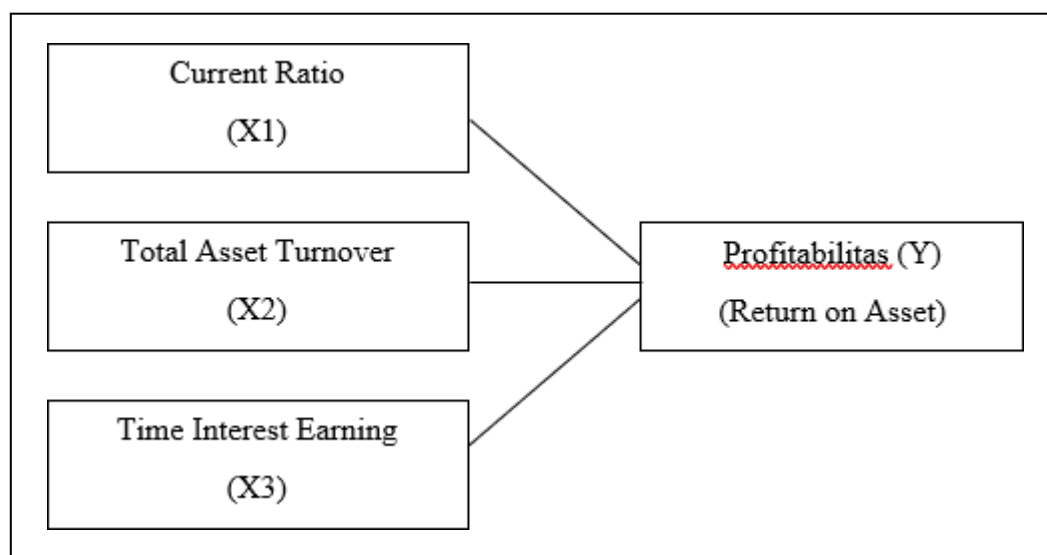
Based on the research framework and theory described above, the researcher can establish the following hypotheses:

H1: The ratios of CR, TATO, TIE have an effect on profitability as measured by ROA.

H2: Current Ratio affects company profitability as measured by Return on Assets.

H3: Total Asset Turn Over affects company profitability as measured by Return on Assets.

H4: Time Interest Earning Ratio affects company profitability as measured by Return on Assets.

METHODOLOGY

The approach in this research uses a quantitative method approach. Sugiyono, (2013), the descriptive method is a method that does not make comparisons or the relationship between one variable and another. This method is a way to assess the independent variable, either one variable or more. Information collection is attempted to obtain related data. The

descriptive method provides an explanation of the variables studied, namely the Current Ratio, Total Asset Turn Over,Timed Interest Earning Ratio in agricultural sector companies listed on the Indonesia Stock Exchange.. The author compares research data with theoretical knowledge as a basis for solving and concluding the object of discussion.

RESULTS

Descriptive Test

Descriptive analysis provides information about research variables, amount of data, minimum value, maximum value, mean value, standard deviation value (Std. Deviation).

Tabel 1

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
CR	42	0.58	4.26	1.4769	0.81261
TATO	42	0.15	1.61	0.5476	0.34767
TIE	42	-16.10	91.94	13.4679	18.90914
ROA	42	-2.14	5.36	1.7076	1.71058
Valid N (listwise)	42				

Source: data processed by SPSS version 24

From the table it can be seen that the average value of the Current Ratio variable is 1.4769, the standard deviation value is 0.81261, where in this variable the resulting average value is greater than the standard deviation value, which means that the other Current Ratios that are sampled in this study are low variations, the minimum and maximum values respectively ie 0.58 and 4.26.

The table showed that the average value of the Total Asset Turn Over variable is 0.5476, the standard deviation value is 0.34767, where in this variable the resulting average value is greater than the standard deviation value. It means the other Total Asset Turn Over that is the sample of this research is the low variation and the minimum and maximum values are respectively 0.15 and 1.61.

While the average value of the variable Timed Interest Earning Ratio is 13.4679, the standard deviation value is 18.90914, it can be concluded that the average value obtained is smaller than the standard deviation value which indicates that the Timed Interest Earning Ratio in this research sample has a high variation, and the minimum and maximum values are -16.10 and 91.94, respectively.

The average Return On Assets variable shows the number 1.7076 and has a standard deviation value of 1.71058 which means this variable has a high variation because it has an average level that can be smaller than the standard deviation results, as well as the minimum and maximum in this variable showing numbers -2.14 and 5.36.

Normality test

The normality test aims to determine whether the mixed or residual variables in the regression model are normally distributed. According to Ghozali, (2018), there are two ways to analyze data normality, namely through graphic analysis and statistical tests.

