UDC 336

# THE EFFECT OF BANK INDONESIA'S INTEREST POLICY, NON PERFORMING LOAN AND LOAN TO DEPOSIT RATIO ON RETURN ON ASSETS IN BANK BRI BRANCH OFFICE IN BALI PROVINCE, INDONESIA

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**ABSTRACT**

The determination of interest rates for Bank Indonesia Certificates (SBI) and other Bank Indonesia monetary policies will ultimately have an impact on banks, particularly on profit performance. This study aims to explain the effect of Monetary Policy (SBI), the effect of Credit risk (NPL) and the effect of Ratio (Credit/DPK) (LDR) on Asset-based Earnings (Profit/Assets) (ROA) at PT. BRI Bank in Bali Province. This study uses secondary data during the period from 2013 to 2020, data from twelve branch offices of PT. Bank Rakyat Indonesia (BRI) which operates in eight districts and one municipality in Bali Province. The data collected are SBI, NPL, LDR and ROA. The data were then analyzed by descriptive analysis with multiple linear regression using the IBM SPSS 26 analysis tool. The calculation of the regression coefficient value for the SBI Interest Rate variable was 0.046 with a significance value of 0.964 which indicates that the SBI variable has a positive but not significant effect on ROA. The regression coefficient value of the NPL is 2.196 with a significance value of 0.031, it shows that the NPL has a positive and significant effect on ROA. The regression coefficient value for the LDR variable is 4.480 with a significance value of 0.000 which indicates that the LDR has a positive and significant effect on ROA.

**KEY WORDS**
Return On Asset, SBI, NPL, LDR.

PT. Bank BRI (Persero) Tbk Bali Province Area which is a state-owned bank with bank activities in addition to focusing on retail as well as micro, small businesses is expected to continue to grow and must continue to exist in its segment towards future banking, in line with Bank Indonesia's policy to continue to take steps steps to develop a healthy, strong and globally competitive Indonesian banking system in the future. PT. Bank BRI is a state-owned company engaged in the Indonesian banking sector, has a role in the nation's economic development by opening and absorbing a lot of workers. According to Deisy (2016) as an intermediary institution, PT Bank BRI must have good performance, because with good performance, banks will be able to more easily gain the trust of customers (agent of trust). Banking as a business entity engaged in finance or finance really needs the trust of customers or the public to support and facilitate business activities carried out. The smooth activities carried out by the bank will be very supportive in achieving the welfare of the stockholders and will increase the value of the company. One of the indicators to assess a bank's financial performance is to look at the level of profitability and efficiency (Fitri Zulifiah, 2014). Many factors also influence the level of profitability or profit of the bank. According to Nahrawi (2017) in addition to internal factors. The banking sector is also heavily influenced by various Bank Indonesia Monetary Policies. The influence of Bank Indonesia's monetary policy which in turn will have an impact on profit performance will be largely determined by the policy of determining the SBI interest rate (BI rate) and other monetary policies (Alim, 2014). The dynamics of the movement of the SBI interest rate (BI rate) and the risk of NPL credit will in turn affect the LDR (Loan to Deposit Ratio) and affect deposit rates, and in time will have an impact on the business community and other communities.

The Bank Indonesia interest rate (BI Rate) is an interest rate policy that reflects the monetary policy stance or stance set by Bank Indonesia and announced to the public (Prakoso and Boentoro, 2013). The ability of national banks to generate operating profits is

reflected by the development of Return On Assets (ROA), which is obtained from financial business organizations that manage third party funding sources, then distribute them to users of credit services on the banking side (Windriya, 2015). Return on Assets (ROA) in financial statement analysis is most often highlighted, because ROA is able to measure the company's ability to generate profits in the past to be projected into the future. Overall PT. BRI Bank Persero. Tbk Bali Province has disbursed KUR up to Rp 3.4 trillion before being revised by the government and the Non Performing Loan (NPL) contributed by KUR is quite low at 0.79%. Non-Performing Loans reflect the level of bank credit risk (Ambarawati and Abundanti, 2018).

## LITERATURE REVIEW

Return on Assets (ROA) is a ratio that shows how much net income can be obtained from all the assets owned by the company. Therefore, the profit after tax figure and the average company wealth are used. The higher this ratio, the better the productivity of assets in obtaining net profits. The assessment criteria based on the component ranking of Return On Assets (ROA) can be seen in the following table:

Table 1 – Matrix of ROA Component Rating Criteria

| Ratio | Ranking | Predicate |
|---|---|---|
| ROA > 1,5% | 1 | Very good |
| 1,25% < ROA ≤ 1,5% | 2 | Good |
| 0,5% < ROA ≤ 1,25% | 3 | Satisfactory |
| 0 < ROA ≤ 0,5% | 4 | Not good |
| ROA ≤ 0% | 5 | Very Not Good |

Sources: SE BI No. 6/23/DPNP tahun 2004.

