

## THE INFLUENCE OF CAPITAL ADEQUACY RATIO, NON PERFORMING LOAN, LOAN TO DEPOSIT RATIO, OPERATIONAL COSTS OF OPERATIONAL REVENUE AND CREDIT DISTRIBUTION ON RETURN ON ASSET WITH NET INTEREST MARGIN AS AN INTERVENING VARIABLE IN CONVENTIONAL RURAL BANKS IN MEDAN CITY PERIOD 2017-2021

Gialin Prihatna Putri br Sitepu<sup>1</sup>, Nisrul Irawati<sup>2</sup>, Fahmi Natigor Nasution<sup>3</sup>

<sup>1,2,3</sup>Faculty of Economics and Business, Universitas Sumatera Utara

Corresponding Email: <sup>1</sup>[gialinprihatna10@gmail.com](mailto:gialinprihatna10@gmail.com), <sup>2</sup>[nisrulirawati@yahoo.com](mailto:nisrulirawati@yahoo.com), <sup>3</sup>[fanatigor@gmail.com](mailto:fanatigor@gmail.com)

### Abstract

*This study aims to determine the effect of Capital Adequacy Ratio, Non-Performing Loans, Loan to Deposit Ratio, Operational Costs, Operating Income and Credit Disbursement on Return on Assets with Net Interest Margin as an Intervening Variable at Conventional Rural Banks in Medan City for the 2017-2021 period. In this study using secondary data collection in the form of financial reports that have been collected and published relating to the object of research. The data analysis method used to solve the problems in this research is descriptive statistical method, classic assumption test, panel data regression analysis method and expanded with sobel test analysis to test mediating (intervening) variables. The results showed that the Capital Adequacy Ratio had a positive and significant effect on Net Interest Margin at Conventional Rural Banks in Medan City, Non-Performing Loans had no significant effect on Net Interest Margin at Conventional Rural Banks in Medan City, Loan to Deposit Ratio had a positive effect and significant to Net Interest Margin at Conventional Rural Banks in Medan City, Operating Costs Operating Income has a negative and significant effect on Net Interest Margin at Conventional Rural Banks in Medan City. Credit Distribution has a positive and significant effect on Net Interest Margin at Conventional Rural Banks in Medan City.*

**Keywords :** *Capital Adequacy Ratio, Non Performing Loans, Loan To Deposit Ratio, Operating Costs Operating Income, Lending, Return On Assets, Net Interest Margin*

### 1. INTRODUCTION

The bank is a financial institution that acts as a financial intermediary to collect funds from the public and mobilize public funds by channeling them back to the community in the form of fund utilization or investment activities. This function can be said to be the breath for the economic development of a country. Commercial Banks are banks whose business activities are carried out conventionally and/or based on sharia principles, which in their activities provide services in payment traffic. While Rural Banks (BPR) are banks that carry out business activities conventionally or based on sharia principles which in their activities do not provide services in payment service traffic.

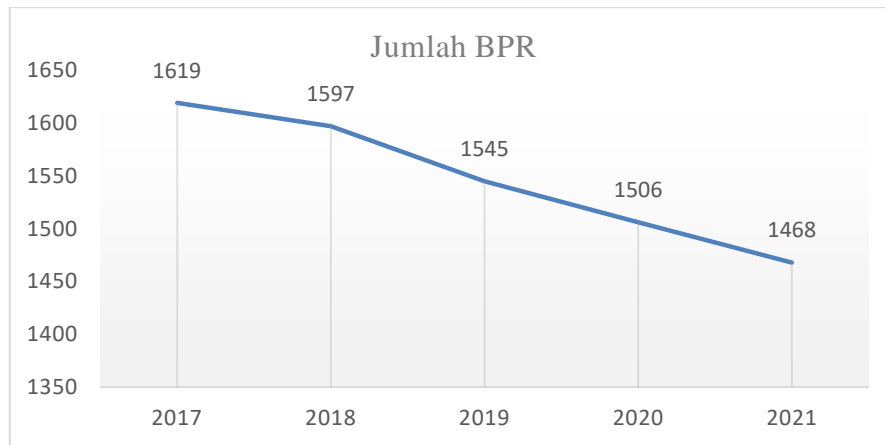
The existence of BPRs is indeed very helpful for MSME business actors so that BPRs also play an important role in banking activities in Indonesia. The main things that are the key to success for BPRs in providing services are the location of BPRs that are close to people who need them, simple service procedures and a preference for an individual approach as well as flexibility in loan patterns and capital. So that for business actors who are classified as SMEs or those who are not bankable for commercial banks is a solution to obtain venture capital services.

