



The effect of non-performance loan (npl) mediation and interest rate moderation on the effect of capital adequacy ratio (car) and bopo on return on assets (roa) in consumer finance companies listed on the idx for 2019-2021

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ABSTRACT

This study aims to analyze the effect of the interaction between CAR and BOPO on financial performance (ROA) which is influenced by NPL as a mediating variable and interest rates as a moderating variable. The data in this study uses quantitative data obtained from financial reports, IDX and BPS. Data analysis used multiple linear regression which was applied with SPSS 25 software. The population taken was 7 finance companies, especially in the consumer finance sector which were listed on the IDX for the 2019-2021 period. The test results from this study concluded that CAR, BOPO, and NPL had a negative and significant effect on ROA. CAR has no significant effect on NPL. Meanwhile BOPO has a positive significant influence on NPL. Furthermore, NPL is not significantly positive mediating the effect of CAR on ROA. Whereas in the effect of BOPO on ROA, NPL can mediate negatively and significantly. Then, for the interest rate as a moderating variable, it can significantly moderate the effect of CAR on ROA positively and the effect of NPL on ROA negatively. But on the effect of BOPO on ROA, interest rates moderate positively.

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INTRODUCTION

Initially, finance companies only offered financing services for motorized vehicles (motorcycles and cars). However, along with the rapid development of the economy, the financing services offered are growing. Starting from financing manufacturing equipment, construction, mining, agriculture, offices, medical equipment, shipping, and precious metals. In addition, finance companies are also growing by offering multipurpose services or commonly referred to as cash loans with collateral for motorbikes or cars.

From the website page www.ojk.go.id it is explained that a financing institution is a company established to carry out financing service activities in the form of providing funds or

capital goods. The types of financing institutions are financing companies, venture capital companies, and financing companies for infrastructure projects.

The Non-Performing Performing Ratio (NPF) in the finance company sector has increased since January 2020 by 2.56% and then in July 2020 it continued to increase by 5.60%. This increase in the NPF ratio implies that there is a decrease in the ability of debtors to pay credit installments, especially debtors who work in the informal sector (Ardianto, Prisma, 2021). That capital does not affect ROA. Meanwhile, Nenda and Chabachib (2016) concluded that capital has a negative effect on ROA (Al-Homaidi; Mosab I. Tabash; Najib HS Farhan; Faozi A. Almaqtari, 2018). The results of the research (Dhananjay Bapat, 2018) show that NPL has a significant negative effect on profitability (ROA).

Tullung (2020) on BPD in Indonesia; Munna Rani Biswas, Subrata Deb Nath, Prasenjit Kumar Biswas, and Md. Aminur Rashid (2021) on commercial banks in Bangladesh which states that NPL has a negative and significant effect on ROA. The condition of the CoVid-19 pandemic has an impact on reducing the profitability or financial performance of finance companies and has the potential to disrupt the company's financial health level. This is because the debtor's ability to pay has decreased as a result of declining economic activity and declining people's income levels. In other words, if the debtor pays the credit installments smoothly, it can increase the company's profit. Vice versa, if the debtor does not pay credit installments smoothly, it can reduce the company's profit.

The findings of (Dinnul Alfian Akbar, 2016) state that CAR has a significant negative effect on NPF. This shows that the greater the capital, the lower the NPF.

