



The Effect of Net Profit Margin (NPM) and Total Asset Turnover (TATO) on Return on Capital Employed (ROCE) at PT Sinar Mas Agro Resources and Technology TBK for the Period 2015 – 2025

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Abstract: The company's financial performance needs to be considered to determine the company's ability to generate returns on capital used. This study aims to determine the effect of Net Profit Margin (NPM) and Total Asset Turnover (TATO) on Return on Capital Employed (ROCE) at PT Sinar Mas Agro Resources and Technology Tbk for the period 2015 to 2025. The study uses a quantitative approach with secondary data in the form of annual financial reports. The population and sample of the study consist of the company's annual financial reports for 11 years with a total sampling technique. Data were collected through documentation, literature studies, and internet research, then analyzed using SPSS version 25 through the classical assumption test, multiple linear regression, coefficient of determination, as well as the t-test and F-test. The results of the study show that NPM has a positive and significant effect on ROCE, while TATO has no significant effect on ROCE. Simultaneously, NPM and TATO have no significant effect on ROCE. In conclusion, the ability to generate net profit from sales is a more influential factor on ROCE than asset turnover in the study period.

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Introduction

Companies generally carry out operational activities with the goal of achieving optimal profits or returns through effective and efficient resource management. One industrial sector that plays a significant role in the Indonesian economy is the palm oil industry, which is developing as part of the agro-industrial sector. This industry contributes through job creation, increasing foreign exchange, and alleviating poverty. The main product is Crude Palm Oil (CPO) and its derivatives are also used in various needs, such as cooking oil, margarine, soap, cosmetics, and biodiesel. This condition requires companies engaged in the palm oil industry to maintain good financial performance to be able to compete sustainably. One company engaged in this industry is PT Sinar Mas Agro Resources and

Technology Tbk or PT SMART Tbk, which is a public company and has been listed on the Indonesia Stock Exchange and has integrated business activities ranging from the management of oil palm plantations to the processing of its derivative products.

The financial performance of PT Sinar Mas Agro Resources and Technology Tbk from 2015 to 2025 shows significant changes. Based on the company's annual financial report, Return on Capital Employed (ROCE) fluctuates from year to year. The ROCE value was at its lowest point at the beginning of the observation period, then increased to reach its highest value in 2022 at 22.32% and decreased again in 2023 to 5.03%, before increasing again the following year. This fluctuation indicates that the company's ability to optimize capital utilization has changed during the study period. This condition is related to the dynamics of global Crude Palm Oil (CPO) market prices and the company's internal efficiency in managing its resources.

The next research problem is seen in the change in Net Profit Margin (NPM) during the period 2015 to 2025. Net Profit Margin reflects the proportion of net profit that a company can retain from each rupiah of sales. According to Kasmir, the higher the Net Profit Margin value, the more efficient the company is in controlling expenses relative to the revenue generated. Research data shows that NPM changes from year to year, including being at its lowest value of -1.06% in 2015, then increasing to reach its highest value in 2022 at 7.34%, before decreasing to 1.38% in 2023 and increasing again in 2024 and 2025. The change in NPM indicates that the company's ability to generate net profit from sales has not shown a stable pattern during the research period. The decrease in NPM in 2023 was also followed by a decrease in ROCE from 21.60% to 5.03%, thus indicating a directional change between the ability to generate net profit and the company's ability to utilize capital.

In addition to Net Profit Margin, Total Asset Turnover (TATO) is also an issue that needs to be studied because it is related to the company's effectiveness in utilizing all assets to generate sales. According to Hery, the higher the Total Asset Turnover, the more efficient the company is in utilizing its assets, thus contributing to increased profitability. Data from PT Sinar Mas Agro Resources and Technology Tbk shows that TATO generally increases from 1.14 times in 2016 to 1.92 times in 2025. However, this increase is not always accompanied by a proportional increase in ROCE. In 2023, for example, TATO remained at 1.68 times, but ROCE actually decreased to 5.03%. This condition indicates that high asset turnover alone is not enough to guarantee good capital performance if it is not accompanied by the company's ability to generate adequate profit margins.

