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The Effect of Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR) and Net Interest Margin (NIM) on Financial Performance (ROA) With Car as Intervening Variables on Go Public Commercial Banks in Indonesia and Listed on BEI Period 2014-2018

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ABSTRACT:
Financial performance is a picture of the achievement of the company's success can be interpreted as the results that have been achieved for various activities that have been carried out. Profitability is a ratio to assess a company's ability to seek profits. This ratio also provides a measure of the effectiveness of a company's management. The purpose of this study is to determine the effect of NPL, LDR, and NIM on financial performance (ROA) through intervening variables (CAR).
The analytical method used is Multiple Linear Analysis, which was previously performed Descriptive Analysis Test, Classical Assumption Test (Normality Test, Heteroscedasticity Test, Multicollinearity Test, Linearity Test), Path Analysis then continued with Hypothesis Test which is processed using SPSS version program 26.
The results showed that NPL and LDR did not affect ROA and NIM affected ROA. NPL and LDR do not affect CAR, NIM affects CAR. CAR affects ROA on commercial banks listed on the IDX. CAR is able to mediate NPL against ROA, however CAR cannot mediate LDR and NIM to ROA at Commercial Banks listed on the IDX. Simultaneously all independent variables (NPL, LDR, and NIM) are influenced by CAR Variables of 3.1%. The rest (100% -3.1%) is explained by other variables not included in this study.

Keywords: Non Performing Loan, Loan to Deposit Ratio, Net Interest Margin, financial performance

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1. INTRODUCTION

Previous research studies related to the analysis of the effect of NPL, LDR and NIM on financial performance: Yatiningsih (2015) the title analysisthe influence of BOPO, LDR, NPL, SIZE, CAR and NIM on ROA (Case Study of Conventional Commercial Banks Listing on the Indonesia Stock Exchange 2009-2013)the results of the study showed that BOPO, NPL, LDR and CAR had a significant negative effect on ROA. NIM size has a significant positive effect on ROA. The magnitude of the degree of determination test (Adjusted R Square) is 0.784 which means that the independent variables BOPO, LDR, NPL, Size, CAR and NIM influence 78.4% of ROA. Meanwhile, the remaining 21.5% is explained by other variables outside the research model.

Agustiningrum (2011) the title Analysis of the Effect of CAR, NPL, and LDR on Profitability in Banking Companies) with the results of the analysis note that CAR has no significant effect on profitability (ROA).NPL has a significant negative effect on profitability (ROA), whereas LDR has a significant positive effect on profitability (ROA).

Banks are the heart of the economy in a country. The progress of a country's economy can be measured by the progress of banks in that country. But that does not mean the bank does not have problems such as, performance at the bank. To assess the financial performance of a bank is to conduct an analysis of the requirements that must be met on the standard financial ratio of commercial banks. Like Capital, Asset Quality, Earning & Efficiency, Liquidity. Company performance is measured by the profitability ratio of Return On Assets (ROA) because ROA is aimed at better performance measurement.

CAR is a capital that shows the ability of banks to provide funds for business development needs and to accommodate risks caused by bank operations that will mediate NPLs, LDRs, NIMs against ROA. Non Performing Loans (NPLs), Loans to Deposits Ratio (LDR),and Capital Adequacy Ratio (CAR) is the ratio of the ratio between the ratio of capital to risk weighted assets and in accordance with government regulations, Kasmir (2015).

Performance development at commercial banks listed on the Indonesia Stock Exchange in 2014 to 2018 experienced ups and downs. Net Interest Margin in 2018 decreased by 0.18% compared to 2017.When NIM has decreased in 2018 credit quality also decreased by 0.20% compared to 2017, this can be seen through the NPL. The increase in NPLs in 2015-2017 affected the value of the Capital Adequacy Ratio (CAR). In 2018 the CAR had decreased from 2017 which was 0.21%. The decline in CAR reflects that bank capital is weak. It is known that the value of profitability (ROA) in 2016 decreased from the previous year which amounted to 0.09%. Profitability is a ratio to assess a company's ability to seek profits. This ratio also provides a measure of the effectiveness of a company's management. The ups and downs of financial ratios at commercial banks in the 2014-2018 period have an inconsistent relationship between the variables of NPL, LDR, NIM, ROA and CAR, for this reason, further research is needed to determine the effect of financial ratios on financial performance.