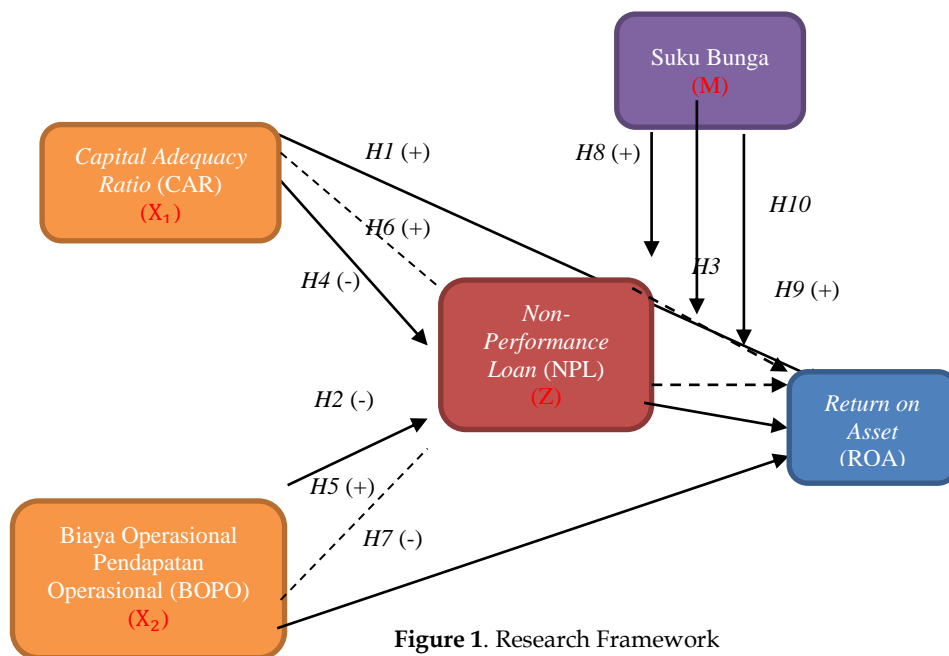
As explained in the article on the money.kompas.com website, the decline in the financial performance of finance companies during the CoVid-19 pandemic was caused by a decrease in demand for credit, both motorcycles, cars, or other financing. Sales of new cars fell by 46% and sales of new motorcycles fell by 40% in June 2020. So that finance company profits fell sharply to 65% yoy as of May 2020.

This increase in the NPF ratio implies that there is a decrease in the ability of debtors to pay credit installments, especially debtors who work in the informal sector. As research conducted by (Mushtaq, Ismail, and Hanif, 2015) stated that the level of default (non-performing loans) affects the return on company assets (profitability). Where high credit risk can worsen the financial performance of commercial banks in Pakistan.

In addition to the research gap, research on the impact of BOPO, CAR, credit risk, and external factors from the macro economy, namely interest rates on financial performance in the financing industry, is still rarely carried out, therefore researchers are interested in continuing this research more deeply.

RESEARCH METHOD

This research was conducted based on the research framework that has been established, namely:



The variables can be explained as follows:

- Capital Adequacy Ratio (CAR) (X1)
The level of profitability of Islamic banks can be influenced by the CAR variable. The higher the CAR number indicates that the bank's ability to bear the risk of any risk-prone productive assets will improve (Edhi and Muhammad 2019). Currently, the minimum CAR requirement set by Bank Indonesia is 8% of the total RWA. These requirements refer to international scale standards set by the Banking for International Settlements (BIS). The following CAR mathematical formula is:
Capital Adequacy Ratio (CAR) = Capital/RWA x 100%
- Operating Expenses Operating Income (BOPO) (X2)
Operating Costs Operating Income is a ratio that compares operating costs and operating income. The smaller the BOPO ratio, the better the performance of the bank's management (Selamet 2019). BOPO's mathematical formula is:
BOPO = (Operating Expenses)/(Operating Income) x 100 %
- Interest Rates (M)
There are two theories of interest rates, namely the Classical theory and Keynesian theory. From the classical theory, the interest rate is the result of the interaction between savings and investment. If interest rates rise, people are increasingly motivated to save their money, and vice versa. Meanwhile, according to Keynesian theory, the interest rate is determined by the supply and demand for money. If interest rates rise, people's desire to hold cash is smaller by investing in buying securities and vice versa according to Nopirin (2019).
- Non-Performance Loan (NPL) (Z)
NPL is a condition when the customer is unable to pay his obligations in installments to the bank according to the agreement, (Mudrajat Kuncoro and Suhardjono, 2019). NPL is also known by another term, namely Non-Performing Financing. NPL is commonly used to calculate the ratio of financing or non-performing loans to conventional banks, while

