

# The Affecting Factors of Banking Profitability

Evi Octavia\*, Toha Baharudin Yusuf, Firda Aliyani Rahayu, Hesty Utami Putri, Oneng Supartika

Faculty of Economics, Widyatama University, Jl. Cikutra No.204, Bandung, 40125, West Java, Indonesia

\*evi.octavia@widyatama.ac.id

## Abstract

*This research meant to acknowledge and to test the impact between Non Performing Loan (NPL), Net Interest Margin (NIM), Capital Adequacy Ratio (CAR), and Biaya Operasional Pendapatan Operasional (BOPO) variable through the profitability of BUMN based bank. Through secondary data and quantitative method. There is 4 BUMN based bank that been heavily researched for a consecutive 10 years since 2010 to the late 2019 which is BRI Bank, BNI, BTN and Mandiri. Analysis method used here is the multiple linear regression analysis. The data processed by using the IBM SPSS Statistic 20 application by determining 0.05 significance state for the hypothesis test. It is shown that Non Performing Loan (NPL) not affecting not have any significant impact to the ROA. Net Interest Margin (NIM) in the other side inflicts a positive and significant impact to the ROA. Capital Adequacy Ratio (CAR) have a negative and significant impact to the ROA. Biaya Operasional Pendapatan Operasional (BOPO) also negatively impact and it is significant to the ROA.*

**Keywords:** *Non-Performing Loans (NPL); Net Interest Margin (NIM); Capital Adequacy Ratio (CAR); Beban Operasional Pendapatan Operasional (BOPO); Return on Asset (ROA).*

## 1. INTRODUCTION

A bank is required to have a proper operational ability to build a sensible trust with the people. A bank operational ability regarded to be the most obvious sign of the increasing trust between the people and the bank. From many bank that built in Indonesia, the BUMN based bank would likely to gain the most trust from people as the medium to save or even to do an investment as they consider it safer and trustworthy remembering that BUMN based bank is owned by the state government (Octaviani & Saraswati, 2018).

Surat Edaran Bank Indonesia 13/1/PBI/2011 regarding the operational ability level of commercials bank, operational ability of a bank is the aspect of it is ability to undergo their prospect with a keen counting through the risk and performance engagement. Banking performance measured through banking profitability ratio. The ratio measurement regarding the banking industries usually leaning on the Return on Asset (ROA) to measure the bank management ability to control the asset within so it could produce a rather income and ROA role to measure the bank management ability to control the investment owned to produce profit, the bigger the profit the faster the liability to give back for the investor. Meliawaty (In Edison & Suryana, 2017).

In the cluster I of 2019 regarding the profitability of BUMN based bank shown that the profit which rather slow compared to the profit gained in the same period the years before have a ridiculous gap of profit gain. Frederick Rasali state that slowed down profit gain often caused by the decreasing state of Net Interest Margin (NIM) or that the final interest payment and the credit allocation were in middle of liquidity pressure (Rasali, 2019).

Otoritas Jasa Keuangan (OJK) reveal that the ratio of NIM was at 4.90% as September 2019 and indeed lower than the NIM from the year before which was 5.14%. In the cluster I/2019, NIM of the banking industries decline by 21bps year on year to be just 4.86%. The decline occurred again at the cluster II/2019. At that time, banking industries NIM was at 4.90% (OJK, 2019). BUMN bank succeed to make a rapid growth to the point of double digit credit allocation. Even though the credit grew, BUMN bank kept the Non-Performing Loan (NPL) at a safe level.

Several factors that might have a role on profitability: Net Interest Margin (NIM), Non-Performing Loan (NPL), Capital Adequacy Ratio (CAR), Biaya Operasional Pendapatan Operasi (BOPO) (Ali & Laksono, 2017). Agustami's and Wicaksono's research result (2017) Non Performing Loan (NPL) has a negative impact upon the profitability, Saputra and friends (2018) Net Interest Margin (NIM) have a positive impact instead, Dewi (2017) CAR somehow have to significant impact to the ROA. Khoirudin and friends (2019) BOPO simultaneously affect the profitability. Based on the phenomenon occurred and from the result of the previous research, research has been done to reflect against the associative relation of Non-Performing Loan (NPL), Net Interest Margin (NIM), Capital Adequacy Ratio (CAR), Biaya Operasional Pendapatan Operasional (BOPO) and Return on Asset (ROA) with a title "The Affecting Factors on Banking Profitability".