2. LITERATURE REVIEW

2.1 Theory

Financial performance is the result of success that can be interpreted as the results that have been obtained from various activities that have been carried out. Profitability is a ratio to assess a company's ability to seek profits. This ratio also provides a measure of the effectiveness of a company's management. The purpose of this study is to determine the effect of NPL, LDR, and NIM on financial performance (ROA) through intervening variables (CAR).

This research focuses on banking companies. To assess the financial performance of a bank is to conduct an analysis of the requirements that must be met on the standard financial ratio of commercial banks. The object of research is commercial banks listed on the Indonesia Stock Exchange in the 2014-2018 Period.

According to Latumaerissa (2017) Net Performing Loan (NPL) is a credit risk that arises because the debtor cannot return the funds borrowed with interest for the bank. A high NPL can increase credit interest rates, which can cause low demand for credit. This ratio can be formulated as follows:

$$Ratio\ NPL : \frac{(Total\ NPL)}{(Total\ Kredit)}$$

According to Riyadi (2015) Loan to Deposit Ratio (LDR) is a comparison of total loans to Third Party Funds (DPK) collected by banks. This ratio will show the level of ability of banks to distribute funds from the public. This ratio can be formulated as follows:

$$LDR: \frac{Credit}{(Third\text{-}party\ funds)\ x\ 100\%}$$

According to Frianto (2012) Net Interest Margin (NIM) is a ratio used to measure the ability of bank management in managing its productive assets to generate net interest income. This ratio can be formulated as follows:

$$NIM: \frac{\text{(Net interest income)}}{\text{(Average Earning Assets)} \times 100\%}$$

According to Kasmir (2015) Capital Adequacy Ratio (CAR) is a ratio used to determine the magnitude of the estimated risk that will occur in lending. This ratio can be formulated as follows:

$$CAR: \frac{\text{(Total Capital)}}{\text{(Total Assets According to Risk (ATMR))} \times 100\%}$$

According to Kasmir (2015) Return on Assets (ROA) is a ratio that shows the results of the total assets used in the company. This ratio can be formulated as follows:

$$ROA: \frac{\text{(Earning After Tax (EAT))}}{\text{(Total Asset)} \times 100\%}$$

3. OBJECTIVES OF THE STUDY

The objectives of this research are as follows:

1. Analyze the effect of NPL, LDR and NIM on ROA
2. Analyzing the effect of NPL, LDR and NIM on CAR
3. Analyzing the effect of CAR on ROA
4. Knowing the CAR function mediates NPL, LDR and NIM against ROA

4. SCOPE OF THE STUDY

The sample in this study is the financial statements of commercial banks listed on the Indonesia Stock Exchange in 2014-2018. The number of samples is 21 samples. Determination of the sample based on purposive sampling.

5. METHODOLOGY AND SAMPLING

The type of data used in this study is secondary data that is data in the form of reports, have been recorded and can be trusted. The data source in this study came from the official website of the Indonesia Stock Exchange in the 2014-2018 period. Data on financial statements can be accessed through the official website http://ojk.go.id. The sample in this study is the financial statements of commercial banks listed on the Indonesia Stock Exchange in 2014-2018. The number of samples is 21 samples. Determination of the sample based on purposive sampling.