NPF is used to calculate the ratio of financing or non-performing loans to Islamic banks and finance companies. Bank Indonesia stipulates that the maximum allowed NPL ratio is 5%. The NPL mathematical formula is:

$$\text{NPL} = (\text{Total Credit Issues}) / (\text{Total Credits Issued}) \times 100\%$$

e. Return on Asset (ROA) (Y)

Return on Assets (ROA) is one of the calculations of profitability ratios to measure a company's financial performance, in addition to Return on Equity (ROE), Operating Margin (OM), Net Profit Margin (NPM), and Return on Invested Capital (ROIC), (Eugene and Joel, 2017). According to Farah (2011), ROA is an indicator to see how much a company is able to generate profits from the total assets used. The ROA mathematical formula is:

$$\text{Return on Assets (ROA)} = (\text{Earning After Tax}) / (\text{Total Assets}) \times 100\%$$

RESULTS AND DISCUSSIONS

Descriptive Statistics Test Results

Table 1. Descriptive Statistics Test Results

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	
ROA1	84	-.0123	.0908	.021569	.0236318	
NPF1	56	.0030	.0401	.016011	.0090565	
CAR1	50	.2232	1.6564	.602482	.3839473	
BOPO1	84	.6432	1.2034	.849394	.1200692	
Suku Bunga	84	.0350	.0600	.044653	.0093382	
Valid N (listwise)	44					

Results of the One-Sample Kolmogorov-Smirnov Test

Table 2. Results of the One-Sample Kolmogorov-Smirnov Test

One-Sample KS Test						
		ROA1	NPF1	CAR1	BOPO1	Suku Bunga
N		84	56	50	84	84
Normal Parameters ^{a,b}	Mean	.021569	.016011	.602482	.849394	.044653
	Std. Deviation	.0236318	.0090565	.3839473	.1200692	.0093382
Most Extreme Differences	Absolute	.175	.147	.171	.072	.191
	Positive	.175	.147	.171	.072	.191
	Negative	-.128	-.075	-.162	-.043	-.151
Test Statistic		.175	.147	.171	.072	.191
Asymp. Sig. (2-tailed)		.000 ^c	.004 ^c	.001 ^c	.200 ^{c,d}	.000 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

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

Table 3. Results of the Second One-Sample Kolmogorov-Smirnov Test

One-Sample KS Test						
		ROA	NPF	CAR	BOPO	Suku Bunga
N		84	84	84	84	84
Normal Parameters ^{a,b}	Mean	.02157	.01567	.60402	.84939	.04455
	Std. Deviation	.023632	.007796	.295282	.120069	.009532
Most Extreme Differences	Absolute	.007	.018	.007	.007	.152
	Positive	.007	.017	.007	.007	.152
	Negative	-.007	-.018	-.007	-.007	-.106
Test Statistic		.007	.018	.007	.007	.152
Asymp. Sig. (2-tailed)		.200 ^{c,d}	.200 ^{c,d}	.200 ^{c,d}	.200 ^{c,d}	.000 ^c

a. Test distribution is Normal.

b. Calculated from data.

- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.

After the regression equation method is used, the amount of data to be processed on all variables becomes complete as much as 84. So, from the results of the second Kolmogorov-Smirnov test, it gives better results, namely the data is normally distributed compared to the previous one except for interest rates.