The inconsistency of the relationship between Total Asset Turnover and Return on Capital Employed, as well as the indication of a relationship between Net Profit Margin and Return on Capital Employed, provides an important basis for conducting empirical testing. Data showing that an increase in TATO is not always followed by an increase in ROCE, and changes in NPM are followed by changes in ROCE, indicate the need to test the influence of each variable individually or both variables together. Therefore, this study aims to determine whether Net Profit Margin affects Return on Capital Employed, whether Total Asset Turnover affects Return on Capital Employed, and whether Net Profit Margin and Total Asset Turnover jointly affect Return on Capital Employed at PT Sinar Mas Agro Resources and Technology Tbk.

This study aims to determine the effect of Net Profit Margin (NPM) on Return on Capital Employed (ROCE), determine the effect of Total Asset Turnover (TATO) on Return on Capital Employed (ROCE), and determine the effect of Net Profit Margin and Total Asset Turnover together on Return on Capital Employed at PT Sinar Mas Agro Resources and Technology Tbk for the period 2015 to 2025. This study is important because it can provide information on the relationship between profitability ratios and activity ratios with the company's ability to utilize the capital used, as well as add insight into financial ratio analysis and become a reference and comparison material for further research. The novelty of this study lies in testing Net Profit Margin and Total Asset Turnover together on Return on Capital Employed with the object of PT Sinar Mas Agro Resources and Technology Tbk for the period 2015 to 2025, so that the study is focused on the empirical conditions of the company during the eleven years of observation.

Research methods

This study uses a quantitative method with the research object of PT Sinar Mas Agro Resources and Technology Tbk for the period 2015 to 2025. The quantitative method was chosen because this



study uses data in the form of numbers obtained from the company's financial statements and then analyzed statistically to test the established hypothesis. According to Sugiyono (2019), the quantitative method is a research method based on the philosophy of positivism, used to study a specific population or sample by collecting data using research instruments and statistical data analysis. The variables used in this study consist of Net Profit Margin (NPM) and Total Asset Turnover (TATO) as independent variables and Return on Capital Employed (ROCE) as the dependent variable. Net Profit Margin is used to measure the profit margin on sales, while Total Asset Turnover is used to measure the company's ability to generate sales based on the company's assets (Kasmir, 2021). Return on Capital Employed (ROCE) is used as an indicator of the company's ability to utilize capital to generate revenue.

The research instrument used is secondary data sourced from the annual financial report of PT Sinar Mas Agro Resources and Technology Tbk for the period 2015 to 2025. Data collection techniques are carried out through documentation, literature studies, and internet research, with the company's financial report obtained through the official website of PT Sinar Mas Agro Resources and Technology Tbk. According to Sugiyono (2019), data collection techniques are the main step in obtaining research data. The collected data are then processed using SPSS (Statistical Program for Social Sciences) version 25. Data analysis techniques include normality tests, multicollinearity tests, heteroscedasticity tests, autocorrelation tests, multiple linear regression analysis, correlation coefficients, coefficients of determination, and hypothesis tests. Normality tests are carried out through P-Plot graphs, histograms, and Kolmogorov-Smirnov, while multicollinearity tests are carried out by looking at the Tolerance and Variance Inflation Factor (VIF) values. The heteroscedasticity test was performed using a scatterplot graph, while the autocorrelation test was used to determine the correlation between confounding errors in a particular period and the previous period. Multiple linear regression analysis was used to determine the effect of Net Profit Margin (NPM) and Total Asset Turnover (TATO) on Return on Capital Employed (ROCE), while the correlation coefficient was used to measure the strength of the relationship between variables and the coefficient of determination was used to determine the model's ability to explain variations in the dependent variable. Hypothesis testing was carried out using a t-test to determine the effect of each independent variable partially and an F-test to determine the effect of independent variables simultaneously. The analysis refers to Ghazali (2018), Saragih and Sembiring (2022), Muliana et al. (2025), Susanti and Saumi (2022), and Hutagaol (2025).

