

## IMPRESSION OF NON-PERFORMING LOAN, LOAN TO DEPOSIT RATIO, AND NET INTEREST MARGIN AGAINST PROFITABILITY

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### ABSTRACT

This study aims to determine the effect of Net Performing Loans, Loan to Deposit Ratio, and Net Interest Margin on profitability. Profitability is proxied by Return On Assets (ROA). Whereas the factor for the existence of Net Performing Loans (NPL) is proxied by non-performing loans, the Loan to Deposit Ratio (LDR) factor is proxied by third-party fund distribution, and the Net Interest Margin (NIM) factor is net interest income proxied. The population in this study amounted to 25 Rural Banks (BPR) in the Jember Regency, and for the study, the sample was 19 People's Credit Banks (BPR) in the Jember Regency, which were selected using the purposive sampling method for the 2017-2018 period. Data were analyzed using multiple linear regression. Based on the test results, it was concluded that the components of the Net Performing Loan (NPL), Loan to Deposit Ratio (LDR), and Net Interest Margin (NIM) affect the profitability using the Return on Assets (ROA) ratio. This proves that Non-Performing Loans (NPLs), Loans to Deposit Ratio (LDR), and Net Interest Margin (NIM) can be used to measure how much income the Bank earns.

Keywords: NPL, LDR, NIM, profitability, and ROA.



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### INTRODUCTION

The role of the Bank is very important in encouraging a country's economic growth. All business sectors, including industry, trade, agriculture, plantation, services, housing, or other consumptive needs, really need banks as partners in developing their businesses. According to Law Number 10 of 1998 concerning Banking, explaining what is meant by the Bank is a Business Entity that collects public funds in the form of deposits consisting of savings and deposits and distributes them to the public in the form of credit and or other forms in order to improve the level of society.

Credit risk is a risk due to the failure or inability of the customer to return the loan amount received along with interest, according to a predetermined time period. This risk is even greater if commercial banks are not able to increase or improve the quality of loans extended because basically, banks invest a number of funds in the form of loans in the hope that they can increase profits. A banking company can be said to be healthy, one of which can be assessed in terms of the

health of credit. Possible risks that arise require credit security, both of a preventive and repressive nature. Therefore the Bank must improve the quality of credit to customers. One of the things that can be done by the Bank is the application of 5C credit consisting of Character, Capital, Capacity, Condition, and Collateral. For banks, debtors who meet all 5C principles are customers who are eligible for credit.

Through the analysis of financial statements can be seen the profitability of a company. Profitability is the ability of an entity to obtain profits in a certain period or the profitability of an entity, can be predicted by comparing the profits obtained during a certain period of time with the total assets or equity of the entity, which is stated in percentage (Sartono, 2010: 122).

Profitability is the most important indicator to measure the performance of a bank. The Non-Performing Loans (NPL) ratio plays an important role in focusing the company's ability to make a profit from the loans channeled. Poor credit quality, in this case, problem loans, cause a decrease in income. Banks will be reluctant to increase lending when non-performing loans or non-performing loans are high because banks must form high write-off reserves. This means that interest income that should be received is reduced because of the lack of funds that can be used for lending causes profitability to decrease.

Non-Performing Loans (NPL) is a measurement of credit risk, which shows a comparison between non-performing loans and loans extended. According to Triandaru (2006: 107), credit risk is the risk faced by banks because they channel funds in the form of loans to the public. Loans that have difficulty in repayment due to deliberate factors and/or due to external factors beyond the ability of debtor control are often referred to as credit originated or NPL. This credit risk can occur due to failure and the inability of customers to return a number of loans received from banks and interest in accordance with a predetermined or scheduled period. Bank Indonesia Regulation Number, 6/9 / PBI / 2004 concerning follow-up supervision and determination of bank status, states that banks that are considered to have potential difficulties that could jeopardize their business continuity are banks that have a net non-performing loan (NPL) of more than 5% of total loans. The assessment of NPL ratios, according to Bank Indonesia circular Number 6/23 / DPNP dated 31 May 2004, is NPL ratios whose values range from 5% to 8%. So that the Bank's value to this ratio is good, Bank Indonesia sets the net NPL ratio criteria below 5%. Calculation of NPL ratio as follows: The assessment of NPL ratios according to Bank Indonesia circular Number 6/23 / DPNP dated 31 May 2004 is NPL ratios whose values range from 5% to 8%. So that the Bank's value to this ratio is good, Bank Indonesia sets the net NPL ratio criteria below 5%. Calculation of NPL ratio as follows: The assessment of NPL ratios according to Bank Indonesia circular Number 6/23 / DPNP dated 31 May 2004 is NPL ratios whose values range from 5% to 8%. So that the Bank's value to this ratio is good, Bank Indonesia sets the net NPL ratio criteria below 5%. Calculation of NPL ratio as follows: 
$$\text{NPL} = (\text{Non-Performing Loans}) / (\text{Total Kredit}) \times 100\%$$