Normality Test

- a. Model I Regression

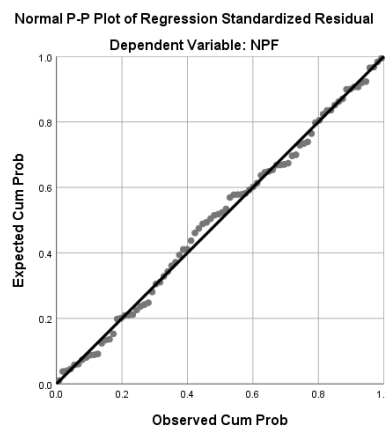


Figure 1. Normal P-P Plot of Regression Standardized Residual

- b. Model II Regression

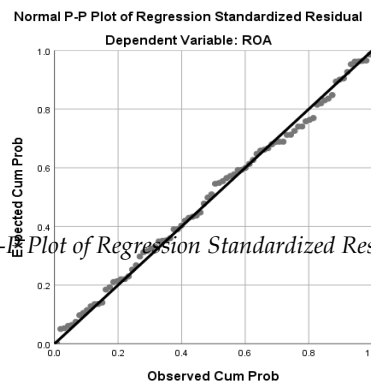


Figure 2. Normal P-P Plot of Regression Standardized Residual Model II

- c. Model III Regression

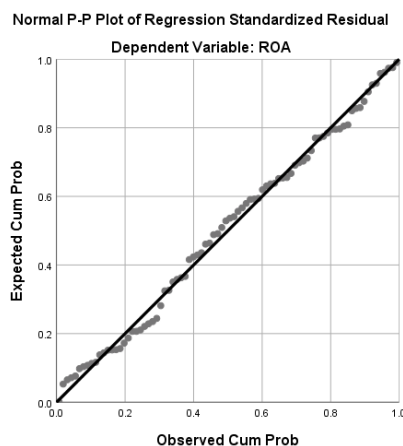


Figure 3. Normal P-P Plot of Regression Standardized Residual Model III

This shows that the data is normally distributed, so based on the results of the normality test using the probability plot method, it can be concluded that the regression model meets the normality assumption.

Multicollinearity Test

a. Model 1 Regression

Table 4. Multicollinearity Model I

Model	Coefficients ^a					Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
	B	Std. Error	Beta				
1 (Constant)	-.010	.006		-1.796	.076		
CAR	.003	.003	.100	1.012	.315	.996	1.004
BOPO	.029	.006	.439	4.432	.000	.996	1.004

a. Dependent Variable: NPF

b. Model II Regression

Table 5. Multicollinearity Model II

Model	Coefficients ^a					Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
	B	Std. Error	Beta				
1 (Constant)	.159	.010		15.281	.000		
CAR	-.010	.005	-.121	-2.033	.045	.984	1.016
BOPO	-.145	.013	-.735	-11.180	.000	.802	1.247
NPF	-.547	.201	-.180	-2.725	.008	.792	1.263

a. Dependent Variable: ROA

c. Model III Regression

Table 6. Multicollinearity Model III

Model	Coefficients ^a					Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
	B	Std. Error	Beta				
1 (Constant)	.188	.012		15.379	.000		
CAR	-.016	.005	-.197	-3.382	.001	.871	1.149
BOPO	-.145	.012	-.736	-12.127	.000	.802	1.247
NPF	-.590	.186	-.195	-3.178	.002	.789	1.267

Suku Bunga	-.556	.144	-.224	-3.860	.000	.874	1.144
a. Dependent Variable: ROA							

From the table above, the three models show that the results of the Collinearity Statistics test show that the VIF value is <10 and the tolerance value is > 0.1. It can be concluded that the regression model is free from the assumption of collinearity.