## **2 LITERATURE REVIEW**

### **2.1 Monetary Ratio**

Monetary ratio is a number acquired from the comparison result of financial report post with the other post which has a significant and relevant such as debt and capital, between cash and total asset, cost of goods production with sells and etc. Monetary ratio purpose is to put a proper rate upon performance and the company financial conditions (Hantono, 2018).

### **2.2 Return On Assets (ROA)**

Is one of the profitability ratio which use purpose is to measure one company effectiveness on gaining profit by taking an advantages of the total assets of the bank (Tjiptono & Fakhruddin, 2012). Here is the formula of Return on Asset (ROA):

$$ROA = \frac{\text{Net Profit After Debt}}{\text{Total Asset}} \times 100\%$$

Bank Indonesia has stated the rating criteria of ROA position as of:

<b>Ranking</b>	<b>Predicate</b>	<b>Criteria</b>
1	Very High	ROA > 1.5%
2	High	1.25% < ROA ≤ 1.5%
3	Fairly High	0.5% < ROA ≤ 1.25%
4	Low	0% < ROA ≤ 0.5%
5	Very Low	ROA ≤ 0%

Source: Kodifikasi Peraturan Bank Indonesia Kelembagaan Penilaian Tingkat Kesehatan Bank.

### **2.3 Non-Performing Loan (NPL)**

Non-Performing Loan or NPL is the ratio between amount of the total credit categorized as slowed down/substandard, doubted and jammed against the total amount of credit in a bank (Surat Edaran BI 17/1 1PBI/ 2015).

According to Kuncoro and Suhardjono (2011) explain that NPL or substandard credit is a condition where debtor being unable to pay a certain amount or the whole liability to the bank as how it supposed to be regarding the contract deal. While the definition of NPL itself according to Taswan (2010) is ratio that shown the highest it gets, the worse quality of credits would become. According to Surat Edaran Otoritas Jasa Keuangan number 43/SEOJK.03/2016 NPL ratio could be calculated by the formula:

$$\text{NPL} = \frac{\text{Total Amount of Substandard Credit}}{\text{Total Operating Income}} \times 100\%$$

Bank Indonesia has determined the rating criteria for NPL position as of:

Ranking	Predicate	Criteria
1	Very Good	NPL < 2%
2	Good	2% ≤ NPL < 5%
3	Fairly Good	5% ≤ NPL < 8%
4	Poor	8% ≤ NPL < 12%
5	Very bad	NPL ≥ 12%

Source: Surat Edaran BI number 6/23/DPNP 31 Mei, 2004

#### 2.4 Net Interest Margin (NIM)

NIM ratio is used to measure bank management ability to maintain their productive activities to gain a net interest income. Net interest income net interest income is derived from interest income less interest expense. The bigger the NIM ratio is would likely to spike up the interest income upon the productive activities which maintained by the bank which eventually result in less possibility to obtain a problem. NIM could be calculated through this formula (Hariyani, 2010).

$$\text{NIM} = \frac{\text{Net Interest Income}}{\text{Productive Assets}} \times 100\%$$

According to Surat Edaran BI number 6/23 /DPNP 31 Mei 2004, the standard set for the NIM ratio is more than 3%. These are the NIM's assessment criteria:

Ranking	Predicate	Criteria
1	Very Good	NIM > 3%
2	Good	2% < NIM ≤ 5%
3	Fairly Good	1,5% < NIM ≤ 2%
4	Poor	1% < NIM ≤ 1,5%
5	Very bad	NIM ≤ 1%

#### 2.5 Capital Adequacy Ratio (CAR)

CAR is the ratio which show the whole bank activity but the one containing several risks that sacrifice the bank's fortune, aside from gaining income from the sources outside bank circle, or the bank performance ratio to measure a sufficient capital which owned by the bank to obscure every risky activity (Leon & Ericson, 2007). Net sources of the banking industries composed of external source & internal source. External net source gained from the owner, shareholder, and the debt held by third party. Internal net source gained from the back up

cash and also an intensive earned by the bank (Fauziah, 2017). CAR could be calculated by arranging this formula (Bank Indonesia Circular Letter number 6/23/DPNP 31 May, 2004).

$$CAR = \frac{\text{Bank's Capital}}{\text{Measured activity according to risk}} \times 100\%$$

Bank Indonesia has determined the criteria of CAR rating as of:

Ranking	Predicate	Criteria
1	Very High	CAR > 12%
2	High	9% ≤ CAR < 12%
3	Fairly High	8% ≤ CAR < 9%
4	Low	6% < CAR < 8%
5	Very Low	CAR ≤ 6%

Source: Kodifikasi Peraturan Bank Indonesia Kelembagaan Penilaian Tingkat Kesehatan Bank.