Tabel 2

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		42
Normal Parameters[a,b]	Mean	0.0000000
	Std. Deviation	1.49520012
Most Extreme Differences	Absolute	0.092
	Positive	0.092
	Negative	-0.085
Test Statistic		0.092
Asymp. Sig. (2-tailed)		.200[c,d]

Source: data processed by SPSS version 24

From that the significant value is 0.200 > 0.05, based on the Kolmogorov Smirnov One-Sample test the data is normally distributed. Gujarati Gujarati, (2015), the Central Limit Theorem (CLT) assumption states that if the number of observations is large enough the normality assumption can be ignored, meaning that the large data can be considered normal.

Heteroscedasticity Test

The purpose of the heteroscedasticity test is to determine whether there is an unequal variance from the residuals of one observation to another in the regression model. Based on Ghozali's theory, (2018), to see the accuracy of the graph plot results, it needs to be tested with a statistical test. The statistical test used in this study was the park test where the park test is one of the ways to detect heteroscedasticity symptoms.

Tabel 3. Heteroscedasticity test results

		Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.163	0.628		0.260	0.797		
	CR	0.450	0.300	0.214	1.503	0.141	0.992	1.008
	TATO	0.731	0.705	0.149	1.037	0.306	0.979	1.022
	TIE	0.036	0.013	0.393	2.748	0.009	0.983	1.017

Source: data processed by SPSS version 24

The heteroscedasticity test results of the Park Test method show that the CR variable

has a significant value of 0.450 > 0.05, the TATO variable has a significant value of 0.731 > 0.05 and the TIE variable has a significant value of 0.036 <0.05 so it can be concluded that there are no symptoms of heteroscedasticity and the assumptions of the heteroscedasticity test can be fulfilled.

Autocorrelation Test

The autocorrelation test aims to determine whether there is a correlation in the linear regression model between the confounding errors in period t and period t-1 or earlier.

Tabel 4. Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.486[a]	.236	.176	1.55310	1.801

a. Predictors: (Constant), TIE, CR, TATO

b. Dependent Variable: ROA

Source: data processed by SPSS version 24

The table shows that the DW value of 1,801 lies between -2 to +2 means no autocorrelation.

Linear Regression Test

In analyzing the data used multiple linear regression analysis to determine the effect of each independent variable on the dependent variable.

Tabel 5. Linear Regression Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.163	0.628		0.260	0.797
	CR	0.450	0.300	0.214	1.503	0.141
	TATO	0.731	0.705	0.149	1.037	0.306
	TIE	0.036	0.013	0.393	2.748	0.009

Source: data processed by SPSS version 24

A: If the value of the ratio as measured by the Current Ratio, Total Asset Turn Over and Timed Interest Earned Ratio has a value of zero, then the company's profitability as measured by return on assets is 0.163.

B1: The value of 0.450 indicates that the variable as measured by the Current Ratio has a positive effect on profitability as measured by return on assets. This can be interpreted that if the CR variable increases, the ROA will increase by 0.450.

B2: The value of 0.731 indicates that the activity variable as measured by Total Asset Turn Over has a positive effect on profitability as measured by return on assets. This can be interpreted that if TATO increases, ROA will also increase by 0.731.

B3: The value of 0.036 indicates that the solvency variable as measured by the Timed Interest Earned Ratio has a positive effect on profitability as measured by return on assets. This can be

interpreted that if TIE increases, ROA will also increase by 0.037.

Multiple Linear Regression Analysis

Multiple correlation analysis indicates how big the relationship among the independent variables namely Current Ratio, Total Asset Turn Over and Time Interest Earning Ratio with the dependent variable namely Return On Assets. Return On Asset.

Table 6. Multiple Linear Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.486ª	.236	.176	1.55310	1.801

a. Predictors: (Constant), TIE, CR, TATO

b. Dependent Variable: ROA

Source: data processed by SPSS version 24

The values contained in the table can be seen the value of the multiple correlation coefficient (R) on the variable Current Ratio, Debt to Asset Ratio and Fixed Asset Turnover to the Return On Asset Variable of 0.486 or 48.9%. This means that if the Current Ratio, Debt to Asset Ratio and Fixed Asset Turnover values increase, the Return on Assets will also increase.

Determination Coefficient Test (R-Square)

The coefficient of determination aims to determine how much the ability of the independent variable explains the dependent variable or how far the independent variable can predict the dependent variable. To find out how big the contribution or percentage of Current Ratio, Total Asset Turn Over and Time Interest Earning Ratio to Return On Assets so that it can be known through determination testing.

