

# Analysis of Non-Performing Loans (NPL) and Loan to Deposit Ratio (LDR) towards Profitability

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# Abstract

The purpose of this research is to expand the insight on credit in terms of analysis of Loan to Deposit Ratio (LDR) and Non-loan performing (NPL) at Rural Bank of Bandung City. The research methodology is descriptive and verification research. The population in this study was Rural Banks Bandung Period 2014 - 2019 which amounted to 29. In this study, the sampling technique used is non-probability sampling and the method is purposive sampling. Based on the sample criteria, the sample in this study is Rural Banks Bandung period 2014 - 2019 which amounted to 24 companies. The analytical method used in this research is multiple linear regression analysis using SPSS 20. The result showed that NPL and LDR affected profitability (ROA). From the hypothesis test results obtained, the amount of influence of NPL and LDR on profitability is 11%. The research is limited to the Rural Bank of Bandung City and only focuses on the effect of Non-Performing Loan and Loan to Deposit on Profitability.

Keywords: NPL; LDR; ROA; Rural Bank; OJK

# 1. Introduction

Rural Bank (BPR) began to emerge since the global crisis in 1998, almost the entire world experienced an economic crisis, namely with high inflation rates and foreign exchange rates very volatile. To overcome the economic crisis and increase domestic economic resilience, especially in Indonesia, to reduce the inflation rate, the government issued a monetary policy in October 1988 called PAKTO 88. Based on Presidential Decree No. 38 provides policies to establish a rural bank.

With the issuance of Law No.7 on Banking in 1992 (Law No.7/1992 on Banking), the rural bank was given a clear legal basis as one type of bank other than commercial banks. However, both types of banks, both commercial banks and rural banks, have the same task. Furthermore, following Law No. 7/1992 on banking, non-bank financial institutions that have obtained a business license from the Minister of Finance can adjust their business activities as a bank. In other words, commercial banks and rural banks have a duty in terms of raising public funds and re-channeling them in the form of loans or loans.

Based on Regulation of the Financial Services Authority of the Republic of Indonesia Number 13/POJK.03/2019 dated April 29, 2019, which came into force in January 2020 concerning reporting of

the rural bank (BPR) and sharia rural banks (BPRS) through the Financial Services Authority Reporting System, rural bank and rural bankS must make monthly reports online or offline containing:

- 1. Monthly report rural bank/rural bankS;
- 2. Business plan and business plan realization report;
- 3. Another report.
- Rural bank/rural bankS monthly report contains:
- 1. Principal data;
- 2. Financial position report;
- 3. Administrative account;
- 4. Profit and loss;
- 5. List of details of a particular post-financial position report;
- 6. Information relating to violations and exceeding the maximum limit of credit, and
- 7. Quarterly financial ratio.

Based on provisions issued by the OJK, a rural bank must be managed correctly and professionally because the rural bank has a very important role in the community, especially in areas that are not reachable by commercial banks. A rural bank is given the freedom to channel credit to informal business groups that have small capital belonging to MSMEs (Small and Medium Enterprises).

Based on the regulation issued by OJK, one of the main activities of the rural bank is to distribute credit to the community who need working capital for business activities, especially for MSME activities, with easy requirements and not too stressed to complicated administrative requirements because the credit target is the informal sector community. Credit disbursed is not necessarily entirely categorized as healthy, or running smoothly there are some obstacles, among others, the unfulfilled obligation of the borrower (the debtor) to return principal and interest to a rural bank or also caused by macro factors that result in the debtor defaulting on the so-called credit risk.

Financial statements are products of management to account for the use of resources and funds entrusted to him. Definition of financial statements in SAK 2007: 1 article 7 as follows: Financial statements are part of the financial reporting process. A complete financial statement usually includes a balance sheet, profit, and loss statements, statements of changes in financial position, notes, and other reports as well as material that constitutes an integral part of financial statements. From this definition, the financial statements presenting the information will be used to the interested parties regarding the financial position, equity performance, cash flow, and other information that is the result of the accounting process during the accounting period of a business unit. Bank assets are generally mostly liquid and only slightly fixed assets. Therefore, the rate of turnaround assets and loads very high. The banking business is a business that relies heavily on trust, namely the trust of the community users of bank services. Thus, the success is determined by the trust of the public, high liquidity, and the ability to maintain the wealth of the left to him.

A rural bank must comply with Bank Indonesia's provisions regarding the maximum limit of lending, guaranteeing, or other similar matters, which can be done by rural bank to borrowers or a group of related borrowers, including to companies in the same group as the rural bank. The maximum limit is not exceeding 30% of the capital following the provisions stipulated by Bank Indonesia.