## 2.6 Beban Operasional Pendapatan Operasional (BOPO)

BOPO is recognized as the efficiency ratio to measure the bank management ability in maintaining operational bank weight to the operational income which gained by the bank. Cost and profit relate each other as both has a relevant profitability bank. A bank with proficient activity tend to have a low BOPO rating (Hasibuan et al., 2020). Counting operational cost with total weight interest and operational weight. Operational income composed of total sums of interest income and others operational income (Hariyani, 2010). The formula to calculate BOPO as of: Surat Edaran BI number 6/23/DPNP 31 May, 2004).

$$BOPO = \frac{\text{Total Operational Weight}}{\text{Total Operational Income}}$$

Bank Indonesia has determined the criteria of BOPO rating as of:

Ranking	Predicate	Criteria
1	Very Good	BOPO < 92%
2	Good	92% ≤ BOPO < 95%
3	Fairly Good	94% ≤ BOPO ≤ 96%
4	Poor	96% < BOPO ≤ 98%
5	Very bad	BOPO > 98%

Source: Surat Edaran BI number 6/23/DPNP/ 31 Mei, 2004.

## 2.7 Idea Structure

### 2.7.1 NPL Impact on ROA

As the NPL rate goes higher and so on, the less professional the bank is on maintaining their credit charge, and given the indication that the rate of risk upon giving credit to the bank is high, as the NPL goes the same direction with the risk (Riyadi, 2010).

### 2.7.2 NIM Impact on ROA

NIM as a tool or as the medium to calculate the capacity of bank management so it may foresee the performance on allocating credit and producing profit through the interest. If the

NIM rate is high, so will the interest, indicating a proper performance to producing net interest profit (Putera, 2019).

### 2.7.3 CAR Impact on ROA

The bigger the CAR ratio, the bigger the bank ability to support growth and producing profit, including to cover up the unexpected loss (IBI, 2014).

### 2.7.4 BOPO Impact on ROA

The smaller the BOPO ratio is the more efficient the operational cost would likely to loss by bank so it allows to narrow the possibility of unexpected loss. Operational cost could be calculated by counting the total weight interest and others total operational weight. Operational income composed of total interest income and total operational income (Hariyani, 2010).

Based on the idea structure and literature review, it could be depicted as conceptual conclusion as of:

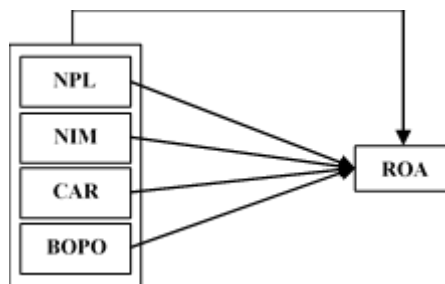


Figure 1. Research Conceptual Conclusion

## 2.8 Hypothesis

Based on the literature review, the hypothesis for this research is:

- H<sub>1</sub> = Non-Performing Loan (NPL) has an impact to Return On Assets (ROA).
- H<sub>2</sub> = Net Interest Margin (NIM) has an impact to Return On Assets (ROA).
- H<sub>3</sub> = Capital Adequacy Ratio (CAR) has an impact to Return On Assets (ROA).
- H<sub>4</sub> = Biaya Operasional Pendapatan Operasional (BOPO) has an impact to Return On Assets (ROA)

## 3 METHODOLOGY

It is important to explain that this research use the explanatory research method, by any means to explain the impact between study object. The object is NPL, NIM, CAR, BOPO, and ROA. In the other hand, data analysis here is supported by an application program SPSS 20 by the significance 0,05 to test the hypothesis.