Heteroscedasticity Test

a. Model I Regression

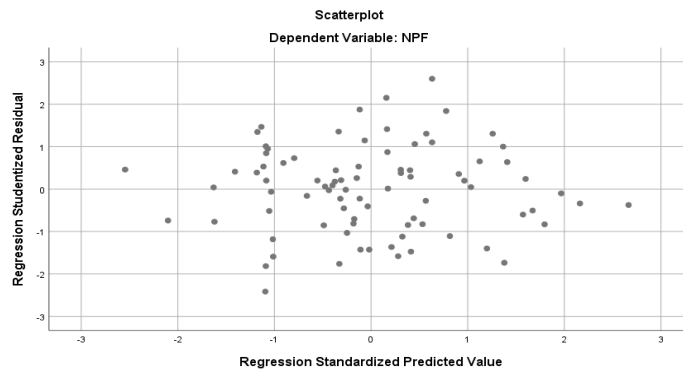


Figure 4. Scatterplot Model I

b. Model II Rgression

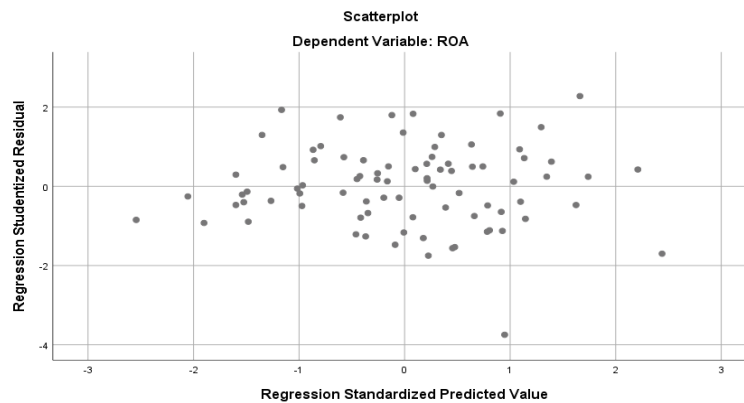


Figure 5. Sscatterplot Model II

c. Model III Regression

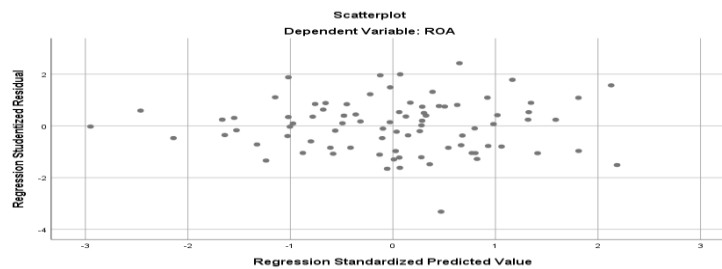


Figure 6. Sscatterplot Model III

In the graphs of the three models above it shows that the distribution of points in the graph does not show any particular pattern, so that it can be stated that the regression model is free from the assumption of heteroscedasticity.

Autocorrelation Test

a. Model I Regression

Table 7. Model Summary Model 1

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.456 ^a	.208	.189	.007022	2.040

a. Predict.: (Const.), BOPO, CAR

b. Dependent Variable: NPF

The table above shows that the test results with the Durbin-Watson method have a DW value of 2.040. Meanwhile, the dU value in the Durbin-Watson table with $\alpha = 5\%$ is 1.6942. Thus, the value of $DW > dU$, which means that the regression model has no symptoms of autocorrelation.

b. Model II Regression

Table 8. Model Summary Model II

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.850 ^a	.722	.712	.012684	2.055

a. Predict.: (Const.), NPF, CAR, BOPO

b. Dependent Variable: ROA

The table above shows that the test results with the Durbin-Watson method have a DW value of 2.055. Meanwhile, the dU value in the Durbin-Watson table with $\alpha = 5\%$ is 1.7199. Thus, the value of $DW > dU$, which means that the regression model has no symptoms of autocorrelation.

c. Model III Regression

Table 9. Model Summary Model III

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.875 ^a	.766	.755	.011708	2.050

a. Predict.: (Const.), Suku Bunga, BOPO, CAR, NPF

b. Dependent Variable: ROA

The table above shows that the test results with the Durbin-Watson method have a DW value of 2.050. Meanwhile, the dU value in the Durbin-Watson table with $\alpha = 5\%$ is 1.7462. Thus, the value of $DW > dU$, which means that the regression model has no symptoms of autocorrelation.