Table 7. Multiple Linear Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.486ª	.236	.176	1.55310	1.801

a. Predictors: (Constant), TIE, CR, TATO

b. Dependent Variable: ROA

Source: data processed by SPSS version 24

The R-Square value is 0.236 or around 23.6%. This shows that the level of relationship between the independent variables and the dependent variable in agricultural companies is 23.6% and the remaining 76.4% is influenced by other variables not examined in this study.

Adjusted R Square

Table 8. Adjusted R Square

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.486[a]	.236	.176	1.55310	1.801

a. Predictors: (Constant), TIE, CR, TATO

b. Dependent Variable: ROA

Source: data processed by SPSS version 24

Based on the table above using the SPSS 24 program, the Adjusted R Square value in this research model is 0.176 or 17.6%. This is the dependent variable, namely Return On Assets, which can be explained directly by the independent variable, namely Current Ratio, Total Asset Turn Over and Time Interest Earning Ratio.

Simultaneous Test (Test F)

The F test aims to determine whether all the independent variables have a joint effect on the dependent variable. The basis for decision making in the F test can be done by comparing the value of Fcount with Ftable and a significance level of 0.05. If Fcount is greater than Ftable and sig <0.05 then Ho is rejected and Ha is accepted.

Table 9 Simultaneous Test (Test F)

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.309	3	9.436	3.912	.016[b]
	Residual	91.661	38	2.412		
	Total	119.970	41			

Source: data processed by SPSS version 24

The results of the significant simultaneous test or F test show that the Fcount value is 3,912 while the Ftable is 2,852. It can be concluded that Fcount > Ftable with a significance level of 0,000 <0.05. Then the researcher can conclude that H1 is accepted. This means that all independent variables or capital structure variables as measured by CR, TATO and TIE together have a significant positive effect on the profitability variable as measured by ROA. This means that if there is an increase in the CR, TATO and TIE variables, the company's profitability as measured by ROA also will increase.

T test

Dasar keputusan uji-t dapat dibuat dengan membandingkan Thitung dengan Ttabel dan taraf signifikansi 0,05. Jika Thitung lebih besar dari Ttabel dan sig <; 0,05 maka Ho ditolak dan Ha diterima. Gunakan uji-t untuk menentukan pengaruh variabel independen terhadap variabel dependen parsial, apakah pengaruhnya signifikan atau tidak" (Priyatno, 2009:50-51).

Tabel 10 Partial Test Results (T Test)

Source: data processed by SPSS version 24

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	0.163	0.628		0.260	0.797
	CR	0.450	0.300	0.214	1.503	0.141
	TATO	0.731	0.705	0.149	1.037	0.306
	TIE	0.036	0.013	0.393	2.748	0.009

Coefficients[a]

From the table above, it can be explained the results of the hypothesis test as follows:

H2: Proving that CR has a positive and insignificant effect on profitability as measured by ROA. Judging from the table above, the CR variable has a Tcount of
0.260 with a significance of 0.797 > 0.05, it is known that the Ttable is 2.024. So, it can be concluded that Tcount < Ttable and sig < 0.05 means that H2 is rejected.

H3: Proving that the TATO variable has a positive and insignificant effect on profitability as measured by ROA. Judging from the table above, the TATO variable has a Tcount of 1.037 with a significance of 0.141 > 0.05, it is known that the Ttable is 2.024. So it can be concluded that Tcount < Ttable and sig > 0.05 means that H3 is rejected.

H4: Proving that the capital structure variable as measured by TIE has a positive and significant effect on profitability as measured by ROA. Seen from the table above, the TIE variable has a Tcount value of 2,748 with a significance of 0.009, it is known that the Ttable is 2024. So it can be concluded that Tcount > Ttable and sig <0.05 means that H4 is accepted.

CONCLUSION AND RECOMMENDATION

Conclusion

Based on the results of the research and discussion above, the following conclusions can be drawn:
1. Simultaneously variable financial ratios have a significant effect on return on assets, meaning that if there is an increase in the CR, TATO, and TIE ratios, it will increase profitability.
2. The partial test on the CR variable state that there is an insignificant relationship to ROA in agricultural companies for the 2018-2021 period. This can be interpreted that an increase in each CR variable will decrease the ROA variable.
3. The partial test results on the TATO variable prove that there is an insignificant relationship to ROA. This means that if the increase occurs in TATO, ROA will decrease.
4. The partial test on the TIE variable state that there is a positive and significant relationship to ROA in agricultural companies 2018-2021.

Recommendation

After conducting research and obtaining the above results, It is advisable for the company to be able to maintain and maximize the level of Current Ratio, Total Asset Turn Over and Timed Interest Earned which can have an impact on decreasing the level of company profitability which can affect the company's financial performance. In addition, companies need to pay close attention and strive to improve company performance every year. By creating financial performance that increases every year, it can attract the attention of investors to invest in agricultural companies.

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