## 4 RESULTS AND DISCUSSION

### 4.1 Research Results

#### 4.1.1 Descriptive Analysis

Analysis has been executed by showing the average rating, lowest rating, mid rating, and max rating:

Table 1. Descriptive Statistics

<b>Descriptive Statistics</b>
-------------------------------

	N	Minimum	Maximum	Mean	Std. Deviation
NPL (X1)	40	1.55	4.78	2.6847	.82472
NIM (X2)	40	3.32	10.77	6.2220	1.51921
CAR (X3)	40	13.76	22.96	18.1280	2.51769
BOPO(X4)	40	59.93	98.12	72.9578	8.38251
ROA (Y)	40	.13	5.15	2.9708	1.12606
Valid N (listwise)	40				

Source: SPSS Statistic 20 Data Processing

Table 1 has shown the sample of research as much as 40 sample from NPL variable with the lowest rating of 1.55%, maximum rating 4.78%, mean 2.6847% by the deviation standard as much as 0.82472%. NIM variable shows that the bank's ability to generate a net profit margin of at least 3.32% and a maximum of 10.77% and an average of 6.2220% with a standard deviation of 1.51921%. The variable CAR shows that the bank provides capital adequacy of at least 13.76%, at most 22.96%, an average of 18.1280% and a standard deviation of 2.51769%. BOPO the minimum value is obtained at 59.93%, the maximum value is 98.12%, the average is 72.9578% and the standard deviation is 8.38251%. ROA (Y) variable with a minimum value of 0.13, the maximum value 5.15%, the average value is 2.9078% and the standard deviation is 1.12606%.

#### 4.1.2 Multiple Linear Regression Analysis

Table 2. Multiple Linear Regression Analysis  
**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	7.366	.437		16.850	.000		
	NPL(X1)	-.096	.052	-.071	-1.860	.071	.351	2.852
	NIM(X2)	.350	.020	.473	17.419	.000	.684	1.462
	CAR(X3)	-.030	.010	-.067	-2.980	.005	.998	1.002
	BOPO (X4)	-.079	.006	-.589	-14.229	.000	.294	3.401

a. Dependent Variable: ROA(Y)  
 Source: SPSS Statistic 20 data processing

Based on Table 2, the multiple linear regression equation is obtained as follows:

$$ROA = 7.366 - 0.096 + 0.350 - 0.030 - 0.079.$$

The regression equation above is known to be a constant of 7.366. The constant shows that if the independent variables are assumed to have constant values, the dependent variable will increase by 7.366% with the variable coefficient:

- NPL = -0.096 means that every 1% increase in the value of the NPL variable will decrease the value of the bank's Return On Assets (ROA) by 0.096%.
- NIM) = 0.350 means that every 1% increase in the value of the NIM variable will increase the value of the bank's Return On Assets (ROA) by 0.350%.
- CAR = -0.030 means that every 1% increase in CAR will reduce the value of the bank's Return On Assets (ROA) by 0.030%.

- BOPO = -0.079 means that every 1% increase in BOPO will reduce the value of the bank's Return On Assets (ROA) by 0.079%.

#### 4.1.3 Classic Assumption Test

##### 4.1.3.1 Normality Test Results using Kolmogorov Smirnov

Table 3. The Kolmogorov-Smirnov One-Sample Normality Test  
**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		40
Normal Parameters <sup>a,b</sup>	Mean	0E-7
	Std. Deviation	.14955321
Most Extreme Differences	Absolute	.123
	Positive	.123
	Negative	-.078
Kolmogorov-Smirnov Z		.780
Asymp. Sig. (2-tailed)		.577

a. Test distribution is Normal.

b. Calculated from data.

Source: SPSS Statistics data processing 20

The Kolmogorov-Smirnov test results above show a significance value of 0.577. The significance value obtained is 0.577 which is greater than the error level of 0.05 ( $0.577 > 0.05$ ) so that it can be concluded that the residual value of the regression model is normally distributed.

##### 4.1.3.2 Multicollinearity Test

From Table 2, it can be seen that the tolerance value for the variable  $x > 0.10$  means that there is no correlation between the independent variables and the VIF value  $< 10$ , it can be concluded that the regression model used does not have multicollinearity between the independent variables.

##### 4.1.3.3 Heteroscedasticity Test Result using Glejser

Table 4. Glejser Test  
**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.050	.214		.236	.815
	NPL (X1)	.002	.025	.018	.068	.946
	NIM (X2)	.016	.010	.314	1.645	.109
	CAR (X4)	-.008	.005	-.244	-1.542	.132
	BOPO (X4)	.001	.003	.158	.542	.591

a. Dependent Variable: Abs\_Res

The results of the Glejser test in Table 4 show that the significance value (Sig) between the independent variables and the absolute residual is greater than 0.05 (Sig > 0.05), it can be concluded that in this study there is no heteroscedasticity.