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The following is the development of BPR in Indonesia during the period from 2017 to 2021 which can be seen in the following graph:

**Graph 1.** Development of the Number of Conventional BPRs in Indonesia Month December 2017-December 2021



Source: Indonesian Banking Statistics

Based on graph 1 above, data from Indonesian Banking Statistics shows that the number of BPRs during the period 2017 to 2021 tends to decrease. In 2017 there were 1,619 BPRs, then in 2018 there were 1,597 units, in 2019 there were 1,545 units, in 2020 there were 1,506 units and in 2021 there were 1,468 units. OJK Chief Executive for Banking Supervision Heru Kristiyana said that the downward trend in the number of BPRs was due to the revocation of business licenses and mergers or business combinations of a number of BPRs. Performance is one of the advantages that must be achieved by a bank to be able to provide an overview of the condition of a bank. Therefore, if the bank's performance is poor, public trust in the bank will decrease so that it will have a negative impact and disrupt activities at the bank. The high level of public trust in banks and the smooth running of activities carried out by banks will have a positive impact and improve the quality of the bank's performance (Stephani, Adenan and Hanim, 2017).

According to Kasmir (2018) the profitability ratio is used to assess a company's ability to make a profit. This ratio also provides a measure of the effectiveness of a company's management. This can be seen from the profits generated by the company from sales and investment income. Warsa and Mustanda (2016) state that the high profitability of a bank can indicate that most of the bank's performance can be said to be good, because it is assumed that the bank has operated effectively and efficiently and allows the bank to expand its business. In this study, profitability is measured using the ROA ratio used as a measure to measure the performance of a bank. The reason for choosing Return On Assets (ROA) as a measure of performance is because ROA can measure a company's ability to generate profits by using the assets owned by the company after adjusting for the costs incurred to fund certain assets. There are several factors that affect return on assets, namely Capital Adequacy Ratio, Non-Performing Loans, Loan to Deposit Ratio, Operating Costs Operating Income, Lending and Net Interest Margin.

**Table 1.** Average ROA in Conventional BPRs in the City of Meda  
Period 2017-2021

Ratio	2017	2018	2019	2020	2021	Total Average Rural Bank ROA (2017-2021)
ROA	-0.04%	2.44%	3.18%	2.15%	0.93%	1.73%

Source: [www.ojk.go.id](http://www.ojk.go.id) (data processed), 2022

Based on table 1 above, it shows that the average ROA at Conventional Rural Banks in Medan City for the 2017-2021 period which experienced a loss in 2017 was -0.04%. This shows that the total assets used by the bank suffer losses because the total assets used do not provide profit and will hinder the growth of the bank (Tifani, 2015). In 2021 the bank will experience a decrease of 0.93% of the total average. Meanwhile, ROA in 2018, 2019 and 2020 has increased from the total average BPR for the 2017-2021 period. This shows that banks that have high ROA have a great opportunity to increase growth (Tifani, 2015).

The first factor that affects ROA is *Capital Adequacy Ratio* considered to be able to measure the level of performance at a bank by measuring the adequacy of capital owned by the bank in supporting assets or generating loans. The higher the CAR value, the bank is able to bear the risk of any risky credit or productive assets (Kurniasih, 2016).

**Table 2.** Average CAR in Conventional BPRs in Medan City  
Period 2017-2021

Ratio	2017	2018	2019	2020	2021	Total Average CAR in BPRs (2017-2021)
CAR	19.80%	19.77%	23.18%	27.85%	29.10%	23.94%

Based on table 2 above, from the 2017-2019 period, CAR has decreased from the total average CAR in BPRs for the 2017-2021 period, while in 2020 and 2021 CAR has increased from the total average CAR in BPRs 2017-2021. So it can be concluded that the decrease in the average ROA in table 1.1 is related to the lower average CAR value of the total average CAR in 2017-2021 BPRs in table 1.2. This indicates that CAR is related to ROA as an indicator of bank performance. The second factor that affects ROA, namely Non-Performing Loans, is the ratio of credit risk which shows the ratio of the number of non-performing loans to total credit. A high NPL value will lead to an increase in lending rates and high credit interest rates can lead to lower demand for credit (Edo and Wiagustini, 2014).

