FACTORS AFFECTING PROFITABILITY WITH THE INTEREST RATE AS MODERATING VARIABLES IN BANK SUMUT

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Abstract: The purpose of this study is to examine the effect of the Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR), Operational efficiency (BOPO), Net Interest Margin (NIM), and Current Account Saving Account (CASA) partially and simultaneously to PT. Bank Sumut profitability with Bank Indonesia (BI) Rates as a moderating variable. The population of this research is the branch office of PT. Bank Sumut which has been established during the observation period from 2014 to 2018. This study uses purposive sampling. The analytical tool used is panel data regression and data processing using software Stata 13. The results of this test show that the NPL and LDR ratios have a negative effect on ROA, while the BOPO, NIM, and CASA ratios have a positive effect on ROA. BI Rates cannot moderate the relationship between the ratio of NPL, LDR, BOPO, NIM, and CASA on ROA in PT. Bank Sumut.

Keywords: NPL, LDR, BOPO, NIM, CASA and ROA

1. INTRODUCTION

The development in the banking world that is very rapid with a high level of complexity, can affect the performance of a bank. One indicator of achieving a company's performance is profit. Profitability shows the company's ability to generate profits (Syahyunan, 2015). Profitability ratios describe a bank's ability to increase its profits through all available capabilities and sources so that it is known to measure the level of business efficiency and profit achieved by the bank. The level of bank soundness that can be used to measure a bank's ability to make a profit is the bank's profitability.

Profitability is very important for banks, because the source of bank funding comes mostly from people who have the trust in the bank to save their funds which is commonly known as Third Party Funds. Public trust to entrust these funds cannot be separated from expectations that will get returns in the form of interest or profit sharing, and this is one of the reasons banks must be profitable to be able to pay interest costs to customers.

The core of bank fund management is how banks manage and align their sources of funds with channeling of funds. On the side of the source of funds, the bank must incur costs of funds (interest to depositors) while on the distribution of funds, banks seek profits. The difference between profit and cost is profit margin. One important aspect in bank fund management is profitability, the other aspect is liquidity. Sources of bank funds are on the liability side and fund channeling is on the assets side.

BI Rates is the most potential instrument owned by Bank Indonesia to maintain financial sector stability, especially banking. However, changes in interest

rates set by BI will not necessarily be followed by the banking world, because banks have a different business perspective from BI. From a business perspective, banks have shareholders who expect banks to be able to generate profits.

Measuring tool that can be used by investors for decision making is to do financial ratio analysis techniques. Financial ratio analysis uses existing financial statement data as a basis for valuation. Although based on data and past conditions, financial ratio analysis is intended to assess the risks and opportunities in the future. Measurement and relationship between one variable with other variables in financial ratios can provide meaningful conclusions to determine the level of financial health of a company. This is the basis for researchers to conduct research on "Factors affecting Profitability with Interest Rates as Moderating Variables at PT. Bank Sumut".

2. LITERATURE REVIEW

2.1 Signaling Theory

Signaling Theory tells about how a company should give signals to users of financial statements. This signal is in the form of information about what has been done by management to realize the wishes of the owner. Signals can be in the form of promotions or other information stating that the company is better than other companies. Information is an important element for investors and business people because the information essentially presents information, notes or pictures both for the past, current and future conditions for the survival of a company and how the market effects (Ross, 1977). The use of signaling theory in this research information in the form of financial ratios. Financial ratios used include Non-Performing Loan (NPL), Loans to Deposit Ratio (LDR), Operational efficiency (BOPO), Net Interest Margin (NIM), Current Account Savings Account (CASA) and Return on Assets (ROA).

2.2 Stakeholder Theory

Stakeholder theory believes that the growth and development of a company is not in its own interests, but must also be able to provide benefits to its stakeholders (shareholders, creditors, consumers, suppliers, government, society, analysts and other parties). Thus, the existence of a company is strongly influenced by the support given by stakeholders to the company (Choriri, 2007). Stakeholder theory in this study is used to explain Return on Assets (ROA) where an increase in ROA will have a positive impact on banks in gaining higher support from stakeholders. This of course will increase stakeholder confidence in banking services. From this the loyalty of the public will arise from the bank and the use of services at the bank will increase through consideration of obtaining a high ROA.