Coefficient of Determination Test

a. Model I Regression

As seen from table 7, the R Square results are 0.208 or 20.80%, the variation of NPL/NPF can be explained by variations in CAR and BOPO. While the remaining 79.20% ($100\% - 20.80\% = 79.20\%$) is explained by other factors outside this regression model.

b. Model II Regression

As seen from table 8, the R Square results are 0.722 or 72.20%, the variation of ROA can be explained by variations in CAR, BOPO, and NPL/NPF. While the remaining 27.80% (100% - 72.20% = 27.80%) is explained by other factors outside this regression model.

c. Model III Regression

As seen from table 9, the R Square results are 0.766 or 76.60%, the variation of ROA can be explained by variations in CAR, BOPO, NPL/NPF, and interest rates. While the remaining 23.40% (100% - 76.60% = 23.40%) is explained by other factors outside this regression model.

d. Moderation Regression

Table 10. Model Summary Regression Moderasi

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.899 ^a	.808	.791	.010816	1.911

a. Predict.: (Const.), m_sb.bopo, NPF, m_sb.car, BOPO, m_sb.npf, CAR, Suku Bunga

b. Dependent Variable: ROA

The R Square result is 0.808 or 80.80%, the variation of ROA can be explained by variations in CAR, BOPO, NPL/NPF, and interest rates. While the remaining 19.20% (100% - 80.80% = 19.20%) is explained by other factors outside this regression model.

F Test

a. ANOVA Model 1 Regression

Table 11. ANOVA Model 1

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	2	.001	10.640	.000 ^b
	Residual	.004	81	.000		
	Total	.005	83			

a. Dependent Variable: NPF

b. Predict.: (Const.), BOPO, CAR

The result of the significant level of the F test is 0.000, which means that the value is below 0.05. So, it can be concluded that CAR and BOPO significantly affect NPL/NPF.

b. ANOVA Model II Regression

Table 12. ANOVA Model II

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.033	3	.011	69.374	.000 ^b
	Residual	.013	80	.000		
	Total	.046	83			

a. Dependent Variable: ROA

b. Predict.: (Const.), CAR, NPF, BOPO

The result of the significant level of the F test is 0.000, which means the value is below 0.05. So, it can be concluded that CAR, BOPO, and NPL/NPF significantly affect ROA.

c. ANOVA Model III Regression

Table 13. ANOVA Model III

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.

1	Regression	.036	4	.009	64.793	.000 ^b
	Residual	.011	79	.000		
	Total	.046	83			

a. Dependent Variable: ROA

b. Predict.: (Const.), Suku Bunga, BOPO, NPF, CAR

The result of the significant level of the F test is 0.000, which means the value is below 0.05. So, it can be concluded that CAR, BOPO, NPL/NPF, and interest rates significantly affect ROA.

d. ANOVA Moderation Regression

Table 14. ANOVA Model Moderation

		ANOVA ^a				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.037	7	.005	45.745	.000 ^b
	Residual	.009	76	.000		
	Total	.046	83			

a. Dependent Variable: ROA

b. Predict.: (Const.), m_sb.bopo, NPF, m_sb.car, BOPO, m_sb.npf, CAR, Suku Bunga

The result of the significant level of the F test is 0.000 which means the value is below 0.05. So, it can be concluded that CAR, BOPO and NPL/NPF significantly influence ROA which is moderated by Interest Rates.

T Test

a. Model I Regression

Table 15. Coefficients Model I

		Coefficients ^a					Collinearity Statistics	
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	-.010	.006		-1.796	.076		
	CAR	.003	.003	.100	1.012	.315	.996	1.004
	BOPO	.029	.006	.439	4.432	.000	.996	1.004

a. Dependent Variable: NPF

Based on the table above, the CAR coefficient is 0.100 and the significance level is 0.315 > 0.05. This shows that CAR has a positive but not significant effect on NPL/NPF. While the magnitude of the BOPO coefficient is 0.439 and a significance level of 0.000 < 0.05. This shows that BOPO has a positive and significant effect on NPL/NPF. Thus, the regression equation for model I is:

$$\text{NPL} = 0.100 \text{ CAR} + 0.439 \text{ BOPO}.$$

b. Model II Regression

Table 16. Coefficients Model II

		Coefficients ^a					Collinearity Statistics	
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	.159	.010		15.281	.000		
	CAR	-.010	.005	-.121	-2.033	.045	.984	1.016
	BOPO	-.145	.013	-.735	-11.180	.000	.802	1.247
	NPF	-.547	.201	-.180	-2.725	.008	.792	1.263