The population in this study is all annual financial reports of PT Sinar Mas Agro Resources and Technology Tbk. According to Sugiyono (2019), a population is a generalization area consisting of objects or subjects that have certain quantities and characteristics to be studied and then conclusions drawn. The research sample was determined using a saturated sampling technique or total sampling, namely all annual financial report data that met the research criteria were used as samples. The sample criteria included companies listed on the Indonesia Stock Exchange, companies consistently publishing financial reports from 2015 to 2025, and financial reports being available in full and accessible through the official website of PT Sinar Mas Agro Resources and Technology Tbk. Based on these criteria, the research sample consisted of all annual financial reports of PT Sinar Mas Agro Resources and Technology Tbk from 2015 to 2025, resulting in 11 annual data sets.

The research procedure was carried out in stages starting from determining the title, data collection, data processing, to analysis and drawing conclusions. The first stage was carried out by determining the research title based on problems related to Net Profit Margin (NPM), Total Asset Turnover (TATO), and Return on Capital Employed (ROCE) at PT Sinar Mas Agro Resources and Technology Tbk for the period 2015 to 2025. The second stage was carried out by collecting the company's annual financial reports through documentation, literature studies, and internet research. The third stage was carried out by processing the financial report data into Net Profit Margin (NPM), Total Asset Turnover (TATO), and Return on Capital Employed (ROCE) data, then analyzing them using SPSS version 25 through classical assumption testing, multiple linear regression, correlation coefficient, coefficient of determination, and hypothesis testing. The final stage was carried out by analyzing the test results to answer the problem formulation and drawing conclusions regarding the effect of Net Profit Margin

(NPM) and Total Asset Turnover (TATO) on Return on Capital Employed (ROCE).

Results and Discussion

Descriptive Data Analysis

1. Net Profit Margin (NPM)

Table 1. Net Profit Margin (NPM) Data

<i>Net Profit Margin(NPM)</i>				
Year	Net Profit for the Current Year	Net sales	%	Results
2015	Rp. -385,509	Rp. 36,230,113	100	-1.06
2016	Rp. 2,599,539	Rp. 29,752,126	100	8.74
2017	Rp. 1,177,371	Rp. 35,318,102	100	3.33
2018	Rp. 597,773	Rp. 37,391,643	100	1.60
2019	Rp. 898,698	Rp. 36,198,102	100	2.48
2020	Rp. 1,539,798	Rp. 40,434,346	100	3.81
2021	Rp. 2,829,418	Rp. 57,004,234	100	4.96
2022	Rp. 5,504,956	Rp. 75,045,559	100	7.34
2023	Rp. 917,870	Rp. 66,530,549	100	1.38
2024	Rp. 1,278,269	Rp. 78,835,443	100	1.62
2025	Rp. 2,585,697	Rp. 86,946,068	100	2.97

Source: Financial Report of PT Sinar Mas Agro Resources and Technology Tbk.

2. Total Asset Turnover (TATO)

Table 2. Data on Total Asset Turnover (TATO)

<i>Total Asset Turnover(TATO)</i>			
Year	Net sales	Average Total Assets	Results
2015	Rp. 36,230,113	Rp. 23,957,015	1.51
2016	Rp. 29,752,126	Rp. 26,141,410	1.14
2017	Rp. 35,318,102	Rp. 27,124,101	1.30
2018	Rp. 37,391,643	Rp. 29,310,310	1.28
2019	Rp. 36,198,102	Rp. 27,787,527	1.30
2020	Rp. 40,434,346	Rp. 35,026,171	1.15
2021	Rp. 57,004,234	Rp. 40,345,003	1.41
2022	Rp. 75,045,559	Rp. 42,600,814	1.76
2023	Rp. 66,530,549	Rp. 39,716,363	1.68
2024	Rp. 78,835,443	Rp. 45,333,313	1.74
2025	Rp. 86,946,068	Rp. 45,202,974	1.92

Source: Financial Report of PT Sinar Mas Agro Resources and Technology Tbk.