2.3 Financial Performance

Financial performance is used to measure the level of the company's ability to generate profits on the use of all assets owned by the company. Financial performance is also generally used to identify the overall financial health of a company. Analysts and investors use financial performance to compare the performance of similar companies in the same industry or to compare industries or sectors in the aggregate. Financial performance is also the result of several individual decisions that are made continuously by management. The scope of

measurement of financial performance focuses on the financial value achieved by the company including assets, liabilities and equity, and net income which is the company's income. With financial performance, it can be measured the financial condition of a company in one reporting period, this financial condition will be the basis for managers in making decisions.

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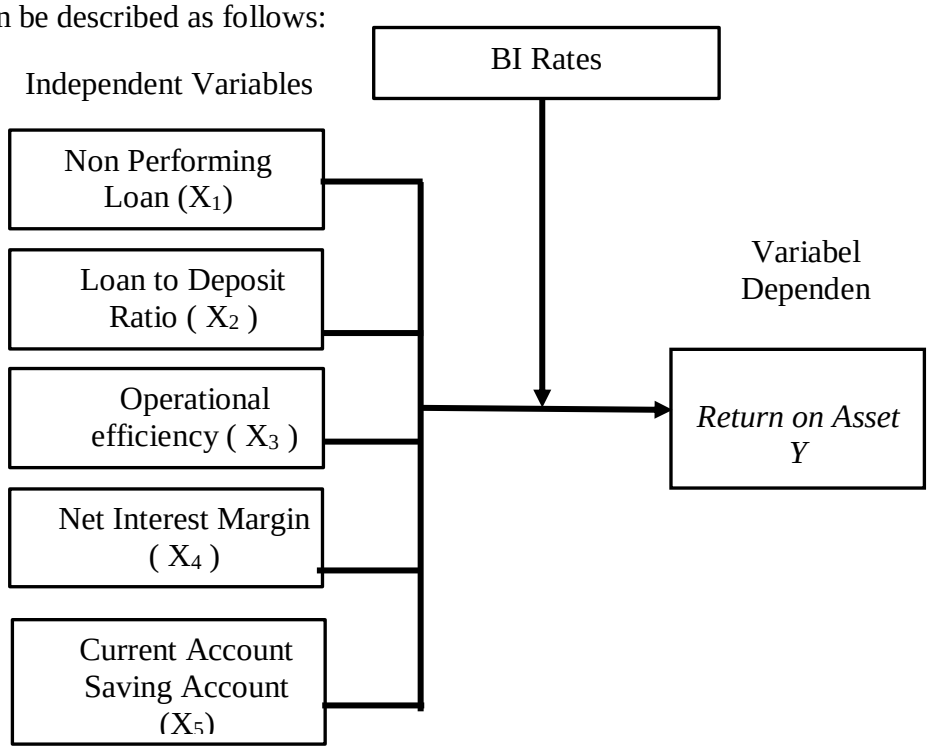
2.5 Conceptual Framework

The conceptual framework was formed to show the effect of the independent variable on the dependent variable, with the moderating variable as the reinforcing variable. In this study the independent variables, namely financial ratios include Non-Performing Loans (X1), Loan to Deposit Ratio (X2), Operational efficiency (X3), Net Interest Margin (X4), and Current Account Saving Account (X5), while The dependent variable is Return on Assets (Y), with BI Rate (Z) as the moderating variable. The study was conducted at PT. Bank Sumut as the object of research. The research period is taken from 2014 to 2018. The conceptual framework can be described as follows:



2.6 Hypothesis

Based on the conceptual framework, the research hypothesis is as follows:

H1: Non-Performing Loans Ratio has a significant negative effect on Return on Assets at PT. Bank Sumut.

H2: Loan to Deposit Ratio has a significant positive effect on Return on Assets at PT. Bank Sumut.

H3: Operational Efficiency has a significant negative effect on Return on Assets at PT. Bank Sumut.

H4: Net Interest Margin Ratio has a significant positive effect on Return on Assets at PT. Bank Sumut.

H5: Current Account Saving Account Ratio has a significant positive effect on Return on Assets at PT. Bank Sumut.

H6: BI Rate can moderate the relationship between Non-Performing Loans, Loan to Deposit Ratio, Operational efficiency, Net Interest Margin, and Current Account Saving Account on Return on Assets at PT. Bank Sumut.

3. RESEARCH METHODS

This type of research used in this research is associative research - causal. Causal associative research aims to analyze the relationship between one variable with another variable or how an independent variable affects the dependent variable (Sugiyono, 2016) and identify / test the causal relationship between variables (Erlina, 2011).

