Effect of Loan to Deposit Ratio (LDR) and Non-Performing Loans (NPL) on Return on Assets (ROA)

(Case Study at PT BPR MITRA KANAKA SANTOSA 2013-2017)

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ABSTRACT---*Banking is one of the financial institutions that has the main activity of raising funds from the community and channeling these funds in the form of loans to the community. Loan to Deposit Ratio (LDR), Non Performing Loans (NPL) and Return On Assets (ROA) are bank financial ratios used to assess banking performance. The ratio of loans to deposits (LDR) and Non Performing Loans (NPL) to the Return on Assets (ROA) case study at PT. Mitra Mitra Kanaka Santosa financial statements for the period 2013-2017. The research methodology used is multiple regression linear analysis which obtained partial results that the ratio of Loan to Deposit Ratio (LDR) has a significant positive effect on Return On Assets (ROA), Non Performing Loans (NPL) has a significant positive effect on Return on Assets (ROA) and Simultaneously obtained a significant Loan to Deposit Ratio (LDR) and Non Performing Loan (NPL) to Return on Assets (ROA).*

Keywords---*Loan to Deposit Ratio (LDR), Non Performing Loans (NPL), Return On Assets (ROA)*

I. INTRODUCTION

Background

People's Credit Banks (BPR) are bank that many experiencing liquidation due to the provision of credit facilities that do not pay attention to the element of prudence or the process of providing credit facilities that are not in accordance with the regulations set by Bank Indonesia and the Financial Services Authority. This causes the emergence of problem loans (NPL). The total credit distributed by People's Credit Banks (BPR) originating from third party funds or community savings and shareholders' capital payments must be returned as quickly as possible and People's Credit Banks (BPRs) must be able to obtain earnings from these activities, but not a few Banks of People's Credit Banks (BPR) which has a high enough non-performing loan that causes the People's Credit Banks (BPR) unable to return funds from third parties or Loan to Deposit Ratio (LDR).

These activities can affect the profitability measured by productive assets owned. If the People's Credit Banks (BPR) has loans with high collectibility or earning assets, the income earned will be greater so that the Return on Assets (ROA) ratio will increase (Saudi, 2018). Conversely, if a non-performing loan (NPL) increases with a level of substandard, doubtful and loss or a non-productive asset can cause a People's Credit Banks (BPR) experiencing difficulties to return its

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capital to depositors and shareholders so that People's Credit Banks (BPR) which experienced liquidation from these activities.

The following Table 1.1 presents data on the movement of LDR, NPL and ROA at PT Bank Perkreditan Rakyat Mitra Kanaka Santosa financial statements for the period 2013-2017.

Table 1.1: The Average LDR, NPL, ROA of PT. BPR MITRA KANAKA SANTOSA

Period 2013-2017

LDR			**NPL**			**ROA**			**Phenomenon**
2013	95,64	-	2013	6,75	-	2013	7,75	-	-
2014	96,25	naik	2014	8,75	Naik	2014	7,25	Turun	Ada
2015	93,75	Turun	2015	4,5	Turun	2015	4	Turun	Ada
2016	81	Turun	2016	8,75	Naik	2016	4,25	Naik	Ada
2017	78	Turun	2017	8,75	Tetap	2017	4	turun	Ada

Source: www.ojk.go.id

From Table 1.1 (the average LDR, NPL, ROA of PT BPR Mitra Kanaka Santosa in 2013-2017) there can be seen a phenomenon where an increase in Loan to Deposit Ratio (LDR) is followed by a decrease in Return on Assets (ROA). The Loan to Deposit Ratio (LDR) phenomenon occurred in 2014 where the Loan to Deposit Ratio (LDR) increased to 96.25, which in 2013 was 95.64 while Return on Assets (ROA) decreased from 7.75 to 7.25. The phenomenon also occurred in 2016 where the decrease in Loan to Deposit Ratio (LDR) which was previously 93.75 in 2016 to 81 while Return on Assets (ROA) rise in 2016 which previously was 4 to 4.25.

In addition to the Loan to Deposit Ratio (LDR), there is a phenomenon where the decrease in Non Performing Loans (NPL) is not followed by increasing profitability as seen from a decrease in Return on Assets (ROA) and an increase in Non Performing Loans (NPL) does not make a decrease in Return on Assets (ROA) which causes the People's Credit Banks (BPR) can not get maximum income. As a phenomenon that occurred in 2015 where the Non Performing Loan (NPL) decreased from 2014 by 8.57 in 2015 decreased to 4.5 but not accompanied by an increase in Return on Assets (ROA) in 2015 there was a decrease in Return On Assets (ROA) which in the previous year reached 7.25 in 2015 to become 4. A phenomenon also occurred in 2016 where the Non Performing Loan (NPL) experienced an increase of 4.5 in 2016 to 8.75 but an increase in the Non Performing Loan (NPL) was not followed by a decrease in Return on Assets (ROA) in 2016 an increase in Return on Assets (ROA) which in the previous year in 2016 increased to 4.25 then the phenomenon of Non Performing Loans (NPL) occurred in 2017 where the Non Performing value Loans (NPLs) did not change the same as the previous year but Return on Assets (ROA) decreased from 4.25 in 2017 to 4.