3. Return on Capital Employed (ROCE)

Table 3. Data on Return on Capital Employed (ROCE)

<i>Return on Capital Employed(ROCE)</i>				
Year	Operating profit	Capital Employed		Results
		Total Asset	J. Short Liabilities	
2015	Rp. 1,017,019	Rp.23,957,015	Rp.9,897,188	7.23
2016	Rp. 1,445,448	Rp.26,141,410	Rp.8,356,807	8.13
2017	Rp. 1,567,268	Rp.27,124,101	Rp.8,465,263	8.40
2018	Rp. 1,581,335	Rp.29,310,310	Rp.8,452,099	7.58
2019	Rp. 1,074,556	Rp.27,787,527	Rp.10,675,761	6.28
2020	Rp. 2,323,027	Rp.35,026,171	Rp.14,358,630	11.24
2021	Rp. 3,881,950	Rp.40,345,003	Rp.15,408,950	15.57
2022	Rp. 6,805,971	Rp.42,600,814	Rp.12,104,564	22.32
2023	Rp. 1,483,072	Rp.39,726,363	Rp.10,225,382	5.03

Return on Capital Employed(ROCE)				
Year	Operating profit	Capital Employed		Results
		Total Asset	J. Short Liabilities	
2024	Rp. 2,025,151	Rp.45,333,131	Rp.13,370,729	6.34
2025	Rp. 3,558,304	Rp.45,202,974	Rp.13,310,197	11.16

Source: Financial Report of PT Sinar Mas Agro Resources and Technology Tbk.

Descriptive Statistical Test Results

Table 4. Results of Descriptive Statistical Tests

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
NPM	11	-1.06	8.74	3.3791	2.79379
TATO	11	113.81	192.35	147.2491	26.71693
ROCE	11	5.03	22.32	9.9345	5.07114
Valid N (listwise)	11				

The Net Profit Margin (NPM) variable (X1) during the observation period showed a minimum value of -1.06 and the maximum value is 8.74. The mean value is 3.3791 and the standard deviation is 2.79379. A standard deviation value smaller than the mean indicates that the Net Profit Margin (NPM) data distributed across the sample companies is relatively homogeneous, meaning there are no significant gaps between the data.

The Total Asset Turnover (TATO) variable during the observation period showed a minimum value of 113.81 and a maximum value of 192.35, with an average of 147.2491 and a standard deviation of 26.71693. As with Net Profit Margin, the standard deviation value of Total Asset Turnover (TATO) which is smaller than the average value indicates that the data variation in this variable is also relatively low, so it can be said that there is no significant data deviation.

The Return on Capital Employed (ROCE) variable as the dependent variable has a minimum value of 5.03 and a maximum value of 22.32, with an average of 9.9345 and a standard deviation of 5.07114. The average value, which is greater than the standard deviation, indicates that the Return on Capital Employed data in the companies that are the research samples are also evenly distributed.

Classical Assumption Test

1. Normality Test

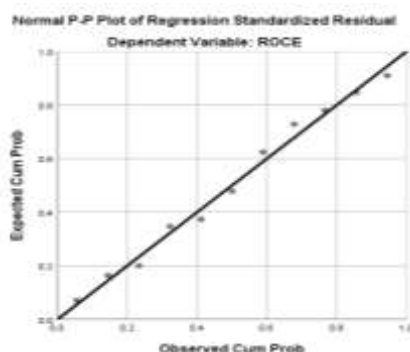


Figure 1. Graph of P-Plot Normality Test Results

Based on the image above, the results of the normality test using the P-Plot graph show that the data points are spread around the diagonal line and follow the direction of the line. This distribution pattern indicates that the residual data from the regression model is normally distributed.