a. Dependent Variable: ROA

Based on the table above, the CAR coefficient is -0.121 and the significance level is 0.045 <0.05. This shows that CAR has a negative and significant effect on ROA. The BOPO coefficient is -0.735 and the significance level is 0.000 <0.05. This shows that BOPO has a negative and significant effect on ROA. Furthermore, the magnitude of the coefficient of NPL/NPF is -0.180 and a significance level of 0.008 <0.05. This shows that NPL has a negative and significant effect on ROA. Thus, the regression equation for model II is:

$$ROA = -0.121 CAR - 0.735 BOPO - 0.180 NPL.$$

c. Model III Regression

Table 17. Coefficients Model III

		Coefficients ^a					Collinearity Statistics	
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.	Tolerance	VIF
		B	Std. Error	Beta	t			
1	(Constant)	.188	.012		15.379	.000		
	CAR	-.016	.005	-.197	-3.382	.001	.871	1.149
	BOPO	-.145	.012	-.736	-12.127	.000	.802	1.247
	NPF	-.590	.186	-.195	-3.178	.002	.789	1.267
	Suku Bunga	-.556	.144	-.224	-3.860	.000	.874	1.144

a. Dependent Variable: ROA

Based on the table above, the CAR coefficient is -0.187 and the significance level is 0.001 <0.05. This shows that CAR has a negative and significant effect on ROA. The BOPO coefficient is -0.736 and the significance level is 0.000 <0.05. This shows that BOPO has a negative and significant effect on ROA. The NPL/NPF coefficient is -0.195 and the significance level is 0.002 <0.05. This shows that NPL/NPF has a negative and significant effect on ROA. Furthermore, the magnitude of the interest rate coefficient is -0.224 and a significance level of 0.000 <0.05. This shows that interest rates have a negative and significant effect on ROA. Thus, the regression equation for model III is:

$$ROA = -0.187 CAR - 0.736 BOPO - 0.195 NPL - 0.224 \text{ Interest Rate}.$$

d. Moderation Regression

Table 18. Coefficients Model Moderation

		Coefficients ^a					Collinearity Statistics	
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.	Tolerance	VIF
		B	Std. Error	Beta	t			
1	(Constant)	.215	.028		7.731	.000		
	CAR	.012	.013	.148	.915	.363	.097	10.354
	BOPO	-.212	.031	-1.075	-6.759	.000	.100	10.021
	NPF	.365	.412	.121	.887	.378	.137	7.318
	Suku Bunga	-1.406	.563	-.567	-2.498	.015	.049	20.428
	m_sb.npf	-18.461	8.823	-.295	-2.092	.040	.127	7.885
	m_sb.car	-.677	.284	-.372	-2.384	.020	.104	9.624
	m_sb.boपो	1.739	.656	.691	2.652	.010	.037	26.904

a. Dependent Variable: ROA

Based on the table above, the CAR coefficient is 0.915 and the significance level is 0.363 <0.05. This shows that CAR has a positive and insignificant effect on ROA. The BOPO coefficient is -1.075 and the significance level is 0.000 <0.05. This shows that BOPO has a negative and significant effect on ROA. The coefficient of NPL/NPF is 0.121 and the significance level is 0.378 > 0.05. This shows that NPL/NPF has a positive and insignificant effect on ROA. The interest rate coefficient is -0.567 and the significance level is 0.015 <0.05. This shows that

interest rates have a negative and significant effect on ROA. Furthermore, the magnitude of the CAR coefficient moderated by interest rates is -0.372 and a significance level of $0.020 < 0.05$. This shows that CAR has a negative and significant effect on ROA which is moderated by Interest Rates. The BOPO coefficient which is moderated by interest rates is 0.691 and the significance level is $0.010 < 0.05$. This shows that BOPO has a positive and significant effect on ROA which is moderated by Interest Rates. The NPL/NPF coefficient which is moderated by interest rates is -0.295 and the significance level is $0.040 < 0.05$. This shows that NPL/NPF has a negative and significant effect on ROA which is moderated by interest rates.