The third factor that affects ROA, namely the Loan to Deposit Ratio, is a measure of liquidity that measures the amount of funds placed in the form of credit originating from funds collected by banks, especially the public (Dendawijaya, 2009). The size of a bank's LDR ratio will affect the bank's profitability. The fourth factor that affects ROA is Operating Costs Operating Income is the ratio between operating costs to operating income. Operational costs are used to measure the level of efficiency and ability of a bank to carry out its operational activities. Operational costs are costs incurred by the bank in order to carry out its main business activities such as interest costs, labor costs and other operating costs.

The fifth factor that affects ROA is that lending is one of the biggest income for banks so that banks must be wise in determining the interest rate set. The more people save their funds in banks, the more funds managed by banks, one of which is lending. Intervening in this study is to link the Capital Adequacy Ratio, Non-Performing Loans, Loan to Deposit Ratio, Operating Costs

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Operating Income and Credit Disbursement to Return on Assets at Conventional Rural Banks in Medan City, a good Net Interest Margin is needed. Research conducted by Anindiansyah, et al (2020) states that NIM has a positive and significant effect on ROA. This means that banks with high NIM ratios tend to have high ROA so that any increase in net interest income at the bank results in an increase in ROA. Meanwhile, Nufus and Munandar (2021) found no effect of NIM on ROA.

## **2. IMPLEMENTATION METHOD**

### **Types of research**

The method used in this study is to use an associative method using a quantitative approach. Associative research was conducted to determine whether there is influence between the dependent variable and the independent variable. In this study the purpose of the associative method is to determine the relationship between the influence of capital adequacy ratio, non-performing loans, loan to deposit ratio, operational costs, operating income and lending to return on assets with net interest margin as an intervening variable in conventional rural credit banks in cities. Medan for the 2017-2021 period.

### **Place and time of research**

This research will be carried out at Conventional Rural Banks in the city of Medan which are registered with the Financial Services Authority with an observation period of 5 years, namely 2017-2021. This research was conducted starting in September 2022 by collecting data by accessing [www.ojk.co.id](http://www.ojk.co.id).

### **Population and Sample**

The population in this study are Conventional Rural Banks in Medan City which are registered with the Financial Services Authority (OJK) for the 2017-2021 period of 8 BPRs. The method used in selecting the sample in this study is non-probability sampling with saturated sampling category. Saturated sampling is a sampling method that is carried out with all members of the population used as samples. So, as many as 8 Conventional BPRs in Medan City will be used as samples in this study which are registered with the OJK for the period December 2017-2021 which provide a complete calculation of financial ratios according to the variables to be studied.

### **Data collection technique**

In this study using secondary data collection in the form of financial reports that have been collected and published relating to the object of research. Library research is also carried out by collecting, reading and studying books, journals and information literature related to the field that is the topic of discussion.

### **Data Types and Sources**

The type of data used in this research is secondary data. Secondary data is data that is already available by other parties so that it no longer needs to be explored directly from the source by researchers (Sinulingga, 2021: 174). Secondary data in this study is in the form of financial

reports from Conventional Rural Banks in Medan City for the period 2017 to 2021 which have been published on the official OJK website.

### 3. RESULTS AND DISCUSSION

#### Descriptive Statistical Analysis

In this study the dependent variable is return on assets (ROA). The independent variables are the capital adequacy ratio (CAR), non-performing loans (NPL), loan to deposit ratio (LDR), operational income operating costs (BOPO) and lending as well as intervening variables, namely net interest margin (NIM). The results of descriptive statistical analysis can be seen in table 3 below:

**Table 3.** Results of Descriptive Statistics

	ROA	NIM	CAR	NPLs	LDR	BOPO	PK
Means	2.295667	18.16400	40.27433	6.397000	70.71200	91.17200	14154968
Median	3.590000	18.74000	22.94000	4.480000	76.45000	86.16500	14723934
Maximum	9.090000	22.74000	79.70000	23.86000	99.84000	189.9900	24780821
Minimum	-22.60000	10.10000	2.840000	1.790000	32.77000	65.45000	2511844.
std. Dev.	5.807638	2.524905	20.67067	4.725068	18.56184	24.52264	6024270.
Skewness	-2.707036	-0.926704	0.624742	1.851656	-0.605331	2.236815	-0.314028
kurtosis	12.32123	4.855767	2.461734	7.267839	2.125865	9.720127	2.360798
Jarque-Bera	145.2468	8.598745	2.313678	39.91121	2.787268	81.46684	1.000657
probability	0.000000	0.013577	0.314479	0.000000	0.248172	0.000000	0.606331
Sum	68.87000	544.8900	908.2400	191.9100	2121.360	2735.160	4.25E+08
Sum Sq. Dev.	978.1311	184.8792	12391.02	647.4616	9991711	17439.43	1.05E+15
Observations	40	40	40	40	40	40	40