Loan to Deposit Ratio (LDR) is the ratio of loans to third party funds, which include current accounts, savings, and deposits. LDR is a ratio that shows the level of liquidity of a bank, also shows the ability to carry out its intermediary function in channeling third party funds to credit. If this ratio shows a low number, then the Bank is in an idle money condition, or excess liquidity will cause the Bank to lose the opportunity to obtain greater profits. The amount of LDR between 78% to 100% (Dewi Solopos, 2012). LDR calculation as follows: 
$$\text{LDR} = (\text{Credit granted}) / (\text{third party funds}) \times 100\%$$

Net Interest Margin (NIM) shows the ability of banks to generate interest income from channeling loans, given the Bank's operating income is highly dependent on the difference in interest (spread) of the credit channeled. To be able to increase the NIM, it is necessary to reduce the cost of funds. The cost of funds is the interest paid by the Bank to each source of bank funds. Overall, the costs that must be incurred by the Bank will determine what percentage of the Bank must set the interest rate given to its customers to obtain net bank income. NIM can be calculated according to SE No.

13/24 / DPNP - 25 October 2011, as follows:  $NIM = (\text{Net interest income}) / (\text{Outstanding Credit}) \times 100\%$

## METHODS

This type of research is a quantitative descriptive study. The objects of this research are Non Performing Loans (NPLs), Loans to Deposit Ratio (LDR), Net Interest Margin (NIM), and profitability (Return On Assets) at PT Bank Perkreditan Rakyat (BPR) located in Jember Regency. The type of data used in this study is secondary data, and the source of the data used is financial data contained in the Publication Report. The consideration of the selection of Rural Bank (BPR) in the Jember Regency is due to the number of bad loans, which tends to be above 5%, but also has a fairly good level of bank health so that it has fairly long progress. The sampling technique used in this study is the purposive sampling method with a sample of 25 Rural Banks (BPR) supported by data contained in the 2017-2018 Publication Report period. Of the 25 Rural Banks (BPR) that became the population, there were 19 selected companies that met the sampling criteria, which then Furthermore, further analysis is carried out in the research. LangWhether, the data analysis of this research consists of the Classical Assumption Test, the Multiple Linear Regression Model, and the Hypothesis Test.

## RESULTS AND DISCUSSION

Net Performing Loans (NPL), Loan to Deposit Ratio (LDR), and Net Interest Margin (NIM) follow the normal distribution with an asymptotic significance value of more than 0.05, which is equal to 0.426 which means the data is normally distributed. The known VIF and Tolerance values for each study variable are Tolerance values for NPL variables (0.963), LDR (0.876), NIM (0.902). Otherwise, there are no symptoms of multicollinearity due to the tolerance value > 0.10. VIF values for NPL variables (1,036), LDR (1,142), NIM (1,108) are stated not to occur multicollinearity symptoms because of the VIF value < 10. From the results of the autocorrelation test above shows that the Durbin Watson (DW) value is 2.402, obtained dL value that is equal to 1.3177, while the value of dU is 1.6563. If entered into the formulation  $DU < DW < (3-DU)$  the result is  $1.6563 < 2,302 < 2,3437$ . So it can be concluded that the HO linear regression model is accepted, which states that there is no autocorrelation, and there is no lag variable between the independent variables.