The population in this study are all conventional branch offices under the auspices of PT. Bank Sumut from 2014 - 2018. The sampling technique uses purposive sampling. The population in this study amounted to 30 conventional branch offices of PT. Bank Sumut with a period of 5 periods so that there are 150 observations. The data analysis method used in this study uses panel data regression analysis using the Stata 13 application.

Descriptive statistics are used to provide a description or description of a data that is seen from the average (mean), standard deviation (standard deviation), maximum and minimum (Ghozali, 2013).

The classic assumption test is the assumption underlying the regression analysis with the aim of measuring the association or attachment between independent variables. There are four tests related to the classical assumption test, namely data normality test, multicollinearity test, heteroscedasticity test and autocorrelation test.

This research uses panel data. Panel data is a combination of time series data and cross section data (Widarjono, 2013). There are three model approaches used to estimate panel data, namely the Common Effect, Fixed Effect, and Random Effect models. There are several tests conducted to be able to estimate panel data, namely the chow test, hausman test and lagrange multiplier test.

Hypothesis testing is done by estimation accuracy test to find out how big is the relationship between the independent variable and the dependent variable. Testing the hypothesis in this study using the coefficient of determination test (R^2), Simultaneous Significant Test (F-Test) and Partial Significant Test (T-Test).

4. RESULTS AND DISCUSSION

4.1 Research Results

Based on data obtained from conventional branch offices PT. Bank of North Sumatra used as a sample in research from 2014 to 2018, the descriptive statistics in this study can be shown in Table 1 as follows:

Table 1. Descriptive Statistics

Variable	Min	Max	Mean	Standard Deviation
ROA	1.22	13.36	7.71	2.89
NPL	0.00	18.53	3.85	3.98
LDR	22.41	334.97	117.89	55.69
BOPO	24.92	332.43	67.30	54.42
NIM	-23.65	22.32	9.55	6.75
CASA	3.23	93.86	68.36	20.44
BI Rate	4.56	7.54	6.14	1.23

The classic assumption test in this research is normality test, multicollinearity test, heteroscedasticity test and autocorrelation test. In this study, the normality test for residuals uses the Skewness test, with the significance level used is $\alpha = 0.05$. The probability value from the Skewness statistic is 0.8471 which is greater than the significance level, which is 0.05. This means that the assumption of normality is fulfilled. For the multicollinearity test in this study, the symptom of multicollinearity can be seen from the correlation values between the variables contained in the correlation matrix. The results of the multicollinearity test are presented in Table 2.

Table 2. Multicollinearity Test with Correlation Matrix

Variable	Variance Inflation Factor (VIF)	1 / Variance Inflation Factor (1/VIF)
X1	1.06	0.940120
X2	1.56	0.642272
X3	3.83	0.261173
X4	3.96	0.252492
X5	2.30	0.434327

Based on Table 2 results of multicollinearity testing, it can be concluded that there are no symptoms of multicollinearity between independent variables. This is because the VIF value is not more than 10. In this study the presence or absence of heteroscedasticity can be done with the Breusch-Pagan test that is known from the Prob Obs * R-Squared value is 0.5521> 0.05, which means heteroscedasticity does not occur. The autocorrelation test in this study is known from the value of the Durbin-Watson statistics, 1.357521. This value is located between 1 and 3, which is 1 <1.357521 <3, so the non-autocorrelation assumption is fulfilled. In other words, there are no symptoms of high autocorrelation in residuals.

Based on the results of the Chow test, it is known that the probability value is 0,000. Because the probability value is 0,000 <0.05, the estimation model used is the Fixed Effect Model (FEM). Furthermore, based on the results of the Hausman test, it is known that the probability value is 0,000 because the probability value is 0,000 <0.05, then the estimation model used is the Fixed Effect Model (FEM).

Based on testing the hypothesis of the coefficient of determination, it is known that the coefficient of determination (Adjusted R-squared) of R ^ 2 is 0.5676. This value can be interpreted as NPL, LDR, BOPO, NIM, and CASA simultaneously or jointly affecting ROA of 56.76%, the remaining 43.24% is influenced by other factors. The results of the F test, the Prob value is known. (F-statistics), which is 0,000 <0.05, it can be concluded that all independent variables, namely NPL, LDR, BOPO, NIM, and CASA simultaneously have a significant effect on ROA variables.

Based on the t test, the panel data regression equation is obtained as follows.