Source: Data processed with Eviews 10, 2023

Based on the results of descriptive statistics in table 3 for all Conventional Rural Banks in Medan City for the 2017-2021 period, it shows that the variable return on assets has a minimum value of -22.60000; maximum value of 9.090000; average value (mean) of 2.295667; and a standard deviation of 5.807638. The net interest margin variable has a minimum value of 10.1000; maximum value of 22.74000; average value (mean) of 18.16400; and a standard deviation of 2.524905. Furthermore, the capital adequacy ratio variable has a minimum value of 2.840000; maximum value of 79.70000; average value (mean) of 40.27433; and a standard deviation of 20.67067. The non-performing loan variable has a minimum value of 1.790000; maximum value of 23.86000; average value (mean) of 6.39700; and a standard deviation of 4.725068.

The variable loan to deposit ratio which is symbolized by X3 has a minimum value of 32.7700; maximum value of 99.8400; average value (mean) of 70,712; and a standard deviation of 18.5618. The operating income operating cost variable has a minimum value of 65.45000; maximum value of 189.9900; average value (mean) of 91.17200; and a standard deviation of 24.52264. And the credit distribution variable has a minimum value of 2,511,844; maximum value of 24,780,821; average value (mean) of 14,154,968; and a standard deviation of 6,024,270.

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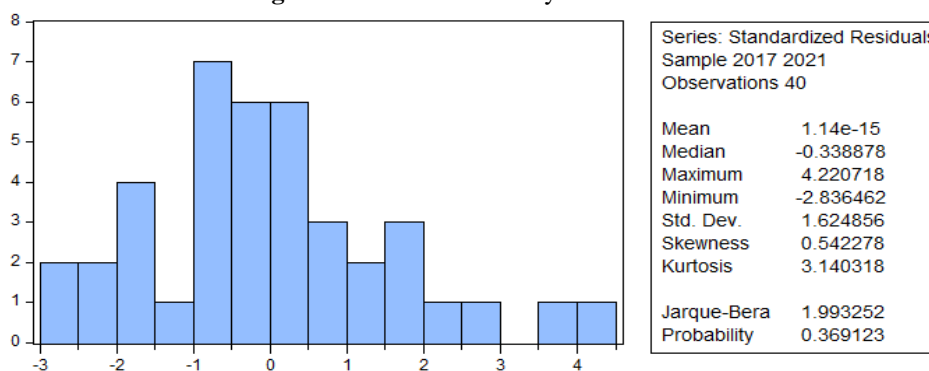
**Classic assumption test**

The classical assumption test is performed to detect whether there is normality, multicollinearity, autocorrelation and heteroscedasticity. This classic assumption test is carried out as a parameter to measure whether the data used is blue or not.

**a. Normality test**

The normality test aims to test whether the residual or confounding variables in the regression model have a normal distribution. In this study, the normality test used Jarque Bera to test whether the dependent, independent, or both variables were normally distributed in the regression model. If the probability value is  $> 0.05$  then the data is said to be normally distributed but vice versa if it is  $< 0.05$  then the data is not normally distributed. The following are the results of the normality test in the image below :

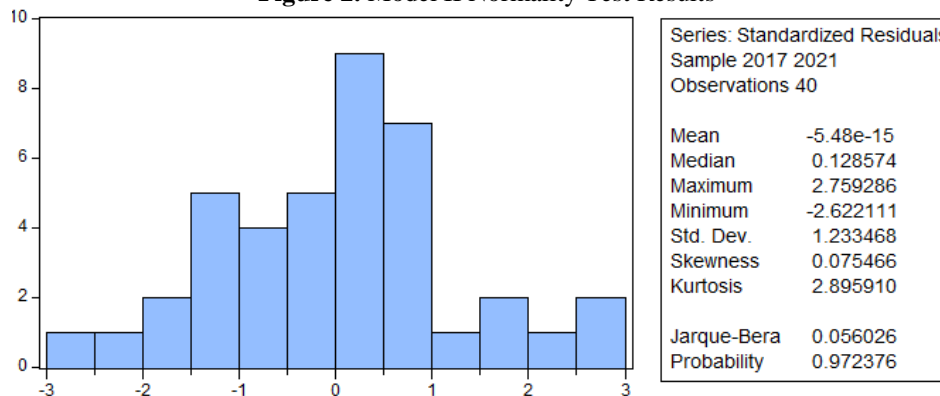
**Figure 1. Model I Normality Test Results**



Source: Data Processed with Eviews 10, 2023

Based on the results of the normality test in the histogram image above, it shows that the probability value of the jarque-bera is 0.369123 which is greater than the degree of error which is 0.05 so it can be concluded that the data from the model is normally distributed.