A rural bank must comply with Bank Indonesia's provisions regarding the maximum limit of credit granting, guaranteeing, or other similar matters, which can be done by rural bank to shareholders (and families) who have 10% or more of paid-up capital, part of the BOD (and families), other rural bank officials.

When the principal of the loan is non-refundable at maturity, this is referred to as credit risk. The source of income from the rural bank is interest income from loans disbursed to debtors. To provide loans

to customers, a rural bank in addition to using its capital also uses third-party funds, namely depositors who deposit funds in the rural bank. In other words, the amount of money used to provide loans is money derived from depositors. Therefore, management must be held accountable for the use of these funds.

The existence of rural bank is very helpful for small businesses to survive and continue to grow to manage their business activities well and maximize the profits that can be obtained, but even the existence of a very easy loan service from a rural bank does not provide good news also to the bank credit service providers who are very helpful to mid-level businesses down, the rural bank often has problems with bad loans or loans that are not paid by borrowers. This makes it rural banks difficult to develop and survive in this situation, this can be seen from the data showing from 2014 to 2019 rural banks closed many of their offices in Indonesia, especially in the city of Bandung.

Year	Total of Rural Bank
2014	1.643
2015	1.637
2016	1.633
2017	1.619
2018	1.597
2019 January	1.593

Table 1. Rural banks registered and supervised by OJK from 2014 to 2019

Source: Financial Services Authority, 2019

From the data above can be seen that from year to year the existence of people's credit banks is decreasing from year to year, it can be seen from the table above that from 2014 to the beginning of 2019 rural bank decreased, in 2014 there were 1,643 Rural bank offices in Indonesia, and in 2019 it was reduced and currently only 1,593 offices are still operating one of the causes of this decline is because the OJK issued regulation number 5 of 2015 to limit minimum core capital six billion rupiah. Because rural bank often experienced bad loans or unpaid loans that caused rural bank capital to continue to decline, which eventually caused rural bank capital to be below six billion and had to merge with other rural bank branches so that the core capital remained above six billion so that it could continue to operate, although this continues until 2019 indicated by as many as 374 rural banks have core capital below 3 billion rupiahs and 348 rural banks has core capital estimated at 3 billion up to 6 billion.

According to Coppola (1998), NPL is the ability of banks in managing non-performing loans in a bank. Credit risk is one of the bank's business risks resulting from uncertainty in the return or non-payment of credit back provided by the bank to the debtor. This measurement can be done for several periods so that it is seen the development of the company's liquidity over time, to measure the liquidity ratio, it can be done by calculating the value of non-performing loans. One way to assess whether a bank's performance is good or not can be seen from the NPL ratio of the bank. As an intermediary institution between overfunded parties and underfunded parties. NPL ratio is 5% by regulations issued by Bank Indonesia.

Liquidity ratio can be interpreted as the ability of a company to carry out its obligations. If the company meets its obligations it means that the company is liquid, whereas if the company is unable to meet its obligations it means that the company is not illiquid. One of the ratios used to measure liquidity is the Loan to Deposit Ratio (LDR).

According to Kasmir (2014), profitability is the core ratio in assessing companies in search of profit. In the regulation on the assessment of the level of health of banks, there are differences from previous regulations in some cases that are perfecting. In the previous regulation issued by the bank through the Decree of the Board of Directors of BI No.30/277/KEP/DIR in 1998 CAMEL (Capital, Asset Quality, Management, Earnings, Liquidity) is defined as guidelines for assessing the level of health of the bank. Under the new rules added a sensitivity factor to market risk. The new regulations added sensitivity factors to market risks (sensitivity to market risk) because it is considered very important to be taken into account in the life current banking system. On this basis, aspects are contained in the analysis using financial ratios.

Return on Asset (ROA) is used to measure the effectiveness of the company in profit by utilizing its assets. Getting bigger Return on Assets (ROA) shows improved financial performance, due to the return is getting bigger. If the Return on Asset (ROA) increases, it means that the company's profitability increases, so the ultimate impact is the increase in profitability enjoyed by shareholders. According to Kasmir (2014), profitability is the core ratio in assessing companies in search of profit. In the regulation on the assessment of the level of health of banks, there are differences from previous regulations in some cases that are perfecting. In the previous regulation issued by the bank through the Decree of the Board of Directors of BI No.30/277/KEP/DIR in 1998 CAMEL (Capital, Asset Quality, Management, Earnings, Liquidity) is defined as guidelines for assessing the level of health of the bank. Under the new rules added a sensitivity factor to market risk. The new regulations added sensitivity factors to market risks (sensitivity to market risk) because it is considered very important to be taken into account in the life current banking system. On this basis, Bank Indonesia as the institution in charge of monitoring and assessing banks in Indonesia issued Bank Indonesia regulations No.6/10/PBI/2004 dated 12 April 2004 which contains guidelines for assessing the level of health banks used CAMELS analysis (Capital, Asset Quality, Management, Earnings, Liquidity, Sensitivity to Market Risk). Aspects contained in the analysis using financial ratios.