Y = 1.56-0.09X_1-0,001X_2 + 0.007X_3 + 0,168X_4 + 0.066X_5

Table 3. Results of the BI Rate significance test in moderating the effect of NPL, LDR, BOPO, NIM, and CASA on ROA with Interaction Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	-0.2869163	0.2297807	-1.25	0.214
X2	-0.006005	0.0191452	-0.31	0.754
X3	-0.0140496	0.0305418	-0.46	0.646
X4	-0.0202383	0.2570961	-0.08	0.937
X5	0.079511	0.0659357	1.21	0.230
Z	-0.1545236	0.9470809	-0.16	0.871
X1 Z	0.0112817	0.0353848	0.32	0.750
X2 Z	0.0016378	0.003049	0.54	0.592
X3 Z	0.0022151	0.0048688	0.45	0.650
X4 Z	0.0234466	0.0403316	0.58	0.562
X5 Z	-0.0040975	0.0104497	-0.39	0.696
Cons	4.126803	5.925814	0.70	0.487

a. The probability value at X1Z is 0.750, which is> 0.05, it is concluded that the BI Rate is not significant in moderating the effect of NPL on ROA.

b. The probability value at X2Z is 0.592, which is> 0.05, it is concluded that the BI Rate is not significant in moderating the effect of LDR on ROA.

c. The probability value at X3Z is 0.650, which is> 0.05, so it is concluded that the BI Rate is not significant in moderating the effect of BOPO on ROA.

d. The probability value at X4Z is 0.562, i.e.> 0.05, it is concluded that the BI Rate is not significant in moderating the effect of NIM on ROA.

e. The probability value at X5Z is 0.696, which is> 0.05, so it is concluded that the BI Rate is not significant in moderating the effect of CASA on ROA.

The determination of the BI rate by Bank Indonesia (BI) aims to stimulate banks to follow the monetary (financial) scenario targeted by BI. It is hoped that the movement of the BI rate will be followed by the movement of two bank interest rates namely deposit rates and lending rates. Simply put, by lowering the BI Rate, BI hopes that banks will also reduce deposit rates and reduce lending rates. The opposite is also true, by raising the BI Rate, Bank Indonesia hopes that banks will follow it. However, in practice, when BI raises or lowers the BI rate, banks do not necessarily raise or lower lending rates or deposit rates, this is because BI does not have the authority to force banks to follow BI in interest rate policies.

The high cost of funds is one of the reasons why banks cannot directly follow the decline in the BI benchmark interest rate. Banking is a business entity

that has the objective to provide added value to investors, so that if banks increase interest rates, this will increase the burden on banks due to rising funding costs and will reduce revenue because many customers will pay off their credit. Vice versa, if banks reduce interest rates, customers will withdraw funds from banks to invest in other more profitable portfolios so that the availability of bank funds to provide credit will decrease which will ultimately reduce banking income.

5. CONCLUSIONS AND SUGGESSTIONS

5.1 Conclusion

Based on the results of research and hypothesis testing that has been done, several conclusions can be drawn as follows:

a. Non-Performing Loans (NPL) have a negative and significant effect on Return on Assets (ROA);
b. Loan to Deposit Ratio (LDR) has a negative effect on Return on Assets (ROA), but it is not significant;
c. Operational Efficiency (BOPO) has a positive effect on Return on Assets (ROA), but is not significant;
d. Net Interest Margin (NIM) has a positive and significant effect on Return on Assets (ROA);
e. Current Account Saving Account (CASA) has a positive and significant effect on Return on Assets (ROA);
f. The BI Rate cannot moderate the relationship of Non-Performing Loans (NPL) to Return on Assets (ROA).
g. The BI Rate is not significant in moderating the effect of the Loan to Deposit Ratio (LDR) on Return on Assets (ROA).
h. The BI Rate is not significant in moderating the effect of Operational Income Operating Costs (BOPO) on Return on Assets (ROA).
i. BI Rate is not significant in moderating the influence of Net Interest Margin (NIM) on Return on Assets (ROA).
j. The BI Rate is not significant in moderating the effect of Current Account Savings Account (CASA) on Return on Assets (ROA).

5.2 Suggestions

a. The next researcher is advised to conduct research on the regional banking sector nationally because in this study the scope is only at PT. Bank Sumut which is part of regional banking;
b. For further researchers it is recommended that the study period be extended more than 5 years in order to obtain results that can be generalized;
c. For further researchers it is recommended to use other ratios that researchers have used in this study so as to provide another perspective in looking at the financial performance of a company;
d. For further research it is recommended to use a moderating variable that can strengthen or weaken the relationship between the dependent variable and the independent variable, such as stock prices, bond prices, and so on.

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