**Figure 2. Model II Normality Test Results**



Source: Data Processed with Eviews 10, 2023

Based on the results of the normality test in the histogram image above, it shows that the jarque-bera probability value is 0.972376 which is greater than the degree of error, which is 0.05 so it can be concluded that the data from the model is normally distributed.

## b. Multicollinearity Test

The multicollinearity test aims to test whether in the regression model formed there is a high or perfect correlation between the independent variables or not. Multicollinearity means that there is a perfect or definite linear relationship between some or all of the variables that explain the regression model. Whether or not multicollinearity exists can be known from the correlation coefficient of each independent variable.

**Table 4.** Model I Multicollinearity Test Results

Variables	coefficient Variances	Uncentered VIF	Centered VIF
C	121.9266	994.2604	NA
CAR	0.000573	6.233616	1.851405
NPLs	0.008611	3.643512	1.413525
LDR	8.00E-08	1.167347	1.113568
BOPO	0.000446	32.00017	1.734118
LNPk	0.417829	894.6348	1.472148

Source: Data Processed with Eviews 10, 2023

Based on the results of the multicollinearity test in the table above, it can be said that model I does not have multicollinearity, because all variables have a VIF value of <10.

**Table 5.** Model II Multicollinearity Test Results

Variables	coefficient Variances	Uncentered VIF	Centered VIF
C	273.8038	1224,307	NA
CAR	0.001112	6.633848	1.970275
NPLs	0.015835	3.674007	1.425356
LDR	1.59E-07	1.272694	1.214062
BOPO	0.000818	32.17652	1.743675
LNPk	1.234821	1449,775	2.385646
NIM	0.058829	87.84403	2.344018

Source: Data Processed with Eviews 10, 2023

Based on the results of the multicollinearity test in the table above, it can be said that model II does not have multicollinearity, because all variables have a VIF value of <10.

## c. Heteroscedasticity Test

The heteroscedasticity test is used to test whether in the regression model there is an unequal variance from the residual one observation to another. If the residual variance from one observation to another observation remains, then it is called homoscedasticity and if it is different it is called

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heteroscedasticity. In this study using the Glejser test to detect the presence of heteroscedasticity. The following are the results of the heteroscedasticity test in the table below:

**Table 6.** Model I Heteroscedasticity Test Results  
**Heteroskedasticity Test: Glejser**

F-statistics	14.07581	Prob. F(5,31)	0.0559
Obs*R-squared	24.67575	Prob. Chi-Square(5)	0.0618
Scaled explained SS	25.56936	Prob. Chi-Square(5)	0.0682

Source: Data Processed with Eviews 10, 2023

Based on the results of the heteroscedasticity test in the table above, it shows that the prob value for the Glejser test is 0.055 or  $> 0.05$ , so it can be said that model I does not have heteroscedasticity.

**Table 7.** Model II Heteroscedasticity Test Results  
**Heteroskedasticity Test: Glejser**

F-statistics	13.33229	Prob. F(6,30)	0.0523
Obs*R-squared	24.79722	Prob. Chi-Square(6)	0.1219
Scaled explained SS	26.93233	Prob. Chi-Square(6)	0.1095

Source: Data Processed with Eviews 10, 2023

Based on the results of the heteroscedasticity test in the table above, it shows that the prob value for the Glejser test is 0.0523 or  $> 0.05$ , so it can be said that model II does not have heteroscedasticity.