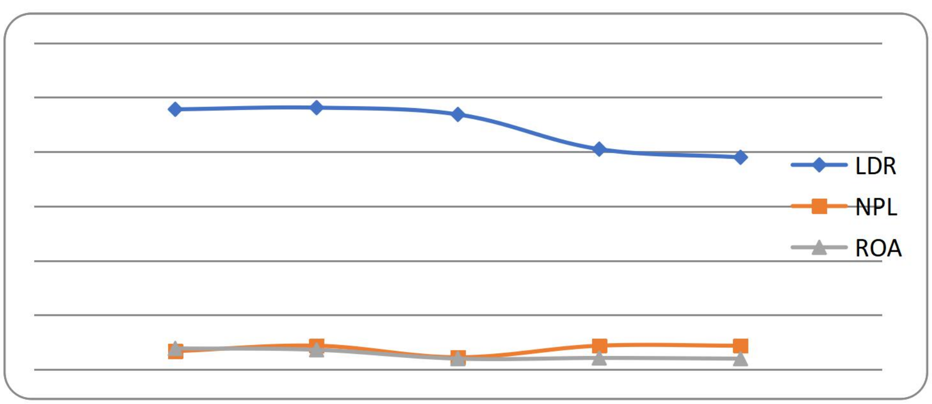

Figure 1.1: Graph of LDR, NPL, ROA development at PT.BPR Mitra Kanaka Santosa for the period 2013-2017

Loan to Deposit Ratio (LDR) in Figure 1.1 shows a graph of increase from 2013 to 2014 but from 2014 to 2017 but the Loan to Deposit Ratio (LDR) continues to show a decline. Non-Performing Loans (NPL) and Return On Assets (ROA) experience fluctuations every year.

Based on the explanation in tables and graphs of Loan to Deposit Ratio (LDR), Non Performing Loans (NPL), Return On Assets (ROA) at PT BPR Mitra Kanaka Santosa, the financial statements for the period 2013 to 2017 can be seen in the majority of gaps with the theory. In this case several theories explain that if the Loan to Deposit Ratio (LDR) or credit distribution to the community is appropriate and pay attention to the element of caution with the source of capital from third party funds or the community as a depositor, it will increase income because the higher the Loan to Deposit Ratio (LDR) the higher the potential to achieve Return on Assets (ROA).

Identification of Research Problems

1. Increase in Loan to Deposit Ratio (LDR) is not followed by an increase in Return on Assets (ROA).
2. The decrease in Non Performing Loans (NPL) is not followed by an increase in Return on Assets (ROA).
3. Increase in Loan to Deposit Ratio (LDR) and decrease in Non Performing Loans (NPL) are not followed by an increase in Return on Assets (ROA).

II. LITERATURE REVIEW

Loan to Deposit Ratio (LDR)

According to the Indonesian Bankers Association (2014: 29) loan to deposit ratio is:

"A measure commonly used to measure liquidity levels. The lower LDR indicates that banks are more liquid. However, if it is very low, bank profits will decrease due to the low portion of interest income derived from loans provided by bank placements in SBIs, call money, and securities. Bank Indonesia under camel's method of assessment of public health, Asset Quality, Management, Earnings, Liquidity, Sensitivity to Market Risks methods indicate the ratio healthy between 78% -85%. "

From the above understanding it can be concluded that the Loan to Deposit Ratio (LDR) is the ratio used to assess the liquidity of a bank by dividing the amount of credit given by banks to third party funds. How to calculate LDR:

$$LDR = \frac{\text{Credit}}{\text{Third party funds}} X\, 100$$

Non Performing Loans (NPL)

According to the Circular letter of OJK Number 39 / SEOJK.03 / 2017 Non Performing Loans are:

"The ratio that measures the ratio of the amount of non-performing loans to the total loans contained in the BPR with the explanation of loans is loans given to third parties (not including credit to other banks), non-performing loans are loans with substandard, doubtful and bad quality, loans the problem is calculated in net (minus PPAP). "