Return on Assets (ROA) is an important indicator to measure the effectiveness of a bank in generating profits by utilizing its assets, the greater the ROA, the higher the rate of return, this means that the bank's business is developing in a healthy manner. Return on Assets (ROA) focuses on the company's ability to earn earnings in the company's operations (Prastowo et.al, 2018). Bank Indonesia has implemented a combination of using monetary policy through indirect instruments with the determination of interest rates for Bank Indonesia Certificates (SBI). These monetary instruments in turn will greatly affect the performance and profit of the national banking system (Wardana, et.al, 2016). The interest rate is measured using the interest rate determined by Bank Indonesia through Bank Indonesia Certificates (SBI). The size of the interest rate is highly dependent on the macro conditions that develop in Indonesia. An increase in interest rates has a correlation with an increase in the volume of stock sales (Nusraningrum and Suwesti, 2018). Credit risk includes non-performing loans. Non-Performing Loans (NPLs) are non-performing loans where the debtor is unable to meet the payment of loan arrears and interest within the period agreed upon in the agreement. The increase in NPL in large numbers can cause problems for the health of banks, therefore banks are required to always maintain credit that is not in a high NPL position. In order to determine a fair or healthy level, an appropriate standard measure for NPL is determined. In this case, Bank Indonesia stipulates that a reasonable level of NPL is 5% of its total loan portfolio. The assessment criteria based on the ranking of NPL components can be seen in the following table:

Table 2 – Matrix of NPL Component Ranking Criteria

| Ratio | Ranking | Predicate |
|---|---|---|
| ≤ 10% | 1 | Very good |
| 10% < NPL ≤ 15% | 2 | Good |
| 15% < NPL ≤ 20% | 3 | Satisfactory |
| 20% < NPL ≤ 25% | 4 | Not good |
| 25% < NPL | 5 | Very Not Good |

Sources: SE BI No. 6/23/DPNP year 2004.

According to (2020) the Loan to Deposit Ratio (LDR) is one of the liquid measures of the inventory concept in the form of a loan to deposit ratio. The higher this ratio, the lower the liquidity of the bank concerned. The assessment criteria based on the LDR component ranking can be seen in the following table:

Table 3 – Matrix of LDR Component Rating Criteria

| Ratio | Ranking | Predicate |
|---|---|---|
| LDR ≤ 75% | 1 | Very good |
| 75% < LDR ≤ 85% | 2 | Good |
| 85% < LDR ≤ 100% | 3 | Satisfactory |
| 100% < LDR < 120% | 4 | Not good |
| LDR > 120% | 5 | Very Not Good |

*Sources: SE BI No. 6/23/DPNP year 2004.*

Loan to Deposit Ratio (LDR) will show the bank's ability to channel third party funds collected by the bank concerned (Boediono, 2013). The research concept framework is as follows:
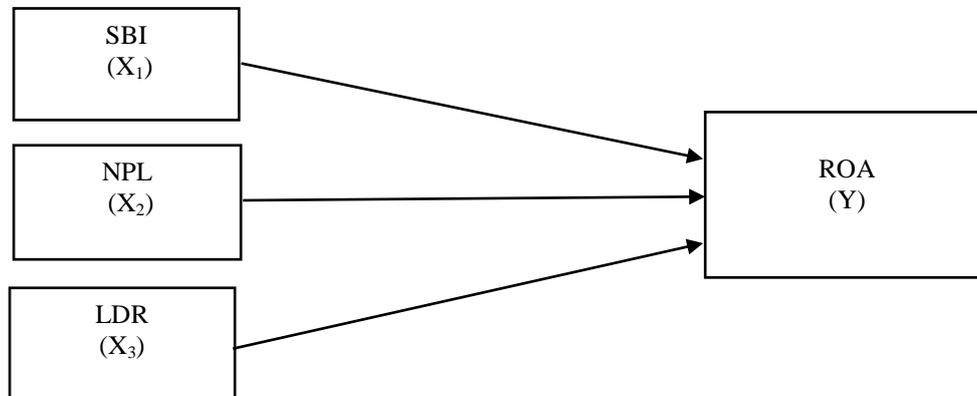


Figure 1 – Research Concept Framework (Source: Data processed, 2021)