**d. Autocorrelation Test**

The autocorrelation test aims to test whether in a linear regression model there is a correlation between the confounding errors in the t period and the previous t-1 period errors. If there is a correlation then it is called an autocorrelation problem. In this study, testing was carried out using the Durbin-Watson (DW) test. The following are the results of the autocorrelation test in the table below:

**Table 8.** Model I Autocorrelation Test Results

Cross-section fixed (dummy variables)			
R-squared	0.813865	Mean dependent var	18.16300
Adjusted R-squared	0.715898	SD dependent var	2.524905
SE of regression	1.345804	Akaike info criterion	3.708435
Sum squared residue	34.41258	Schwarz criterion	4.222208
Likelihood logs	-44.62653	Hannan-Quinn criter.	3.872795
F-statistics	8.307619	Durbin-Watson stat	2.251087
Prob(F-statistic)	0.000047		

Source: Data Processed with Eviews 10, 2023



Based on the results of the autocorrelation test in the table above, it shows a Durbin-Watson value of 2.251087. This value is greater than the Du value, which is 1.7859 and less than the 4-DU, which is 2.2141, so it can be said that in model I there is no autocorrelation.

**Table 9.** Model II Autocorrelation Test Results

Cross-section fixed (dummy variables)

R-squared	0.954875	Mean dependent var	2.295667
Adjusted R-squared	0.927299	SD dependent var	5.807638
SE of regression	1.565925	Akaike info criterion	4.024005
Sum squared residue	44.13819	Schwarz criterion	4.584484
Likelihood logs	-48.36008	Hannan-Quinn criter.	4.203307
F-statistics	34.62653	Durbin-Watson stat	1.953420
Prob(F-statistic)	0.000000		

Source: Data Processed with Eviews 10, 2023

Based on the results of the autocorrelation test in the table above, it shows a Durbin-Watson value of 1.953420. This value is greater than the Du value, which is 1.7859 and less than the 4-DU, which is 2.2141, so it can be said that the model II does not have autocorrelation.

### Panel Data Regression Model Selection

The panel data regression model can be selected using three approaches, namely common effect, fixed effect and random effect. Each model has its own advantages and disadvantages. To choose the most appropriate model there are tests, namely the chow test, hausman test and lagrange multiplier. After testing, the best regression model will be obtained, namely whether using the common effect, fixed effect or random effect. So, the first step that must be taken is to choose a model from the three available model approaches.

### Panel Data Regression Analysis

The regression analysis used in this study is panel data regression, which is a combination of time series and cross section. The following are the results of the panel data regression analysis to prove the significance of the following hypothesis formulation.

**Table 10.** Results of Regression Analysis Model I

Variables	coefficient	std. Error	t-Statistics	Prob.
C	-12.64139	14.19764	-0.890387	0.3844
CAR	0.061381	0.026741	2.295431	0.0333
NPLs	-0.057132	0.096083	-0.594612	0.5591
LDR	0.058025	0.027427	2.236145	0.0478
BOPO	-0.044064	0.017495	-2.375523	0.0310
LNPK	1.677479	0.817685	2.423615	0.0211

Source: Data Processed with Eviews 10, 2023

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The following is the model I equation:

$$NIM = -12.641 + 0.061CAR - 0.057NPL + 0.058LDR - 0.044BOPO + 1.677PK$$

**Table 11.** Results of Regression Analysis Model II

Variables	coefficient	std. Error	t-Statistics	Prob.
C	-32.06577	16.86094	-1.901778	0.0733
CAR	0.038624	0.035165	1.098379	0.2865
NPLs	-0.689098	0.112833	-6.107215	0.0000
LDR	-0.040993	0.035473	-1.155626	0.2629
BOPO	-0.011017	0.021346	-0.516142	0.6120
LNPk	1.664028	0.851534	2.581526	0.0112
NIM	0.789353	0.081231	2.957053	0.0084

Source: Data Processed with Eviews 10, 2023

The following is the model II equation:

$$ROA = -32.065 + 0.036CAR - 0.689NPL - 0.0409LDR - 0.011BOPO + 1.166PK + 0.789NIM$$

**Hypothesis testing**

**a. Simultaneous Test (Test F)**

The F test aims to determine the effect of the independent variable (X) on the dependent variable (Y) simultaneously or simultaneously. To find out whether or not there is a significant influence between variables simultaneously can be seen from the probability value. If the probability value is > 0.05 then there is no influence between the independent variables on the dependent variable simultaneously, conversely if the probability value is <0.05 then there is an influence between the independent variables on the dependent variable simultaneously.