It can be concluded that non-performing loans or Non-Performing Loans (NPLs) are loans that have difficulty in repayment due to deliberate factors and / or due to external factors beyond the debtor's control ability. NPL can be calculated by:

$$NPL = \frac{\text{Nonperforming Loans}}{\text{Total Credit}} \text{ X } 100$$

Return On Assets (ROA)

According to Hery (2015: 144) return on assets is:

> "The ratio that shows the results (return) on the use of company assets in creating net profit. In other words, this ratio measures how much net income will be generated from each rupiah of funds embedded in total assets. "

According to the OJK Circular Letter Number 39 /SEOJK.03/2017 return on assets is a ratio that measures the overall profit before tax with the average total assets. With the Return on Assets (ROA) ratio, it can describe the income earned by banks in terms of total assets owned. The calculation is a measure of the effectiveness of the company in managing its investments. How to calculate ROA:

$$ROA \ = \frac{Profit\ before\ tax}{Average\ Total\ Assets}\ X\ 100$$

Framework

Effect of Loan to Deposit Ratio with Return on Assets

LDR (Loan to Deposit Ratio) is used to assess the liquidity of a bank by dividing the amount of credit given by banks to third party funds. Loan to Deposit Ratio is a measure commonly used to measure liquidity levels. The lower LDR indicates that banks are more liquid. (Indonesian Bankers Association, 2014: 29). In other words, LDR has a relationship with ROA because the higher this ratio will make the liquid level lower.

As stated by Suryana and Acep Edison (2017) which states that LDR affects ROA. The higher LDR indicates that more third party funds are channeled into loans. Loans disbursed effectively will provide more interest income. The difference between the interest paid to third parties and the interest earned on loans extended will increase the company's profitability.

The Effect of Non Performing Loans with Return On Assets

Non Performing Loans (NPLs) are non-performing loans which indicate the level of non-performing loans in a bank. If the ratio of Non Performing Loans is higher, the higher the collectibility, the less smooth, doubtful, and bad. The NPL ratio that is the reference for Bank Indonesia is a maximum of 5%. If the NPL ratio is higher than 5%, then the bank is considered to have high credit risk (Indonesian Bankers Association, 2014: 29).

In the journal Shinta Dewi Vernanda and Endang Tri Widyarti (2016) The greater the NPL, the greater the risk of loan defaults and potentially lowering interest income and lowering profits. If the profit generated decreases it will reduce ROA (Manikam and Syafruddin, 2013).

Effect of Loan to Deposit Ratio and Non Performing Loans on Return On Assets

LDR is a ratio that is used to assess the level of liquidity of a bank. The high LDR shows that the level of liquidity of a bank is low due to the large amount of funds disbursed by banks in the form of credit, but with a high LDR the bank can obtain high profits due to the interest income earned from the credit channeled. The high non-performing loans owned by a bank can cut the income earned by the bank from its productive assets or current credit. The high NPL of a bank will reduce the income of a bank that is obtained from the average total assets owned. In addition to reduced income, credit will cause difficulties for banks to refund funds to third parties or depositors at the bank.

The framework of thinking will explain theoretically the interrelation between variables to be examined. Thus the framework of thought in this study can be described as follows:

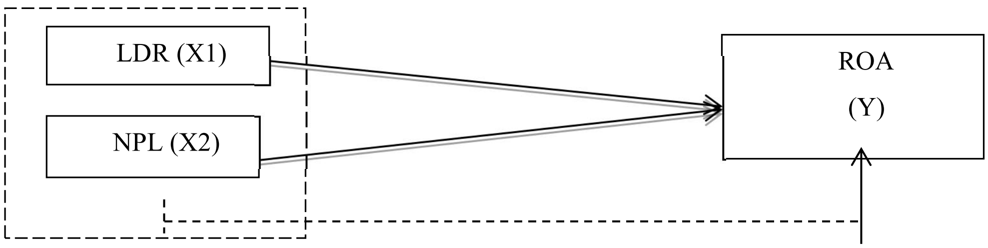

Figure 2.1: Chart of Thinking Framework

2.5. Research Hypothesis

1. LDR has partial effect on ROA
2. NPL has partial effect on ROA
3. LDR and NPL simultaneously influence ROA

III. RESEARCH METHODS

According to Ghozali (2016: 3) the purpose of data analysis is to obtain relevant information contained in the data and use the results to solve problems. The data analysis method is divided into two:

1. Dependent Method is a method for testing whether or not there is a relationship between independent variables and dependent variables individually or together.
2. The Independent Method is to identify how and why these variables are related to each other.