6. ANALYSIS RESULTS

Descriptive Statistics Analysis Results

Tabel 4.7

Hasil Analisi Statistik Deskriptif

	N	Minimum	Maximum	Mean	Std. Deviation
NPL	105	.14	8.27	2.5114	1.58482
LDR	105	42.02	104.37	84.6594	13.61214
NIM	105	1.42	11.09	5.3013	2.25122
CAR	105	10.25	66.43	20.7430	7.27893
ROA	105	.13	5.22	1.6415	1.05383
Valid N (listwise)	105				

Sumber: Hasil Olah Data SPSS Versi 26

Based on the results of descriptive statistical tests contained in table 4.7 the minimum NPL variable is 0.14 and the maximum value is 8.27.The Mean value on the NPL variable is 2.5114 and the Std Deviation value is 1.58482. The minimum value of the LDR variable is 42.02 and the maximum value is 104.37. The Mean value on the LDR variabel is 84.6594 and the Std Deviation value is 13.61214. The minimum value of the NIM variable is 1.42 and the maximum value is 11.09. The Mean value on the NIM 5.3013 and the Std Deviation value is 2.25122. The minimum value of the CAR is 10.25 and the maximum value is 66.43. The Mean value the CAR 20.7430 and the Std Deviation 7.27893. The minimum value of the ROA variabel is 0.13 and the maximum value is 5.22. The Mean value is 1.6415 and the Std Deviation 1.05383.

Normality Test Against ROA

Tabel 4.8

Hasil Uji Normalitas Terhadap ROA

		Unstandardized Residual
N		105
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.96677912
Most Extreme Differences	Absolute	.084
	Positive	.084
	Negative	-.068
Kolmogorov-Smirnov Z		.861
Asymp. Sig. (2-tailed)		.449

a. Test distribution is Normal.

b. Calculated from data.

Sumber: Hasil data olah SPSS 26

The results in table 4.8 show that the Asymp Sig. (2-tailed) of 0.449, which is greater than 0.05 that the data is normally distributed.

The following are the results of normality tests on CAR

Tabel 4.9

Uji Normalitas terhadap CAR

		Unstandardized Residual
N		105
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	7.22361886
Most Extreme Differences	Absolute	.131
	Positive	.131
	Negative	-.122
Kolmogorov-Smirnov Z		1.341
Asymp. Sig. (2-tailed)		.055

a. Test distribution is Normal.

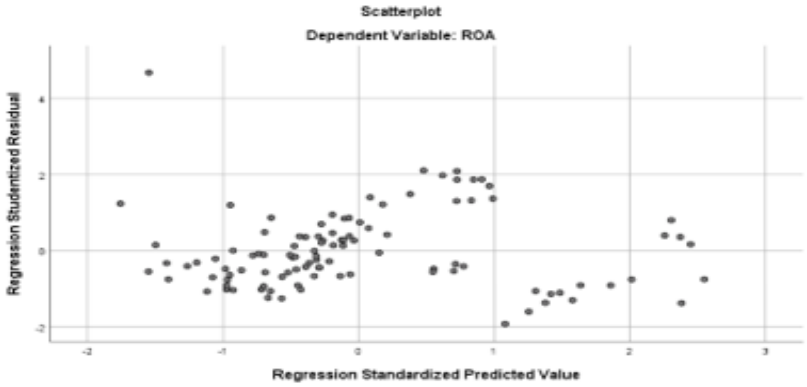
b. Calculated from data.

Sumber: Hasil data olah SPSS versi 26

In table 4.9 it shows that the value of the Asymp table Sig. (2-tailed) of 0.055, which is greater than 0.05 that the data is normally distributed.

Heteroscedasticity Test

The following results from the heteroscedasticity test for model 1, can be seen in Figure 4.1:



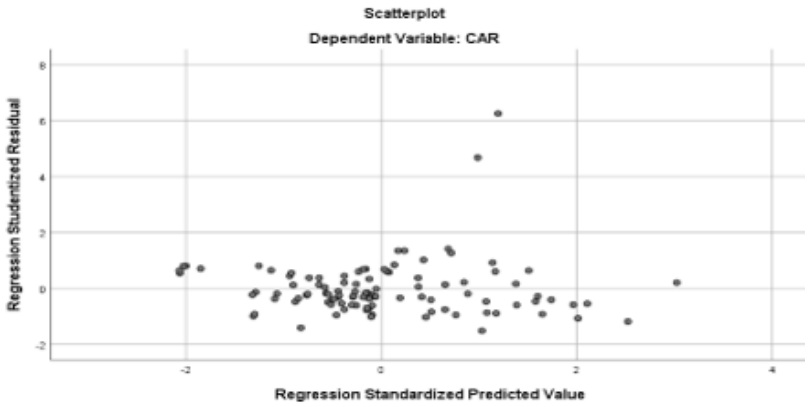
Gambar 4.1

Hasil Uji Heteroskedastisitas Model 1

Sumber: Hasil Olah Data SPSS

Based on Figure 4.1 above it can be seen that the value of the Scatterplot graph shows that the points spread randomly and spread both above and below the number 0 (zero) on the Y axis, it can be concluded that there was no heteroscedasticity in the regression model used.