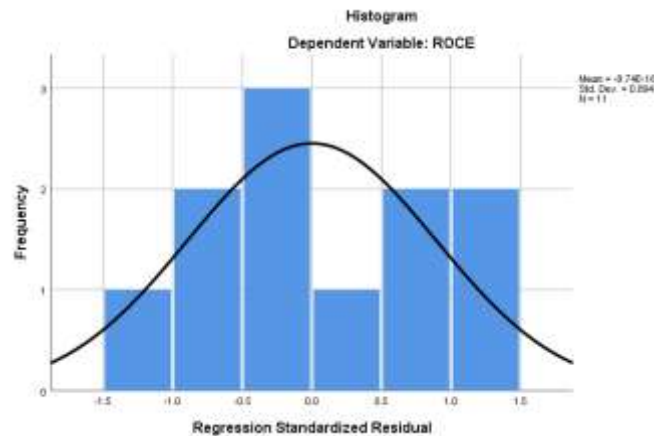


Figure 2. Histogram Normality Test Results Graph

Based on the image above, the results of the normality test using a histogram graph show that the distribution of residual data forms a pattern approaching a normal curve (bell-shaped curve). Most of the data is concentrated around the mean, and the distribution of residual frequencies does not show extreme skewing to the left or right. This condition indicates that the residuals in the regression model are normally distributed, thus meeting the assumption of normality.

Table 5. Results of the Kolmogorov-Smirnov Normality Test
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		11
Normal Parameters ^{a, b}	Mean	.0000000
	Std. Deviation	3.60561638
Most Extreme Differences	Absolute	.115
	Positive	.099
	Negative	-.115
Test Statistic		.115
Asymp. Sig. (2-tailed)		.200 ^{c, d}

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 the results of the Kolmogorov-Smirnov test, the Asymp. Sig (2-tailed) value of 0.200 can be concluded that the residual data in the regression model is normally distributed. This result indicates that the regression model in this study has met the normality assumption, which is an important requirement in multiple linear regression analysis, so that the normality assumption has been met. This result is also in line with the results of the previous Histogram and Normal P-Plot graph tests, which showed that the residual data distribution pattern follows a diagonal line and forms a normal curve.

2. Heteroscedasticity Test

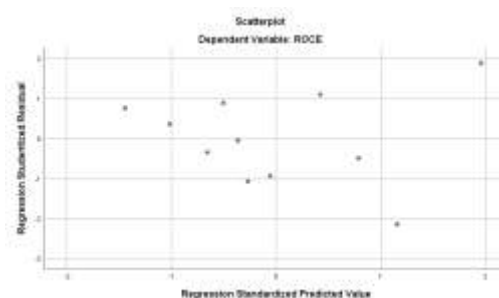


Figure 3. Scatterplot Heteroscedasticity Test Results Graph

Based on the scatterplot graph, the data points are randomly distributed, and the distribution of the points does not form a specific pattern (such as a line, wave, or fan). The points are distributed both above and below the zero axis. This condition indicates that there is no clear pattern in the distribution of the residuals, and the residual variance tends to be constant. Based on the scatterplot graph, it can be concluded that there are no symptoms of heteroscedasticity in the regression model, so the heteroscedasticity assumption has been met.

3. Multicollinearity

Table 6. Multicollinearity Test Results

		Coefficients ^a					
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics
Model		B	Std. Error	Beta	t	Sig.	Tolerance VIF
1	(Constant)	-5.020	7.784		-.645	.537	
	NPM	1.227	.467	.676	2.627	.030	.954 1.048
	TATO	.073	.049	.387	1.502	.171	.954 1.048

a. Dependent Variable: ROCE

Based on the multicollinearity test results table above, it is known that the VIF value of the Net Profit Margin (X1) and Total Asset Turnover (X2) variables is 1.048 and the Tolerance Value value is 0.954. Therefore, because $1.404 < 10$ and $0.954 > 0.1$, it can be concluded that there is no multicollinearity in the regression model so that the model is suitable for further analysis. This condition indicates that each independent variable can be used simultaneously in the regression model to explain its effect on the dependent variable, namely Return on Capital Employed (ROCE) without excessive correlation interference.