## METHODS OF RESEARCH

This research was conducted at the office of PT. BRI Bank in Bali Province Jl. Kusuma Atmaja No. 1 Renon Denpasar, with 12 branch offices consisting of Denpasar Gajah Mada, Denpasar Gatot Subroto, Kuta, Gianyar, Ubud, Tabanan, Bangli, Negara, Denpasar Gajah Mada, Singaraja, Klungkung, Karangasem branch offices with each branch covering a work unit , cash offices and terraces in their respective areas. This research is classified as associative research. Associative research is research that aims to determine the influence or relationship between two or more variables (Sugiyono, 2015). The study uses secondary data, according to Sujarweni (2014) secondary data is data obtained from records, books, in the form of company published financial reports, government reports, articles, books as theory, magazines, and so on. Research focus on PT. Bank BRI in Bali Province with 12 branch offices operating in Bali Province related to Monetary Policy (SBI), Non Performing Loan (NPL), Loan to Deposit Ratio (LDR) and Return On Assets (ROA) data from 2013 to 2020. The variables used in this study are the dependent variable and the independent variable with the following description:

- Dependent variable (Y). The dependent variable in this study is Return On Assets (ROA);
- Independent variable (X). The independent variables in this study are Monetary Policy (SBI) (X1), Non Performing Loans (NPL) (X2) and Loan to Deposit Ratio (LDR) (X3).

The data analysis technique used in this study is a quantitative analysis technique,

namely multiple linear regression analysis. According to Ghozali (2018), multiple linear regression analysis is used to determine the direction and how much influence the independent variable has on the dependent variable. Multiple linear regression model is shown by the following equation:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e \qquad (1)$$

Where:

Y = *Return On Assets* (ROA);
A = Constanta;
$X_1$ = *Policy Moneter* (SBI) ($X_1$);
$X_2$ = *Non Performing Loan* (NPL) ($X_2$);
$X_3$ = *Loan to Deposit Ratio* (LDR) ($X_3$);
$\beta_{1,2,3}$ = Coef. Regression;
e = error or term.

Classical assumptions in this study include normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. This study formulated the hypothesis as follows:

- $H_1$: *Monetary Policy* (SBI) has a significant positive effect on *Return On Asset* (ROA);
- $H_2$: *Non Performing Loan* (NPL) has significant negative effect on *Return On Asset* (ROA);
- $H_3$: *Loan to Deposit Ratio* (LDR) has significant positive effect on *Return On Asset* (ROA).

## RESULTS AND DISCUSSION

There are four variables in this study, namely Monetary Policy (SBI), Non Performing Loan (NPL), LDR, and profit/assets (ROA). The following is an overview of the research variables according to the observation period. The results of descriptive data processing can be seen in the Table of Descriptive Data Processing Results as follows:

Table 4 – Descriptive Data Processing Results

| | Descriptive Statistics | | | | | | |
|---|---|---|---|---|---|---|---|
| | N Statistic | Range Statistic | Minimum Statistic | Maximum Statistic | Mean Statistic | Std. Error | Std. Deviation Statistic |
| SBI | 96 | 3,29 | 4,25 | 7,54 | 5,8850 | 0,11970 | 1,17283 |
| NPL | 96 | 0,77 | 0,03 | 0,80 | 0,5061 | 0,01422 | 0,13932 |
| LDR | 96 | 39,97 | 53,63 | 93,60 | 71,1344 | 0,86342 | 8,45975 |
| ROA | 96 | 2,42 | 1,12 | 3,54 | 2,4552 | 0,06321 | 0,61928 |

*Source: Data processed, 2021.*

Based on the calculation results above, it appears that the Return On Assets (ROA) has the lowest value of 1.12%, the highest value of 3.54% and the average ROA of 2.4552%. This shows that statistically, during the research period, the ROA of BRI bank branches in Bali Province has met the standards set by Bank Indonesia, which is above 1.5%. While the standard deviation for ROA is 0.61928 which is smaller than the average ROA, this indicates that the data used in the ROA variable has a small distribution because the standard deviation is smaller than the average value, so that the data deviation in the ROA variable can be said to be good.

Before testing the multiple linear regression on the research hypothesis, it is necessary to first conduct a test to determine whether there is a violation of the classical assumptions. First, the Kolmogorov Smirnov test is used to test statistically whether the data is normally distributed or not.

Based on the results in the Kolmogorov-Smirnov Test Table, the normality test for the dependent variable ROA shows that the Kolmogorov-Smirnov value is 0.119 and the significance is 0.200. So it can be said that with a significance level of = 0.05 the ROA data is

normally distributed, because the ROA significance value at Kolmogorov-Smirnov is 0.200 greater than the predetermined significance value ($\alpha$ = 0.05). The next test is testing whether there is multicollinearity can be done using the calculation of Tolerance (TOL) and the VIF (Variance Inflation Factor) method.