Following are the results of the Model 2 heteroscedasticity test, can be seen in Figure 4.2:



Gambar 4.2

Hasil Uji Heteroskedastisitas Model 2

Sumber: Hasil Olah Data SPSS

Based on Figure 4.2 above it can be seen that the value of the Scatterplot graph shows that the points spread randomly and spread both above and below the number 0 (Zero) on the Y axis, it can be concluded that there was no heteroscedasticity in the regression model used.

Multicollinearity Test

The following results from the multicollinearity test on CAR can be seen in table 4.10:

Tabel 4.10

Hasil Uji Multikolinearitas terhadap CAR

Coefficients[a]							
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	23.616	4.528		5.215	.000		
	NPL	.212	.456	.047	.464	.643	.974	1.027
	LDR	-.033	.057	-.063	-.586	.559	.847	1.181
	NIM	-.119	.342	-.037	-.347	.729	.858	1.166
a. Dependent Variable: CAR								

Sumber: Hasil Olah Data SPSS

Based on table 4.10, it can be seen that the tolerance value of the NPL variable is 0.974 and the VIF value on the NPL is 1.027. The value of LDR tolerance is 0.847 and the VIF value on LDR is 1.181. The tolerance value on the NIM is 0.858 and the VIF value on the NIM is 1.166, so it can be concluded that each independent variable meets the requirements, namely tolerance> 0.1 and VIF <10 which means there is no multicollinearity.

Following are the results of the multicollinearity test on ROA, it can be seen in table 4.11:

Tabel 4.11

Hasil Uji Multikolinearitas terhadap ROA

Coefficients[a]								
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1	(Constant)	-.608	1.472		-.413	.681		
	NPL	-.080	.062	-.120	-1.292	.199	.972	1.029
	LDR	.007	.008	.094	.949	.345	.844	1.185
	NIM	.160	.046	.342	3.459	.001	.857	1.167
	CAR	.003	.016	.018	.163	.871	.991	1.009
a. Dependent Variable: ROA								

Sumber: Hasil Olah Data SPSS versi 26

Based on table 4.11, the multicollinearity test results on CAR can be seen that the NPL tolerance value is 0.972 and the VIF value is 1.029. The tolerance value on LDR is 0.844 and the VIF value is 1.185. The tolerance value on the NIM is 0.857 and the VIF value is 1.167 while the tolerance value on the CAR is 0.991 and the VIF value is 1.009, so it can be concluded that each independent variable meets the requirements namely tolerance> 0.1 and VIF <10 which means there is no multicollinearity.

Linearity Test

Following are the results of the linearity test of the ROA variable against NPL, it can be seen in table 4.12:

Tabel 4.12

Hasil Uji Linieritas Variabel ROA terhadap NPL

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
ROA * NPL	Between Groups	(Combined)	109.703	91	1.206	2.688	.025
		Linearity	1.825	1	1.825	4.070	.065
		Deviation from Linearity	107.878	90	1.199	2.672	.025
	Within Groups		5.831	13	.449		
	Total		115.534	104			

Sumber: Hasil Olah Data SPSS

In table 4.12 of the ROA linearity test against NPL above we can determine using the value of F.
Is known:
F table = (df deviation from linearity: df Within Groups)
= (90:13) look at the distribution of F table values
= 1.83
The calculated F value is 2.672 <F table 1.83, so it can be concluded that there is a linear relationship between the ROA variable and the NPL variable.