4. Autocorrelation

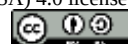
Table 7. Autocorrelation Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.703 ^a	.494	.368	4.03120	1.728

a. Predictors: (Constant), TATO, NPM

b. Dependent Variable: ROCE

The autocorrelation test results table above shows that the Durbin-Watson value is 1.728, which is close to 2, indicating that there is no strong correlation between the residuals in the study period and the residuals from the previous period. This indicates that the regression model does not exhibit any autocorrelation, either positive or negative.



Multiple Linear Regression Test**Table 8. Multiple Linear Regression Test Results**

Coefficients^a						
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	-5.020	7.784		-.645	.537
	NPM	1.227	.467	.676	2.627	.030
	TATO	.073	.049	.387	1.502	.171

a. Dependent Variable: ROCE

Based on the results of the coefficient calculations above, the following regression equation is obtained:

$$Y = a + b_1x_1 + b_2x_2$$

$$= -5.020 + 1.227 X_1 + 0.073 X_2$$

The constant value of -5.020 indicates that the Net Profit Margin (NPM) and Total Asset Turnover (TOTAL) are considered constant or have a value of zero, then the Return on Capital Employed (ROCE) value is estimated at -5.020. And the Net Profit Margin (NPM) coefficient value of 1.227 indicates that every increase in the Net Profit Margin (NPM) value of 1.227 will increase the Return on Capital Employed (ROCE) by 1.227 units assuming other variables remain constant. Finally, the Total Asset Turnover (TATO) coefficient value of 0.073 indicates that every increase in Total Asset Turnover (TATO) by 1 unit will increase the Return on Capital Employed (ROCE) by 0.073 units assuming other variables remain constant. According to Cashmere (2021), High Total Asset Turnover (TATO) reflects the company's operational efficiency in utilizing assets to maximize revenue, which ultimately has a positive impact on profitability.

Correlation Coefficient**Table 9. Correlation Coefficient Test Results**

		Correlations		
		NPM	TATO	ROCE
NPM	Pearson Correlation	1	-.215	.593
	Sig. (2-tailed)		.526	.054
	N	11	11	11
TATO	Pearson Correlation	-.215	1	.241
	Sig. (2-tailed)	.526		.474
	N	11	11	11
ROCE	Pearson Correlation	.593	.241	1
	Sig. (2-tailed)	.054	.474	
	N	11	11	11

1. The relationship between Net Profit Margin (NPM) and Return on Capital Employed (ROCE) coefficient value (Pearson Correlation) between Net Profit Margin (NPM) and Return on Capital Employed (ROCE) is 0.593 with a significance value (Sig. (2-tailed)) of 0.054. Because the r value is greater than 0.05, it can be concluded that the value shows a unidirectional (positive) relationship with a moderate or fairly strong level of closeness between Net Profit Margin (NPM) and Return on Capital Employed (ROCE)
2. The correlation coefficient between Total Asset Turnover (TATO) and Return on Capital Employed (ROCE) is 0.241 with a significance value of 0.474. This value indicates a positive relationship but with a relatively weak level of closeness. The correlation between Net Profit Margin (NPM) and Total Asset Turnover (TATO) as fellow independent variables is -0.215, which indicates a weak relationship in the opposite direction, while strengthening the conclusion of the

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multicollinearity test that there is no strong relationship between the independent variables in this study.

Coefficient of Determination (R^2)

Table 10. Correlation Coefficient Test Results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.703 ^a	.494	.368	4.03120

a. Predictors: (Constant), TATO, NPM

From the table above, the R Square value obtained is 0.494, which shows that the Net Profit Margin (NPM) and Total Asset Turnover (TATO) variables are simultaneously able to explain the variation of Return on Capital Employed (ROCE) by 49.4%, while the remaining 50.6% is influenced by other variables or factors outside this research model, such as Debt to Equity Ratio, Current Ratio and others. As for the number of independent variables that are more than one, the Adjusted R Square value is more appropriate to be used as a reference for interpretation than the usual R Square, because it has been adjusted to the number of independent variables and the sample size used. The Adjusted R Square value in this study of 0.368 shows that more conservatively, the Net Profit Margin (NPM) and Total Asset Turnover (TATO) variables are able to explain the variation of Return on Capital Employed (ROCE) by 36.8%, while the remaining 63.2% is explained by other variables outside this research model.