#### 4.1.3.4 Autocorrelation Test

Table 5. Autocorrelation Test  
**Model Summary b**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.991a	.982	.980	.15787	1,538

a. Predictors: (Constant), BOPO (X4), CAR (X3), NIM (X2), NPL (X1)

a. Dependent Variable: ROA (Y)

Source: SPSS Statistics data processing 20

The test results show the DW value of 1.538 then compared with the table value DW (n) = 40, the independent variable (k = 4) obtained a value of dU = 1.721 and a value of dL = 2.2791. From these results it results in  $dL < d < dU$  or  $1.721 < 1.538 < 2.2791$ . So it can be concluded that in this study there is no autocorrelation in the dependent variable.

#### 4.1.4 Goodness Fit Test Results (Fit Model)

Table 5 shows the R Square (R<sup>2</sup>) value of 0.982 and the Adjusted R Square value of 0.980. With the test results, it explains that the ROA variable can be influenced by all X variables by 98%. This shows that the contribution of the independent variable to changes in the dependent variable is very strong. The remaining 0.20% is influenced by other variables outside the research used.

#### 4.1.5 Test result (partial) t Double Linear Regression

##### 1. Based on the Significance Value (Sig < 0.05)

Table 2 shows the results of the partial t test with a significance < 0.05 are as follows:

- NPL (0.071) > 0.05. NPL has no significant effect on ROA.
- NIM (0.00) < 0.05. NIM has a significant effect on ROA.
- CAR (0.005) < 0.05. CAR has a significant effect on ROA.
- BOPO (0.00) < 0.05. BOPO has a significant effect on ROA.

##### 2. Based on t<sub>table</sub>

$$\begin{aligned}
 & (\alpha: 2; n - k - 1) \\
 & = (0.05; 2; 40 - 4 - 1) \\
 & = 0.025; 35 \\
 & = 2.030
 \end{aligned}$$

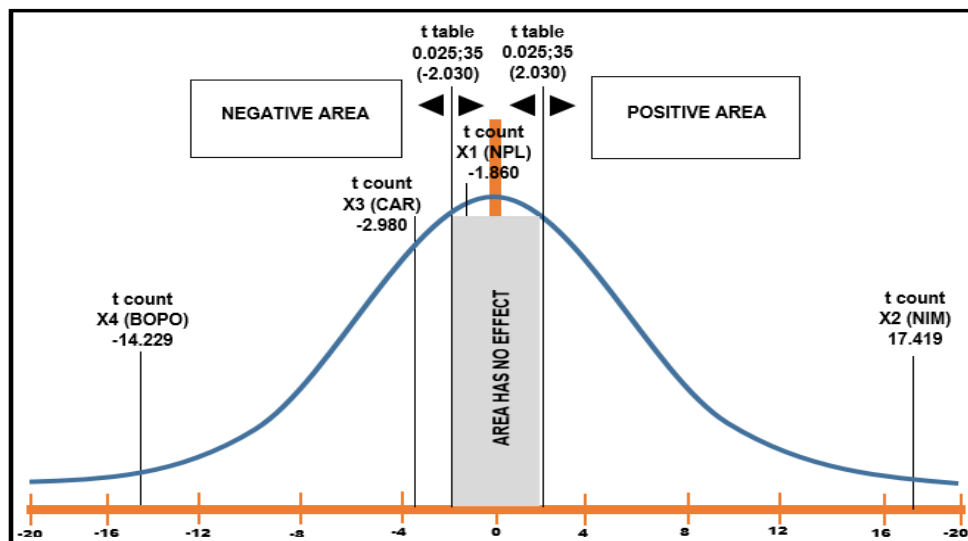


Figure 2. Graph of significance value area using  $t_{table}$

From Figure 2 can be concluded:

- NPL has no effect on ROA.
- NIM has a positive effect on ROA.
- CAR has a negative effect on ROA.
- BOPO has a negative effect on ROA.

#### 4.1.6 Test Result F (Simultaneous) Double linear regression

##### 1. Based on the Significance Value (sig < 0.05)

Table 6. Anova  
**ANOVA**

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48,580	4	12,145	487,315	.000b
	Residual	.872	35	.025		
	Total	49,452	39			

a. Dependent Variable: ROA (Y)

b. Predictors: (Constant), BOPO (X4), CAR (X3), NIM (X2), NPL (X1)

Source: SPSS Statistics data processing 20

Test result F variable significance NPL, NIM, CAR and BOPO simultaneously affect Y because significance value  $0.000 < 0.05$ .