The results of the regression analysis showed that the value of the resulting constant was -4,444; regression coefficient for Non-Performing Loans (NPL) of -0.145; Loan to Deposit Ratio (LDR) coefficient of 0.088; Net Interest Margin (NIM) coefficient of 16,562. The equation of the multiple regression model developed to test the hypotheses that have been formulated in this study is  $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$ ,  $Y = -4,444 - 0.145 (X_1) + 0.088 (X_2) + 16,562 (X_3) + e$ . Simultaneous test results show the calculated F value of 4.434 with a significance of 0.010. The significance value is smaller than 0.05, which is 0.010; it can be assumed that the independent variable simultaneously influences the dependent variable. The t-test (alpha) 0.05 on the independent variable after being tested produced the following findings: On the independent variable Non-Performing Loans (NPL) found that the significance value signifies 0.05 is 0.050. This indicates that H1 can be accepted, and this means that the Non-Performing Loan (LDR) has a significant effect on Return on Assets (ROA). In the independent variable Loan to Deposit Ratio (LDR), it was found that the significance value > 0.05 is 0.032. This indicates that H2 can be accepted, and this means that the Loan to Deposit Ratio (LDR) has a significant effect on Return On Assets (ROA). In the independent variable Net Interest Margin (NIM), it was found that the significance value  $\leq 0.05$  is 0.005. This indicates that H3 can be accepted, and this means that the Net Interest Margin (NIM) has a significant effect on Return On Assets (ROA).

The results of hypothesis testing (H1) show that the Net Performing Loan (NPL) has a negative coefficient of -0.145, indicating that each increase in NPL by 1 unit of Return on Assets (ROA) will decrease by 14.5% and the level of significance of T by 0.050 with a regression coefficient with a level of sig T <0.05. This value means that the Net Performing Loan (NPL) affects profitability (ROA). This event shows that the smaller the value of Net Performing Loans (NPL), the smaller the risk of non-performing loans that affect earnings income. Research conducted by Wildan Farhat Pinasti (2018) also proves that Net Performing Loans (NPL) have a positive effect on profitability.

The results of hypothesis testing (H2) show that the LDR has a positive coefficient of 0.088, indicating that each LDR increase of 1 unit of ROA will increase by 8.8% and the level of significance of T by 0.032 with a regression coefficient with a sig T level <0.05. This value has the meaning that Loan to Deposit Ratio (LDR) influences profitability (ROA). This happens because lending from Third Party Funds is going well so that banks have the opportunity to earn greater profit income. The results of this study are supported by research conducted by Luh Eprima Dewi et al. (2015) with the results stating that the Loan to Deposit Ratio (LDR) has a significant positive effect on profitability (ROA).

The results of hypothesis testing (H3) show that NIM has a positive coefficient of 16,654, indicating that each increase in NIM by 1 unit of ROA will increase by 100% and the significance level of T by 0.005 with a regression coefficient with a sig T level <0.05. This value has the meaning that the Net Interest Margin (NIM) has a significant positive effect on profitability (ROA). The results of a study conducted by Ceria Lisa Rahmi (2014) with the results of a study which stated that the Net Interest Margin (NIM) had a significant positive effect on profitability (ROA).

## CONCLUSION

This study aims to determine the effect of the variable Net Performing Loans (NPL), Loan to Deposit Ratio (LDR), and Net Interest Margin (NIM) on the profitability variable Return on Assets (ROA) at PT. Rural Credit Banks (BPR) in Jember Regency for two years period, namely 2017 - 2018. Based on this research, it can be concluded as follows: Non-Performing Loan (NPL) variables measured by comparing between non-performing loans and total loans prove that Net Performing Loans (NPL) significant positive effect on profitability (ROA) so that H1 is accepted. It can be concluded that banks experience a very low risk of non-performing loans. Variable Loan to Deposit Ratio (LDR) as measured by comparing all loans given with third party funds proves that Loan to Deposit Ratio (LDR) has a significant positive effect on profitability (ROA) so that H2 is received. It can be concluded that the Bank is in good health. Net Interest Margin (NIM) measured by comparing net interest income with outstanding credit, proves that Net Interest Margin (NIM) has a significant positive effect on profitability (ROA) so that H3 is accepted. It can be concluded that banks generate higher net profits. Future studies are expected to increase the period of financial statements understudy so that more samples are obtained, and the results can reflect the actual conditions. And furthermore, it is hoped to add more variables used to measure bank health by using profitability ratios such as CAMEL analysis and credit quality of a bank. For users of financial statements can use the Return On Assets (ROA) ratio to measure the profitability of a bank.

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