t-test

Table 11. t-Test Results
Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	-5.020	7.784		-.645	.537
	NPM	1.227	.467	.676	2.627	.030
	TATO	.073	.049	.387	1.502	.171

a. Dependent Variable: ROCE

Based on the table above, the significance value obtained for each variable Net Profit Margin (NPM) and Total Asset Turnover (TATO) is 0.030 and 0.171, so the Net Profit Margin (NPM) value is $0.030 < 0.05$, while the value of Total Asset Turnover (TATO) is $0.171 > 0.05$ and the t table value is 2.306, while the calculated t value of each variable is 2.627 and 1.502, so from this T test, the following conclusions are obtained:

1. The Net Profit Margin (NPM) variable has a significance value of $0.030 < 0.05$ and a calculated t value of $2.627 > t$ table of 2.306, so Net Profit Margin (NPM) has an influence on Return on Capital Employed (ROCE) so that H_0 is rejected and H_1 is accepted.
2. The Total Asset Turnover (TATO) variable has a significance value of $0.171 > 0.05$ and a calculated t value of $1.502 < t$ count of 2.306, so Total Asset Turnover (TATO) has no influence on Return on Capital Employed (ROCE) so that H_0 is accepted and H_2 is rejected.



F test**Table 12. F Test Results****ANOVA^a**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	127.160	2	63.580	3.912	.065 ^b
	Residual	130.005	8	16.251		
	Total	257.164	10			

a. Dependent Variable: ROCE

b. Predictors: (Constant), TATO, NPM

Based on the results of the table above, it is known that the calculated F is 3.912 with a significance value of 0.065. Because the calculated F value of 3.912 is smaller than the F-table of 4.459 and the significance value of 0.065 is greater than 0.05, it can be concluded that simultaneously Net Profit Margin (NPM) and Total Asset Turnover (TATO) do not have a significant effect on Return on Capital Employed (ROCE). Thus, the third hypothesis (H3) which states that Net Profit Margin (NPM) and Total Asset Turnover (TATO) simultaneously have an effect on Return on Capital Employed (ROCE) in this study is rejected.

However, it should be noted that the F-test significance value of 0.065 is very close to the 0.05 threshold, so this result still indicates a fairly strong influence, although it cannot be said to be statistically significant at the 95% confidence level. This is most likely due to the relatively limited number of research samples, namely $n = 11$, which affects the statistical power of this test.

Research Discussion**1. The Effect of Net Profit Margin (NPM) on Return on Capital Employed (ROCE)**

Based on the test results that have been conducted in this study, where the t-test results show that Net Profit Margin (NPM) has a significant effect on Return on Capital Employed (ROCE) with a calculated t value of $2.627 > 2.306$ and a significance value of $0.030 < 0.05$, this indicates that H_0 is rejected and H_a is accepted. The regression coefficient value of Net Profit Margin (NPM) is 1.227 indicating that the influence given by Net Profit Margin (NPM) is positive, meaning that every increase in Net Profit Margin (NPM) by 1 unit will increase the value of Return on Capital Employed (ROCE) by 1.227 units.

The results above demonstrate that the higher PT Sinar Mas Agro Resources and Technology Tbk's ability to generate net profit from each rupiah of sales, the higher the company's return on capital employed (ROCE). This indicates that the company's efficiency in controlling production costs, operating costs, and other sales expenses significantly contributes to the company's increased profitability on the capital it manages.

The results of this study align with research conducted by Nabillah & Tristanto (2025), which found that Net Profit Margin (NPM) has a positive and significant impact on corporate profit growth, and research by Aismadiyah (2021), which states that Net Profit Margin has a partial and significant impact on a company's return on assets and capital. These results also support Kasmir's theory, which states that a high Net Profit Margin reflects a company's efficiency in generating net income, which ultimately increases the company's return on capital.