##### 2. Based on $f_{count}$ dan $f_{table}$

Showed the test result F above is obtained  $F_{count}$  amounting to 487.315 And  $F_{table} = (k;n-k) = (4;40-4) = (4;36) = 2.84$ . So it can be concluded that NPL, NIM, CAR and BOPO simultaneously affects ROA because  $F_{count} (487.315) > F_{table} (2.84)$ .

#### 4.2 Discussion

Based on the test results, it can be concluded that:

#### **4.2.1 Effect on Non-Performing Loan (NPL), Net Interest Margin (NIM), Capital Adequacy Ratio (CAR), Beban Operasional Pendapatan Operasional (BOPO) on Return On Assets (ROA)**

Significance value on the four variable showing sig amount 0.00, can be concluded sig < 0.05. NPL, NIM, CAR and BOPO simultaneously affect Return On Assets (ROA).

#### **4.2.2 Effect on Non-Performing Loans (NPL) on Return On Assets (ROA)**

NPL has no effect on ROA and showing amount of t value -1.860. Significant value (0.071) > 0.05 showing NPL its not significant of ROA. It can be concluded that NPL has no effect and is not significant towards ROA. The results of this research with the research of Saputra's (2018) show the same results that NPL is not significant to profitability (ROA).

#### **4.2.3 Effect on Net Interest Margin (NIM) on Return On Assets (ROA)**

NIM has a positive effect on Return On Assets and shows a t value of 17.419. The t value of significance of the test is 0.00 (Table 2). A significance value of 0.00 < 0.05 indicates that NIM is significant to ROA. It is concluded that Net Interest Margin has a significant positive effect on ROA. The results of this study with the research of Saputra et al. (2018) show the same results that NIM has a significant positive effect on profitability (ROA).

#### **4.2.4 Effect on Capital Adequacy Ratio (CAR) on Return On Assets (ROA)**

Based on the test results, the Capital Adequacy Ratio has a negative effect on Return on Assets and shows a t value of -2.980. Significance value (0.005) < 0.05 showing that CAR is significant on ROA. The results of this study with Dewi's (2017) research show different results that CAR has a significant negative effect on Profitability (ROA).

#### **4.2.5 Effect on Beban Operasional Pendapatan Operasional (BOPO) Return On Assets (ROA)**

Based on the test results, BOPO has a negative effect on Return On Assets and shows that the BOPO variable obtains t value of -14.229. The significance value (0.000) < 0.05 indicates that BOPO has a significant effect on ROA. Therefore, it is concluded that BOPO has a significant negative effect on ROA. The results of this study with research by Dewi (2017) show the same results that BOPO has a significant negative effect on Profitability (ROA).

## **5 Conclusion**

### **5.1 Conclusion**

The conclusions based on the results of this study are as follows:

- NIM variable contribution in affecting Y variable partially its big enough with the amount of t value 17,419. Thus helping the other three variables, the NPL, CAR and BOPO give their influence on variable Y. in conclusion that simultaneously NPL, NIM, CAR and BOPO variable has an effect on Return On Assets (ROA).
- The non-impact of NPL on ROA is due to the fact the Bank of BUMN which used as the research sample has an NPL ratio of 2.6847 it is included to the best NPL predicate with the criteria  $2\% \leq 2.6847 < 5\%$  so the risk of the credit is small. This small risk of credit has no effect on (ROA) profitability because the bank of BUMN who used as a research sample has a high CAR ratio with an average of 18.1280% and is included in the very high bank CAR category because it is valued at >12% so the risk of bad credit can be covered by this capital. Therefore, non-performing loan (NPL) has no effect and is not significant to ROA.