In this study the data analysis method used is the dependent method because the aims and objectives of the research are to find out the influence of the variables simultaneously and simultaneously. This study uses multiple linear regression analysis as a reference for conducting descriptive analysis and inferential analysis. The results of this data processing are used to answer the problems that have been formulated.

IV. DISCUSSION

Effect of LDR on ROA

Based on the results of the study showed that the LDR has a significant value of 0.049 less than the significant value of 0.05 and the value of t count 2.162 is greater than t table 2.110. From these values it can be concluded that the LDR has a positive effect on ROA. According to the Indonesian Bankers Association (2014: 29) the lower LDR indicates that banks are more liquid. However, if it is very low, bank profits will decrease due to the low portion of interest income derived from loans provided by bank placements in SBIs, call money, and securities.

Funds collected by PT BPR Mitra Kanaka Santosa from customers or depositors who save their money in the form of savings or deposits, then the funds are channeled in the form of credit is the main business activity carried out in general by the People's Credit Banks (BPR). The difference between the interest paid to the customer or the depositor with the interest obtained from the loans extended will increase the profitability of PT BPR Mitra Kanaka Santosa with these activities LDR has a positive effect on ROA. From the results of the regression analysis conducted it can be concluded that an increase in LDR will increase ROA in accordance with the theory described.

The results of this study are supported by the results of previous studies conducted by Suryana and Acep Edison (2017), Luh Putu Sukma Wahyuni and Niluh Putu Wiagustini (2015) and Annisa Astari Putri (2017) research which states that LDR has a positive effect on ROA.

Effect of NPL on ROA

Based on the results of the study indicate that the NPL has a significant value of 0.036 less than the significant value of 0.05 and the value of t count 2.228 is greater than t table 2.110. From these values it can be concluded that NPL has a positive effect on ROA. The NPL ratio is the ratio that is highly considered at PT BPR Mitra Kanaka Santosa or throughout the banking sector, due to regulations set by the Central Bank that the maximum non-performing loans owned by a bank is 5%. If banks have a non-performing loan value of more than 5%, then it can be ascertained that the bank is in a high risk non-performing loan. The provision of high credit can hold, offset or decrease the NPL, because the comparison between total non-performing loans and total loans disbursed. Even though the NPL value has increased, it is still followed by the distribution ~~or provision~~ of high credit facilities, so that profits can still be obtained by PT BPR Mitra Kanaka Santosa.

In addition, loan restructuring can be a factor in reducing non-performing loans. This is done by extending the credit period, which aims to ease customer installments. Thus the credit will remain in a smooth condition because credit can be saved from problem loans so that the value of ROA will increase.

The results of this study contradict the results of research conducted by Nuryaman and Argi Hargianto (2009) as well as research conducted by Shinta Dewi Vernanda and Endang Tri Widiyarti (2016) which states that NPL has a negative effect on ROA. But the results of this study are supported by the results of previous studies conducted by Suryana and Acep Edison (2017), Hasdillah (2017) and Annisa Astari Putri (2017) which states that NPL has a positive effect on ROA.

Effect of LDR and NPL on ROA

F test results in the regression model obtained a value of 0.049 where this value is significant because it is less than 0.05 and F value of 3.617 is greater than the F table of 3.55. Then it can be concluded that LDR and NPL simultaneously have positive effect on ROA. The results of this study show the same results as previous studies conducted by Shinta Dewi Vernanda and Endang Tri Widiyarti (2016) who stated that CAR, LDR, NPL, BOPO and SIZE influence ROA and Annisa Astari Putri's research (2017) which states LDR, NPL and BOPO simultaneously influence ROA.

Giving high credit can generate high income and can hold or can reduce the level of problem loans. Loans can be productive assets for PT.BPR Mitra Kanaka Santosa as long as management can manage these loans so that they remain in a smooth condition and can minimize the emergence of problem loans (NPLs) by holding the emergence of problem loans or PT BPR Mitra Kanaka Santosa's NPLs can earn interest gains which is quite high and can pay all interest obligations to customers who have savings in the form of savings at PT.BPR Mitra Kanaka Santosa. From these activities PT. BPR Mitra Kanaka Santosa can benefit from the difference between credit interest and interest obligations that must be paid to customers. With the collection and distribution of funds, it can be concluded that the LDR and NPL have simultaneous effects on ROA.

V. CONCLUSION

1. Based on the results of the Loan to Deposit Ratio (LDR) research, it has an effect on Return on Assets (ROA).
2. Based on the results of Non Performing Loan (NPL) research, it has an effect on Return on Assets (ROA).
3. Based on the results of the Loan to Deposit Ratio (LDR) and Non Performing Loan (NPL) studies simultaneously affect Return On Assets (ROA).

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