Table 5 – Kolmogorov-Smirnov Test

| One-Sample Kolmogorov-Smirnov Test | | Unstandardized Residual |
|---|---|---|
| N | | 96 |
| Normal Parameters[a,b] | Mean | 0,0000000 |
| | Std, Deviation | 0,53740585 |
| Most Extreme Differences | Absolute | 0,119 |
| | Positive | 0,076 |
| | Negative | -0,119 |
| Test Statistic | | 0,119 |
| Asymp, Sig, (2-tailed) | | 0,200 |

*Source: Data processed, 2021.*

Table 6 – Tolerance and VIF values

| Variabel | Collinearity Statistics Tolerance | VIF |
|---|---|---|
| SBI | 0,849 | 1,177 |
| NPL | 0,988 | 1,012 |
| LDR | 0,845 | 1,183 |

*Source: Data processed, 2021.*

Based on the table of Tolerance and VIF values, it can be seen that the VIF value for each research variable is as follows:

1. The VIF value for the SBI variable is 1.177 < 10, so the SBI variable is declared to have no symptoms of multicollinearity;
2. The VIF value for the NPL variable is 1.012 < 10, so that the NPL variable is declared to have no symptoms of multicollinearity;
3. The VIF value for the LDR variable is 1.183 < 10, so the LDR variable is declared to have no multicollinearity symptoms.

Next, to test whether there is autocorrelation between variables, a Run test is performed. Based on the SPSS autocorrelation test table, the results show a significant value of 0.151 which means that it is not significant and there is no autocorrelation between variables.

Table 7 – Autocorrelation Test

| Runs Test | Unstandardized Residual |
|---|---|
| Test Valuea | 0,14280 |
| Cases < Test Value | 48 |
| Cases >= Test Value | 48 |
| Total Cases | 96 |
| Number of Runs | 42 |
| Z | -1,436 |
| Asymp. Sig. (2-tailed) | 0,151 |
| a. Median | |

*Source: Data processed, 2021.*

Table 8 – Estimation Results of Linear Regression

| Variables | Coef. Reg ($\beta_i$) | t test | Standard error | Significance |
|---|---|---|---|---|
| Constant | -0,304 | -0,434 | 0,700 | 0,665 |
| SBI ($X_1$) | 0,002 | 0,046 | 0,052 | 0,964 |
| NPL($X_2$) | 0,888 | 2,196 | 0,405 | 0,031 |
| LDR ($X_3$) | 0,032 | 4,480 | 0,007 | 0,000 |
| F test = 10,056 | | R-Square = 0,222, Sig = 0,000 | | |

*Source: Data processed, 2021.*

The R2 value of 0.222, this means that 22.2 percent of the variation in Return of Assets (ROA) performance can be explained by variations of the three independent variables, namely SBI, NPL and LDR, while the remaining 77.8 percent is explained by other reasons outside model. Based on the calculation with the F-test in the Linear Regression Estimation Results table, the F-count value is 10.056 with a significance value (sig) of 0.000. Because the significance value is 0.000 <0.05, there is a significant effect between the SBI, NPL, and LDR variables on the ROA variable simultaneously. The constant value is -0.304, it shows that the ROA has a value of 0.304 with the independent variables (SBI, NPL, and LDR) considered constant.

The regression coefficient value for the SBI Interest Rate variable is 0.046 with a significance value of 0.964 where this value is greater than the 0.05 significance level. It states that the SBI Interest Rate has no significant effect on Return On Assets (ROA). The regression coefficient value for the Non Performing Loan (NPL) variable is 2.196 with a significance value of 0.031 where this value is smaller than the 0.05 significance level, but has no negative effect. The average NPL value in this study is 0.5061 which means the NPL ratio is in accordance with the provisions, which is below the maximum value determined by Bank Indonesia. The regression coefficient value for the Loan to Deposit Ratio (LDR) variable is 4.480 with a significance value of 0.000 where this value is significantly less than 0.05, the Loan to Deposit Ratio (LDR) has a positive and significant effect on Return On Assets (ROA).

## CONCLUSION

Based on the results of statistical calculations show that the SBI variable has a positive but not significant effect on ROA. Further studies are needed to find other variables that are more dominant in influencing the profitability (ROA) of Bank BRI's branch office in Bali Province. The NPL variable has no positive and significant effect on ROA. The increase in NPL does not result in a decrease in ROA, because the value of Allowance for Earning Assets (PPAP) can still cover non-performing loans. The LDR variable has a positive and significant effect on ROA. This shows that the greater the Loan to Deposit Ratio (LDR), the profit earned by the bank (ROA) will increase (assuming that the bank concerned is able to channel its credit effectively). With the increase in profit (ROA), the financial performance of the bank concerned will improve or increase.

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