- Average level of NIM ratio of BUMN bank who used as a research sample in the period 2010 - 2019 had a very good NIM with criteria  $> 3\%$  and a value of 6.22%, NIM variable contribution on increasing the ROA is very good. The increase in a bank's net interest margin income, the higher the profitability in the rate of return on assets (Return On Asset) so that the result of the research is showing that Net Interest Margin (NIM) has a positive significant effect on ROA.
- CAR has a negative impact on ROA because the distribution of dividends paid to shareholders exceeds the standard set by Bank Indonesia (10 – 12%). Banks of BUMN give the dividend payout ratio during the time period 2010 – 2019 with an average of 31.13% and this number reduces profitability of (Return On Asset). Other than that the high CAR ratio with an average (18.1280%) not only used for dividend payments but also used to cover the risk of bad credit (NPL) and the high number of CAR is cannot increase profitability (ROA) so that the Capital Adequacy Ratio (CAR) has a significant negative effect on ROA.
- BUMN's bank BOPO ratio is reached an average 70.6383% which is based on the regulations of Bank Indonesia, this number is included to the very good category (BOPO  $< 92\%$ ). Although during the research period the BUMN's bank is targeted the lower value of BOPO, because the lower BOPO value the more efficient BUMN's bank performance. So the average BOPO on BUMN's bank still need improvement. But this does not reduce the profitability of (ROA) generated because the increase in operating costs also increases operating income and interest income (net interest margin) obtained by BUMN's banks during the period 2010 - 2019. Therefore, BOPO has a significant negative effect on ROA.

## 5.2 Suggestions

For Banking (BUMN bank) which is the subject of research:

- To overcome NPL, the bank restructures against bad credit, for example changing the type of credit taken by the debtor from short-term to long-term credit. Which when the bank's doing this will minimalize the risk of bad credit.
- Most of the bank's income is derived from net interest income (NIM). In order to maximizing NIM the banks should rearrange the loan interest rate given to debtors and being able to reduce interest costs incurred so that the resulting profitability of (ROA) is more maximized.
- The high CAR ratio of BUMN's bank is very good, to maximize the use of this CAR, it is recommended that BUMN banks conduct a review and re-evaluation of the amount of dividends given to shareholders through RUPS, remembering that the amount of dividend that given is very high and exceeded standards set by Bank Indonesia and should have capital allocated to the bank's asset unit to expand expansion and not be used to cover the risk of bad credit (NPL).
- To reduce the BOPO ratio, banks should improve the quality and use of productive assets to have the more efficient financial performance. As well as being able to increase operating income by reducing operating costs as small as possible to reduce the use of operating costs so that costs incurred are more efficient.

## Further Researcher

Conducting further research using banking ratio variables and banking performance ratios with more research variables and research time periods.

## Acknowledgements

The authors thank God Almighty because with His blessing and power, the writers can finish this research. Special thanks to the author's parents for the prayers and the support, Mrs. Evi Octavia as research advisers for professional guidance, support and useful suggestions, from Mr. Kohar Mudzakar as a lecturer trustee, and to all of the lecturers and also all the staff of Widyatama University for all the knowledge and guidance during authors studying in here. And to all of friends in B2-A class of accounting thanks for all the support. Thank you also to the Widyatama University Information Technology Center, and to all technician who helped installed the program used in testing this research.