Thus, the regression equation for the moderation model is:

$$\text{ROA} = 0.148 \text{ CAR} - 1.075 \text{ BOPO} + 0.121 \text{ NPL} - 0.567 \text{ Interest Rate} - 0.372 \text{ CAR} \cdot \text{Interest Rate} + 0.691 \text{ BOPO} \cdot \text{Interest Rate} - 0.295 \text{ NPL} \cdot \text{Interest Rate}$$

Path Analysis Test

- a. The effect of NPL mediation on the effect of CAR on ROA
It is known that the direct effect of capital on ROA is -0.121. Meanwhile, the indirect effect of capital on ROA mediated by NPL is $(-0.029) \times (-0.180) = 0.00522$. Based on the results of these calculations, it means that the direct effect is smaller than the indirect effect. So it can be concluded from the results of this test that indirectly the effect of CAR mediated by NPL has a more positive effect on ROA.
- b. The effect of NPL mediation on the effect of BOPO on ROA
It is known that the direct effect of Operational Income Operating Costs on ROA is -0.735. Meanwhile, the indirect effect of BOPO on ROA mediated by NPL is $(0.158) \times (-0.180) = -0.02844$. Based on the results of these calculations, it means that the direct effect is greater than the indirect effect. So it can be concluded from the results of this test that indirectly the effect of BOPO mediated by NPL does not increasingly have a negative effect on ROA.

Sobel Test

- a. The effect of NPL mediation on the effect of CAR on ROA
In table 15 the CAR variable has a t value of 1.012 and in table 16 the NPL variable has a t value of -2.725. So that with the Sobel test, the results are obtained, namely the t value is 0.949 and the p-value is $0.343 > 0.05$. Thus, it can be concluded that NPL does not significantly mediate the effect of CAR on ROA.
- b. The effect of NPL mediation on the effect of BOPO on ROA
In table 15 the BOPO variable has a t value of 4.432 and in table 16 the NPL variable has a t value of -2.725. So that with the Sobel test, the results are obtained, namely the t value is 2.321 and the p-value is $0.020 < 0.05$. Thus, it can be concluded that NPL significantly mediates the effect of BOPO on ROA.

Discussion

The following table summarizes the results of testing the hypothesis of this study:

Table 19. Discussion

Hhypothesis	Coefficient Value	Significant Value		Conclusion
H1	-0.121	0.045	H1 Rejected	CAR has a negative and significant effect on ROA
H2	-0.735	0.000	H2 Accepted	BOPO has a negative and significant effect on ROA
H3	-0.180	0.008	H3 Accepted	NPL has a negative and significant effect on ROA
H4	0.100	0.315	H4 Rejected	CAR has a positive but not significant effect on NPL

H5	0.439	0.000	H5 Accepted	BOPO has a positive and significant effect on NPL
H6	0.00522	0.343	H6 Accepted	NPL mediates a positive but not significant effect of CAR on ROA
H7	-0.02844	0.020	H7 Accepted	NPL mediates the negative and significant effect of BOPO on ROA
H8	-0.372	0.020	H8 Rejected	Interest rates moderate the negative and significant effect of CAR on ROA
H9	0.691	0.010	H9 Accepted	Interest rates moderate the positive and significant effect of BOPO on ROA
H10	-0.295	0.040	H10 Rejected	Interest rates moderate the negative and significant effect of NPL on ROA

CONCLUSION

As a reference for prospective investors who wish to place their funds in a finance company, especially in the consumer finance sector, which is listed on the IDX. By looking at the considerations and indicators of the variables proposed in this study, it can be used as a reference in selecting and assessing companies that are good in financial statements and have prospects for investment returns. And in making decisions to determine factors related to improving company performance, especially Return on Assets (ROA) and the variables that can influence it. Using a sample of companies outside the Financing Company category in the consumer finance sector and a longer period to add more valid references and test results. And can add a number of other independent variables or use other variables in predicting Return on Assets (ROA).

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