2. The Effect of Total Asset Turnover (TATO) on Return on Capital Employed (ROCE)

Based on the results of the t-test that has been conducted, it is known that the significance value of Total Asset Turnover (TATO) is 0.171 which is greater than 0.05. This indicates that H_0 is accepted and H_a is rejected which means Total Asset Turnover (TATO) does not have a significant effect on Return on Capital Employed (ROCE) at PT Sinar Mas Agro Resources and Technology Tbk for the 2015-2025 period. The regression coefficient value of Total Asset Turnover (TATO) of 0.073 indicates a positive relationship, where every increase in Total Asset Turnover (TATO) by 1 unit will increase

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Return on Capital Employed (ROCE). However, because the significance value is more than 0.05, this positive relationship is not statistically strong enough to be declared a significant effect.

The insignificant Total Asset Turnover (TATO) on Return on Capital Employed (ROCE) is caused by several factors, where this company operates in the palm oil industry which is highly influenced by price fluctuations, especially Crude Palm Oil (CPO). The increase in sales obtained from high asset turnover is not necessarily followed by an increase in operating profit, because production costs also increase along with fluctuations in raw material prices and other operational costs. In addition, high asset turnover does not necessarily reflect efficiency in capital use, because the asset structure of agribusiness companies that are capital-intensive in plantations and palm oil processing requires a longer time to generate optimal returns.

The results of this study differ from the theory proposed by Kasmir, who stated that high Total Asset Turnover (TATO) reflects a company's operational efficiency and has a positive impact on its profitability. However, these results align with the findings of research conducted by Utami & Manda (2021) that Total Asset Turnover (TATO) does not always have a significant effect on profitability, especially for companies facing commodity price instability.

3. The Effect of Net Profit Margin (NPM) and Total Asset Turnover (TATO) on Return on Capital Employed (ROCE)

Based on the results of the simultaneous hypothesis test f test, it is known that the calculated f value obtained is 3.912 while the f table is 4.459 so that the calculated $f < f$ table. And the significance value obtained is 0.065 which is greater than 0.05. This shows that H_0 is accepted and H_a is rejected, meaning that Net Profit Margin (NPM) and Total Asset Turnover (TATO) simultaneously do not have a significant effect on Return on Capital Employed (ROCE) at PT Sinar Mas Agro Resources and Technology Tbk for the period 2015-2025.

However, it should be noted that the significance value of the f -test result of 0.065 is very close to the 0.05 limit, so this result still indicates a tendency for a fairly strong influence of both variables together, statistically not yet able to be declared significant at the 95% confidence level. This is most likely due to the limited number of research samples, which thus affects the statistical power of the test conducted.

These two variables alone cannot significantly explain changes in Return on Capital Employed (ROCE). This is reinforced by the Adjusted R-square coefficient of determination, which shows that only 36.8% of the variation in Return on Capital Employed (ROCE) can be explained by Net Profit Margin (NPM) and Total Asset Turnover (TATO), while the remaining 63.2% is explained by other variables not examined in this study.

These results indicate that company profitability, as measured by Return on Capital Employed (ROCE), is a complex performance indicator influenced by many factors, not just sales profitability and company activity. Therefore, companies need to holistically consider various financial and non-financial aspects in an effort to improve their financial performance sustainably..

Conclusion

This study concludes that Net Profit Margin (NPM) has a positive and significant effect on Return on Capital Employed (ROCE), while Total Asset Turnover (TATO) does not have a significant effect on ROCE at PT Sinar Mas Agro Resources and Technology Tbk during 2015–2025. Simultaneously, NPM and TATO do not have a significant effect on ROCE. The Adjusted R Square of 36.8% indicates that NPM and TATO explain 36.8% of the variation in ROCE, while the remaining 63.2% is explained by other factors outside the model. This study is limited by the observation period and the small number of observations, consisting of only 11 annual data. Future research is therefore recommended to extend the observation period, increase the number of observations, and include additional variables that may explain ROCE more comprehensively.



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