## References

1. Agustami, S., & Wirekso, A. M. (2013). Pengaruh Non Performing Loan (NPL) Terhadap Profitabilitas (Studi Kasus PT Bank OCBC NISP, Tbk Tahun 2002-2010). *Jurnal Riset Akuntansi dan Keuangan*, Vol. 1, No. 2, 112-122.
2. Ali, M., & Laksono T.Y, R. R. (2017). Pengaruh Net Interest Margin (NIM), Biaya Operasional Terhadap Pendapatan Operasional (BOPO), Loan to Deposit Ratio (LDR) dan Non Performing Loan (NPL) Terhadap Return on Assets (ROA). *Jurnal Riset Akuntansi dan Keuangan*, 5(2), 1377-1392.
3. Bank Indonesia. (2004). Home: Peraturan Perbankan Surat Edaran Bank Indonesia No.6/23/DPNP Sistem Penilaian Tingkat Kesehatan Bank Umum dan lampiran. <https://www.bi.go.id/id/peraturan/perbankan/pages/ketentuan%20perbankan.aspx>.
4. Bank Indonesia. (2011). Home: Peraturan Perbankan: Peraturan Bank Indonesia Nomor 13/1/PBI/2011 tanggal 5 Januari 2011 tentang Penilaian Tingkat Kesehatan Bank Umum. [https://www.bi.go.id/id/peraturan/perbankan/Pages/pbi\\_130111.aspx](https://www.bi.go.id/id/peraturan/perbankan/Pages/pbi_130111.aspx).
5. Bank Indonesia. (2015). Peraturan Stabilitas Sistem Keuangan: Peraturan Bank Indonesia No. 17/11/PBI/2015 tentang Perubahan Atas Peraturan Bank Indonesia Nomor 15/15/PBI/2013 tentang Giro Wajib Minimum Bank Umum dalam Rupiah dan valuta Asing Bagi Bank Umum Konvensional. [https://www.bi.go.id/id/peraturan/ssk/Pages/pbi\\_171115.aspx](https://www.bi.go.id/id/peraturan/ssk/Pages/pbi_171115.aspx).
6. Dewi, A. S. (2018). Pengaruh CAR, BOPO, NPL, NIM, dan LDR Terhadap ROA Pada Perusahaan di Sektor Perbankan yang Terdaftar di BEI Periode 2012-2016. *Jurnal Pundi*, 1(3).
7. Edison, A., & Suryana. (2017). Pengaruh Non Performing Loan (NPL), Loan Deposit Ratio (LDR), Loan Asset Ratio (LAR), Biaya Operasional Pendapatan Operasional (BOPO) Terhadap Profitabilitas (Study Pada Perbankan Terdaftar di Bursa Efek Indonesia). *Profesionalisme Akuntan Menuju Sustainable Business Practice*.
8. Fauziah, F. (2017). Kesehatan Bank, Kebijakan Dividen, dan Nilai Perusahaan Teori dan Kajian Empiris. Samarinda: RV Pustaka Horizon.
9. Hantono. (2018). Konsep Analisa Laporan Keuangan dengan Pendekatan Rasio dan SPSS. Yogyakarta: CV Budi Utama.
10. Hariyani, I. (2010). Restrukturisasi & Penghapusan Kredit Macet. Jakarta: PT Elex Media Komputindo Kompas Gramedia.
11. Hasibuan, A. N., Annam, R., & Nofinawati. (2020). *Audit Bank Syariah*. Jakarta: Kencana.
12. Ikatan Bankir Indonesia. (2014). *Mengelola Bank Komersial*. Jakarta Pusat: PT Gramedia Pustaka Utama.
13. Khoirudin, M., Indrianasari, N. T., & Mudhofar, M. (2019). Pengaruh Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), dan Biaya Operasional Pendapatan Operasional

- (BOPO) Terhadap Profitabilitas PT. BPR Sentral Arta Asia Periode 2010-2017. *Counting: Journal of Accounting*, 1(4), 77-87.
14. Kuncoro, M., & Suhardjono. (2011). *Manajemen Perbankan Teori dan Aplikasi*. Yogyakarta: BPFE.
  15. Leon, B., & Ericson, S. (2007). *Manajemen Aktiva Pasiva Bank Nondevisa*. Jakarta: PT Grasindo.
  16. Octaviani, S., & Saraswati, N. (2018). Analisis Penilaian Tingkat Kesehatan Bank Dengan Metode Risk Analisis Penilaian Tingkat Kesehatan Bank Dengan Metode Risk. *Jurnal Akuntansi*, 5(2), 138-146.
  17. Otoritas Jasa Keuangan. (2016). Surat Edaran Otoritas Jasa Keuangan Nomor 43/SEOJK.03/2016. <https://www.ojk.go.id/id/kanal/perbankan/regulasi/surat-edaran-ojk/Pages/SEOJK-tentang-Transparansi-dan-Publikasi-Laporan-Bank-Umum-Konvensional.aspx>.
  18. Putera, D. P. (2019). *Hukum Perbankan: Analisis Mengenai Prinsip, Produk*. Surabaya: Scopindo Media Pustaka.
  19. Rasali, F. (2019). Laba Bank BUMN Kuartal I 2019 Melambat. (C. Indonesia, Interviewer)
  20. Riyadi, S. (2010). *Banking Assets and Liability Management*. Jakarta: Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.
  21. Saputra, A., Arfan, M., & Saputra, M. (2018). Pengaruh Capital Adequacy Ratio, Net Interest Margin, Loan to Deposit Ratio dan Non Performing Loan Terhadap Profitabilitas Bank Umum Non Devisa di Indonesia Periode 2014-2016. *Jurnal Perspektif Ekonomi Darussalam*, 4(2), 199-212.
  22. Taswan. (2010). *Manajemen Perbankan Konsep, Teknik, dan Aplikasi*. Yogyakarta: UPP STIM YKPN.
  23. Tjiptono, D., & Fakhruddin, H. M. (2012). *Pasar Modal di Indonesia*. Jakarta: Salemba Empat.