Following are the results of the linearity test of the ROA variable against the LDR variable, it can be seen in table 4.13:

Tabel 4.13

Hasil Uji Linearitas Variabel ROA terhadap LDR

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
ROA * LDR	Between Groups	(Combined)	112.032	100	1.120	1.280	.460
		Linearity	4.824	1	4.824	5.510	.079
		Deviation from Linearity	107.208	99	1.083	1.237	.477
	Within Groups		3.502	4	.876		
	Total		115.534	104			

Sumber: Hasil Olah Data SPSS

From table 4.13 of the linearity test results of the ROA variable against the LDR variable, that the Sig. deviation from linearity of 0.477> 0.05, it can be concluded that there is a linear relationship between ROA and LDR variables.

Following are the results of the linearity test of the ROA variable against the NIM variable, it can be seen in table 4.14:

Tabel 4.14
Hasil Uji Linieritas Variabel ROA terhadap NIM
ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
ROA * NIM	Between Groups	(Combined)	110.749	90	1.231	3.600	.005
		Linearity	16.880	1	16.880	49.386	.000
		Deviation from Linearity	93.869	89	1.055	3.086	.011
	Within Groups		4.785	14	.342		
	Total		115.534	104			

Sumber: Hasil Olah Data SPSS

In table 4.14 of the ROA linearity test against NIM above we can determine using the value of F.
Is known:
F table = (df deviation from linearity: df Within Groups)
= (89:14) look at the distribution of F table values
= 1.80
Given the calculated F value 3086 <F table 1.80, so it can be concluded that there is a linear relationship between the ROA variable with the LDR variable.

Following are the results of the linearity test of the CAR variable against the NPL variable, it can be seen in table 4.15:

Tabel 4.15
Hasil Uji Linieritas Variabel CAR terhadap NPL
ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
CAR * NPL	Between Groups	(Combined)	5313.111	91	58.386	10.503	.000
		Linearity	8.931	1	8.931	1.607	.227
		Deviation from Linearity	5304.180	90	58.935	10.602	.000
	Within Groups		72.265	13	5.559		
	Total		5385.375	104			

Sumber: Hasil Olah Data SPSS

In table 4.15 of the CAR linearity test against NPL above we can determine using the value of F.
Is known:
F table = (df deviation from linearity: df Within Groups)
= (90:13) look at the distribution of F table values
= 1.83

The calculated F value is 10,602 <F table 1.83, so it can be concluded that there is a linear relationship between the CAR variable and the NPL variable.

Following are the results of the linearity test of the CAR variable against the LDR variable, it can be seen in table 4.16:

Tabel 4.16
Hasil Uji Linieritas Variabel CAR terhadap LDR
ANOVA Table

				Sum of Squares	df	Mean Square	F	Sig.
CAR * LDR	Between Groups	(Combined)		4778.522	100	47.785	.315	.983
		Linearity		27.015	1	27.015	.178	.695
		Deviation from Linearity		4751.508	99	47.995	.316	.983
	Within Groups			606.853	4	151.713		
	Total			5385.375	104			

Sumber: Hasil Olah Data SPSS

From table 4.16 of the linearity test results of the CAR variable against the LDR variable, that the Sig. deviation from linearity of 0.983> 0.05, it can be concluded that there is a linear relationship between CAR variables and LDR.

Following are the results of the linearity test of the CAR variable against the NIM variable, it can be seen in table 4.17:

Tabel 4.17
Hasil Uji Linieritas Variabel CAR terhadap NIM

				Sum of Squares	df	Mean Square	F	Sig.
CAR * NIM	Between Groups	(Combined)		4318.609	90	47.985	.630	.902
		Linearity		21.030	1	21.030	.276	.608
		Deviation from Linearity		4297.579	89	48.287	.634	.899
	Within Groups			1066.766	14	76.198		
	Total			5385.375	104			

Sumber: Hasil Olah Data SPSS

From table 4.17 of the linearity test results of the CAR variable against the NIM variable, that the Sig. deviation from linearity of 0.634> 0.05, it can be concluded that there is a linear relationship between CAR variables and NIM.