**Table 12.** Simultaneous Test Results (F Test) Model I  
Cross-section fixed (dummy variables)

R-squared	0.813865	Mean dependent var	18.16400
Adjusted R-squared	0.715898	SD dependent var	2.524905
SE of regression	1.345804	Akaike info criterion	3.708435
Sum squared residue	34.41258	Schwarz criterion	4.222208
Likelihood logs	-44.62653	Hannan-Quinn criter.	3.872795
F-statistics	8.407619	Durbin-Watson stat	2.251087
Prob(F-statistic)	0.000047		

Source: Data Processed with Eviews 10, 2023

Based on table 12 above, it can be seen that the independent variables have a significant simultaneous effect on the dependent variable which shows a probability value of Fcount of 8.407619 > Ftable of 2.503 with a probability value of 0.000, which means that the probability value is below the significance value of 0.05. So it can be concluded that H0 is rejected and H1 is accepted, which means that the independent variables simultaneously or jointly have an influence on the dependent variable.

**Table 13.** Simultaneous Test Results (F Test) Model II  
Cross-section fixed (dummy variables)

R-squared	0.954875	Mean dependent var	2.295667
Adjusted R-squared	0.927299	SD dependent var	5.807638
SE of regression	1.565925	Akaike info criterion	4.024005
Sum squared residue	44.13819	Schwarz criterion	4.584484
Likelihood logs	-48.36008	Hannan-Quinn criter.	4.203407
F-statistics	34.62653	Durbin-Watson stat	1.953420
Prob(F-statistic)	0.000000		

Source: Data Processed with Eviews 10, 2023

Based on table 13 above, it can be seen that the independent variables have a significant simultaneous effect on the dependent variable which shows a probability value of Fcount of 34.62653 > Ftable of 2.399 with a probability value of 0.000, which means that the probability value is below the significance value of 0.05. So it can be concluded that H0 is rejected and H1 is accepted, which means that the independent variables simultaneously or jointly have an influence on the dependent variable.

#### b. Partial Test (t test)

The t test shows how far the influence of one independent variable individually explains the variation of the dependent variable. The t test can be done by comparing the t-test to the t-table with a significance level of 0.05. It can be concluded with the following criteria:

- 1) If  $t\text{-count} > t\text{-table}$ , then H0 is rejected and H1 is accepted which shows that there is a significant influence of the independent variable on the dependent variable partially.
- 2) If  $t\text{-count} < t\text{-table}$ , then H0 is accepted and H1 is rejected which shows that there is no significant effect of the independent variable on the dependent variable partially.

**Table 14.** Partial Test Results (t test) Model I

Variables	coefficient	std. Error	t-Statistics	Prob.
C	-12.64139	14.19764	-0.890387	0.3844
CAR	0.061381	0.026741	2.295431	0.0333
NPLs	-0.057132	0.096083	-0.594612	0.5591
LDR	0.058025	0.027427	2.236145	0.0478
BOPO	-0.044064	0.017495	-2.375523	0.0310
LNPK	1.677479	0.817685	2.423615	0.0211

Source: Data Processed with Eviews 10, 2023

Based on table 14 of the partial test (t test) of model I above, it can be seen that the regression results are as follows:

- 1) The CAR variable has a coefficient value of 0.061381 which indicates a positive direction. The t-count value is 2.29543 with a t-statistical probability of 0.0333 < 0.05, so H1 is accepted so that it can be concluded that CAR partially has a positive and significant effect on NIM.

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- 2) The NPL variable has a coefficient value of -0.057132 which indicates a negative direction. The t-count value is -0.594612 with a t-statistical probability of 0.5591 > 0.05, then H0 is accepted so that it can be concluded that NPL partially has a negative and insignificant effect on NIM.
- 3) The LDR variable has a coefficient value of 0.058025 which indicates a positive direction. The t-count value is 2.236145 with a t-statistical probability of 0.0478 <0.05, so H1 is accepted so that it can be concluded that LDR partially has a positive and significant effect on NIM.
- 4) The BOPO variable has a coefficient value of -0.044064 which indicates a negative direction. The t-count value is -2.375523 with a t-statistical probability of 0.0310 <0.05, then H1 is accepted so that it can be concluded that BOPO partially has a negative and significant effect on NIM.
- 5) In the variable Credit Distribution which has a coefficient value of 1.677479 which indicates a positive direction. The t-count value is 2.423615 with a t-statistical probability of 0.0211 <0.05, so H1 is accepted so it can be concluded that Credit Distribution has a positive and significant effect on NIM partially.