Following are the results of the linearity test of the CAR variable against the ROA variable, it can be seen in table 4.18:

Tabel 4.18
Hasil Uji Linieritas Variabel CAR terhadap ROA

ANOVA Table

				Sum of Squares	df	Mean Square	F	Sig.
CAR * ROA	Between Groups	(Combined)		5034.434	94	53.558	1.526	.237
		Linearity		6.957	1	6.957	.198	.666
		Deviation from Linearity		5027.477	93	54.059	1.540	.232
	Within Groups			350.942	10	35.094		
	Total			5385.375	104			

Sumber: Hasil Olah Data SPSS

From table 4.18 of the linearity test results of the CAR variable to the ROA variable, that the Sig. deviation from linearity of 0.232> 0.05, it can be concluded that there is a linear relationship between CAR variables and ROA.

Autocorrelation Test

The following are the results of the autocorrelation test, can be seen in table 4.19:

Tabel 4.19

Hasil Uji Autokorelasi

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.093[a]	.009	-.021	7.27032	1.892

a. Predictors: (Constant), NIM, NPL, LDR

b. Dependent Variable: CAR

Sumber: Hasil Olah Data SPSS

Based on table 4.19 the results of the autocorrelation test above the Durbin Watson value of 1,892, which means that the value meets the requirements, namely the Durbin Watson value between -2 and +2 or -2 <DW <+2. This explains that there is no autocorrelation between residuals.

Following are the results of the autocorrelation test, can be seen in table 4.20:

Tabel 4.20

Hasil Uji Autokorelasi

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.406[a]	.165	.132	.98220	2.081

a. Predictors: (Constant), CAR, NPL, NIM, LDR

b. Dependent Variable: ROA

Sumber: Hasil Olah Data SPSS

Based on table 4.20 the results of the autocorrelation test above the Durbin Watson value of 1,081 which means that the value meets the requirements of the Durbin Watson value between -2 and +2 or -2 <DW <+2. This explains that there is no autocorrelation between residuals.

Path Analysis

Following are the results of the model 1 regression equation, it can be seen in table 4.21:

Tabel 4.21

Hasil uji persamaan Regresi model 1

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	23.616	4.528		5.215	.000
	NPL	.212	.456	.047	.464	.643
	LDR	-.033	.057	-.063	-.2.701	.049
	NIM	-.119	.342	-.037	-1.947	.029

a. Dependent Variable: CAR

Sumber: Hasil Olah Data SPSS

Based on table 4.21 the results of the regression equation are obtained as follows:

$ROA = 23{,}616 + 0{,}212X_1 - 0{,}033X_2 - 0{,}119X_3 + e1$

1. The constant value (α) of the above regression equation is 23,616. this means that if all the independent variables (NPL, LDR and NIM) are in a constant position that has a value of 0 (zero), then the value of the ROA variable is 23,616.
2. The NPL regression coefficient is positive at 0.212. This means that for every increase in one unit of NPL, ROA will increase by 0.212 assuming a fixed independent variable.
3. The negative LDR regression coefficient is 0.033, this means that if the LDR has increased by one unit, the ROA will decrease by 0.033 with the assumption that the independent variable is fixed.
4. 4. The NIM regression coefficient is 0.119 which means that if the NIM has increased by one unit, ROA will decrease by 0.119 with the assumption that the independent variable is fixed.

Following are the results of the model 2 regression equation, it can be seen in table 4.22:

Tabel 4.22

Hasil uji persamaan Regresi model 2

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.608	1.472		-.413	.681
	NPL	-.080	.062	-.120	-1.292	.199
	LDR	.007	.008	.094	.949	.345
	NIM	.210	.065	.347	3.205	.002
	CAR	.003	.016	.018	.163	.871

a. Dependent Variable: ROA

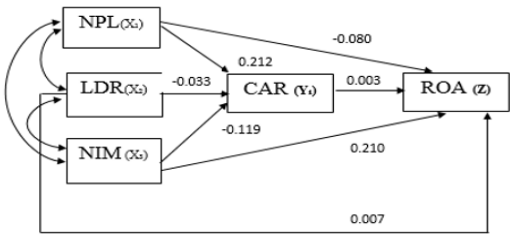
Sumber: Hasil Olah Data SPSS 26

the results of the regression equation are as follows:

$ROA = -0{,}608–0{,}080X_1 + 0{,}007X_2 + 0.160X_3 + 0.003X_4 + e1$

1. The constant value (α) of the above regression equation is -0.608. this means that if all the independent variables (NPL, LDR and NIM) are in a constant position that has a value of 0 (zero), then the value of the ROA variable is -0.608.
2. The NPL regression coefficient is negative at 0.080. This means that for every increase in one unit of NPL, CAR will decrease by 0.080 assuming a fixed independent variable.
3. LDR regression coefficient of 0.007 this means that if the LDR has increased by one unit, the CAR will increase by 0.007 with the assumption that the independent variable is fixed.
4. NIM regression coefficient of 0.210 this means that if the NIM has increased by one unit, the CAR will increase by 0.210 with the assumption that the independent variable is fixed.
5. The ROA regression coefficient is negative at 0.003, this means that if ROA has increased by one unit, the CAR will decrease by 0.003 with the assumption that the independent variable is fixed.

Based on tests that have been done using SPSS 26 software, the following results are the path coefficient analysis:



Gambar 4.3

Hasil Analisis Koefisien Jalur

Sumber: Hasil Olah Data SPSS 26

The path analysis results show that NPL has a direct effect on ROA of -0.080. The indirect effect calculated from the indirect coefficient is 0.212 x 0.003 = 0.000636 so that the total effect of NPL on ROA is -0.080 + 0.003 = -0.077.A significant level of NPL mediation efficiency towards ROA of 0.212 x -0.080 = -0.01696> -0.080 then NPL directly affects ROA through CAR.The direct effect of LDR on ROA of 0.007. The indirect effect of LDR on ROA is calculated from the coefficient of -0.033 x 0.003 = -0.000009.So the total effect of LDR on ROA is 0.007 + 0.003 = 0.010. The significant level of LDR mediation coefficient on ROA is -0.033 x 0.007 = -0.000231 <0.007, so the LDR has no direct effect on ROA through CAR.The direct effect of NIM on ROA was 0.210. The indirect effect of NIM on ROA is calculated from the coefficient of -0.119 x 0.003 = -0.000357.So that the total influence of the NIM on ROA of 0.210 + 0.003 = 0.213. The significant level of NIM mediation coefficient on ROA is -0.119 x 0.003 = -0.000357 <0.210, so NIM has no direct effect on ROA through CAR.

The following is a summary of the influence of variables, which can be seen in Table 4.23:

Tabel 4.23

Rangkuman Pengaruh Variabel

Pengaruh Variabel	Pengaruh Kausal			Keterangan
	Langsung	Tidak Langsung		
		Melalui Variabel Z	Total	
$X_1 \rightarrow Y$	0.212	-	0.210	-
$X_2 \rightarrow Y$	-0.033	-	-0.033	-
$X_3 \rightarrow Y$	-0.119	-	-0.119	-
$X_1 \rightarrow Z$	-0.080	0.210 x 0.003 = 0.00063	-0.07937	Tidak Berpengaruh Langsung
$X_2 \rightarrow Z$	0.007	-0.003 x 0.003 = - 0.000009	0.007009	Tidak Berpengaruh Langsung
$X_3 \rightarrow Z$	0.210	-0.115 x 0.003 = -0.000345	0.216345	Tidak Berpengaruh Langsung
$Y \rightarrow Z$	0.003	-	0.003	-

Sumber: Hasil data olah SPSS 26

Persial Hypothesis Test (t Test)

The following partial test results (t test), can be seen in table 4.24:

Tabel 4.24

Hasil uji hipotesis uji t terhadap CAR

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	23.616	4.528		5.215	.000
NPL	.212	.456	.047	.464	.643
LDR	-.033	.057	-.063	-2.701	.049
NIM	-.119	.342	-.037	-1.947	.029

Sumber: Hasil data olah SPSS 26

Here are the results of the partial t test of regression model 1:

1. The results of testing the NPL variable show that the significant level of the variable is 0.643> 0.05 then Ho1 is accepted and the t test of the NPL variable has a t value of 0.464 while t table is 1.659 then t arithmetic <t table (0.464 <1.659) then Ha1 is rejected which means NPL does not affect CAR.
2. The test results show that the significant level of the LDR variable is 0.049 <0.05 then Ho2 is rejected and the t test LDR variable has a t value of -2.701 while t table -1.659 then -t count <-t table (-2.701> -1.659) then Ha2 is accepted which means LDR affects CAR.
3. The test results show that the significant level of the NIM variable is 0.029 <0.05 then Ho3 is rejected and the t test of the NIM variable has a t value of -1.947 while t table of -1.659 then -t count <-t table (-1.947> -1.659). Ha3 is accepted which means that NIM has an effect on CAR.

Following are the results of the t test on the ROA variable, it can be seen in table 4.25:

Tabel 4.25

Hasil Uji t terhadap Variabel ROA

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.608	1.472		-.413	.681
	NPL	-.080	.062	-.120	-1.292	.199
	LDR	.007	.008	.094	.949	.345
	NIM	.210	.065	.347	3.205	.002
	CAR	.003	.016	.018	.163	.871

a. Dependent Variable: ROA

Sumber: Hasil data olah SPSS 26

Here are the results of the partial t regression model 2:

1. The test results show that the significant level of the NPL variable is 0.199> 0.05 then Ho1 is accepted and the t test of the NPL variable has a t value of -1.292 while t table -1.659 then -t count <-t table (--1.292 <-1.659). Ha1 is rejected, which means that NPL has no effect on ROA.
2. The test results show that the significant level of the LDR variable is 0.345> 0.05 then Ho2 is accepted and the t test of the LDR variable has a t value of 0.949 while t table is 1.659 then t arithmetic <t table (0.949 <1.659).Then Ha2 is rejected which means LDR has no effect on ROA.
3. The test results show that the significant level of the NIM variable is 0.002 <0.05 then Ho3 is rejected and the t test of the NIM variable has a t value of 3.205 while t table is 1.659 then t arithmetic <t table (3.205> 1.659) then Ha3 is accepted which means NIM has an effect on ROA.

The test results show that the significant level of variable CAR is 0.871> 0.05 and Ho3 is accepted and t test ROA variable has a t value of 0.163 while t table is 1.659 then t count <t table (-0.033 <1.659) then Ha3 is rejected which means CAR is not affect ROA.

Determination Coefficient Test (R^2)

The following is the R model 1 test results, can be seen in table 4.26:

Tabel 4.26

Hasil Uji R² Model 1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.366[a]	.134	.100	7.67872

a. Predictors: (Constant), NIM, NPL, LDR
Sumber: Hasil data olah SPSS 26

Based on the R test results in table 4.26 above, it can be seen that the Adjusted R Square value is 0.100 or 10%. This figure shows that 10% of the CAR variable can be explained by NPL, LDR, and NIM variables. While the rest (100% -10%) is explained by other variables not present in this study.

The following results of the Model 2 R test, can be seen in table 4.27:

Tabel 4.27

Hasil Uji R² Model 2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.406[a]	.165	.132	.98220

a. Predictors: (Constant), CAR, NPL, NIM, LDR
Sumber: Hasil data olah SPSS 26

Based on the R test results in table 4.27 above, it can be seen that the Adjusted R Square value is 0.132 or 13.2%. This figure shows that 13.2% of the CAR variable can be explained by the NPL, LDR, and NIM variables. While the rest (100% -13.2%) is explained by other variables not included in this study.

7. CONCLUSION

Based on the results of research, data analysis and discussion of the effect of NPL, LDR, NIM on ROA and CAR as intervening variables of case studies on banking companies listed on the Indonesia Stock Exchange in the 2014-2018 period, the following conclusions can be drawn:

1. NPL and LDR do not affect ROA and NIM affect ROA.
2. NPL and LDR do not affect CAR and NIM affect CAR
3. CAR affects ROA

NPL is able to mediate the relationship of NPL with ROA and CAR is not able to mediate the relationship between LDR and NIM to ROA.

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