**Table 15.** Partial Test Results (t test) Model II

Variables	coefficient	std. Error	t-Statistics	Prob.
C	-32.06577	16.86094	-1.901778	0.0733
CAR	0.038624	0.035165	1.098379	0.2865
NPLs	-0.689098	0.112833	-6.107215	0.0000
LDR	-0.040993	0.035473	-1.155626	0.2629
BOPO	-0.011017	0.021346	-0.516142	0.6120
LNPK	1.664028	0.851534	2.581526	0.0112
NIM	0.789353	0.081231	2.957053	0.0084

Source: Data Processed with Eviews 10, 2023

Based on table 15 of the partial test (t test) of model II above, it can be seen that the results of the regression results are as follows:

- 1) The CAR variable has a coefficient value of -0.038624 which indicates a positive direction. The t-count value is 1.098379 with a t-statistical probability of 0.2865 > 0.05, so H0 is accepted so that it can be concluded that CAR partially has a positive and insignificant effect on ROA.
- 2) The NPL variable has a coefficient value of -0.689098 which indicates a negative direction. The t-count value is -6.107215 with a t-statistical probability of 0.000 <0.05, so H1 is accepted so that it can be concluded that NPL partially has a negative and significant effect on ROA.
- 3) The LDR variable which is symbolized by X3 has a coefficient value of -0.040993 which indicates a negative direction. The t-count value is -1.155626 with a t-statistical probability of 0.2629 > 0.05, so H0 is accepted so it can be concluded that LDR partially has a negative and insignificant effect on ROA.

- 4) The BOPO variable has a coefficient value of  $-0.011017$  which indicates a negative direction. The t-count value is  $-0.516142$  with a t-statistical probability of  $0.6120 > 0.05$ , then  $H_0$  is accepted so that it can be concluded that BOPO partially has a negative and insignificant effect on ROA.
- 5) In the variable Credit Distribution which has a coefficient value of  $1.664028$  which indicates a positive direction. The t-count value is  $2.581526$  with a t-statistical probability of  $0.0112 < 0.05$ , so  $H_1$  is accepted so that it can be concluded that Credit Distribution has a partial positive and significant effect on ROA.
- 6) The NIM variable has a coefficient value of  $0.789353$  which indicates a positive direction. The t-count value is  $2.957053$  with a t-statistical probability of  $0.0084 < 0.05$ , so  $H_1$  is accepted so that it can be concluded that NIM partially has a positive and significant effect on ROA.

#### 4. CONCLUSION

Based on the results of research on the Effect of Capital Adequacy Ratio, Non Performing Loans, Loan to Deposit Ratio, Operational Costs Operational Income and Credit Distribution on Return On Assets with Net Interest Margin as Intervening Variables at Conventional Rural Banks in Medan City for the 2017-2021 period. So, this research can be drawn the following conclusions:

1. *Capital Adequacy Ratio* positive and significant effect on Net Interest Margin at Conventional Rural Banks in Medan City.
2. *Non Performing Loans* no significant effect on Net Interest Margin at Conventional Rural Banks in Medan City.
3. *Loan to Deposit Ratio* positive and significant effect on Net Interest Margin at Conventional Rural Banks in Medan City.
4. Operating Costs Operating Income has a negative and significant effect on the Net Interest Margin at Conventional Rural Banks in Medan City.
5. Lending has a positive and significant effect on Net Interest Margin at Conventional Rural Banks in Medan City.
6. Capital Adequacy Ratio has no significant effect on Return On Assets at Conventional Rural Banks in Medan City.
7. Non Performing Loans have a negative and significant effect on Return On Assets at Conventional Rural Banks in Medan City.
8. Loan to Deposit Ratio has no significant effect on Return On Assets at Conventional Rural Banks in Medan City.
9. Operating Costs Operating Income has no significant effect on Return On Assets at Conventional Rural Banks in Medan City.
10. Lending has a positive and significant effect on Return On Assets at Conventional Rural Banks in Medan City.
11. Net Interest Margin has a positive and significant effect on Return On Assets at Conventional Rural Banks in Medan City.
12. Capital Adequacy Ratio has a significant effect on Return on Assets through Net Interest Margin at Conventional Rural Banks in Medan City
13. Non-Performing Loans do not have a significant effect on Return on Assets through Net Interest Margin at Conventional Rural Banks in Medan City. Net Interest Margin is able to mediate the effect of Loan to Deposit Ratio on Return on Assets.

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14. *Loan to Deposit Ratio* has a significant effect on Return on Assets through Net Interest Margin at Conventional Rural Banks in Medan City
15. *Operating Expenses Operating Income* has a significant effect on Return on Assets through Net Interest Margin at Conventional Rural Banks in Medan City
16. *Credit Distribution* has a significant effect on Return on Assets through Net Interest Margin at Conventional Rural Banks in Medan City

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