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Banks that have non-performing loans that exceed the standards set by Bank Indonesia will cause a decrease in profit obtained, because of the higher the non-performing loan, the worse the credit quality that causes the greater the number of non-performing loans, so that the bank suffers losses in its operational activities that affect the decrease in profit obtained by the bank, so it can be said that the NPL has a negative and significant effect on profitability (Manuaba, 2012). This is contrary to the results found by Nusantara (2009) which stated that non-performing loans have no significant effect on profits.

Based on research conducted by Agustiningrum (2013), LDR has a positive and significant effect on profitability. In contrast to the results found by Ahmad. et al (2012) and Ayadi and Boujelbene (2012) showing that LDR negatively and significantly affects the profitability of ROA. While Hutagalung et al. (2013) stated that LDR has no significant influence on ROA.

From the background and the existence of research gap from the latest research on the relationship between NPL and LDR to profitability, then this research is interesting to be done in Rural Bank of Bandung with the formulation of problems that is analyzing whether NPL and LDR affect the profitability of the rural bank.

### 2. Literature Review

The rural bank is one type of bank known to serve the group of micro, small, and medium enterprises with a location that is near to the place of business activities of people in need.

The rural bank is a business entity that collects funds from the community in the form of deposits and distributes it to the community in the form of credit or other forms to improve the standard of living of many people who carry out business activities conventionally or based on sharia principles in which activities do not provide services in payment traffic.

The main function of a rural bank is to distribute credit to micro, small and medium enterprises, but also receive deposits from the community. In lending to the community using the principle of 3T, namely On Time, On Time, On Target, because the credit process is relatively fast, the requirements are simpler, and very understand the needs of customers.

The principles of the rural bank are:

The principle used by a rural bank in conducting its business is the principle of vigilance. Economic freedom is the Indonesian economic system regulated in the 1945 Constitution article 33 with 8 positive things and 3 negative things to avoid (free fight liberalism, etatism, and monopoly).

Objectives of the rural bank

The establishment of the rural bank has the objectives, namely:

1. Directed to meet the needs of banking services for rural communities

2. Support the growth and modernization of the rural economy so that farmers, fishermen, and small traders in the village can avoid leeches, pension, and money release

3. Serving capital needs with credit delivery procedures that are easy and as simple as possible because they are relatively low education people

4. Participate in mobilizing capital for development purposes and help the people in saving money and saving by providing a place that is close, safe, and easy to save money for small savers.

The target of the rural bank is to serve the needs of farmers, farmers, fishermen, traders, small businessmen, employees, and retirees because this target cannot be reached by commercial banks and to better realize the equitable banking services, equitable chance trying, income equality, and so that they do not fall into the hands of money releasers (loan sharks and pension).

In lending to avoid non-performing loans, then:

The rural bank must have confidence in the ability and ability of the debtor to pay off his debts following the agreement.

The rural bank must comply with Bank Indonesia's provisions regarding the maximum limit of lending, guaranteeing, or other similar matters, which can be done by rural bank to borrowers or a group of related borrowers, including to companies in the same group as the rural bank. The maximum limit is not exceeding 30% of the capital following the provisions stipulated by Bank Indonesia.

The rural bank must comply with Bank Indonesia's provisions regarding the maximum limit of credit granting, guaranteeing, or other similar matters, which can be done by rural bank to shareholders

(and families) who have 10% or more of paid-up capital, BOD members (and families), other rural bank officials. (Gurupendidikan.co.id, 2020)

To realize a healthy rural bank industry, the Financial Services Authority implements a policy of restructuring the rural bank industry by seeking health measures against the troubled rural bank that can still be saved through the addition of paid-up capital mergers or acquisitions by encouraging the entry of new investors who have the ability to strengthen capital and management of the rural bank.

Non-Performing Loan (NPL)

Non-performing loans are caused by intentional elements or also because the debtor is unable to fulfill its obligations. According to SE BI 12/11/DPNP to know the NPL value, it can be done by comparing the number of non-performing loans with the total credit with the following formula:

Non-Performing Loans

Non-performing Loan = ------ X 100 %

Credit disbursed

The criteria for the assessment of health level NPL ratio are:

Table 2. NFL Ratio Health Chieffa		
Ratio	Predicate	
NPL <u>&lt; 5 %</u>	Healthy	
NPL > 5 %	Not Healthy	

Table 2. NPL Ratio Health Criteria

Loan to Deposit Ratio (LDR)

According to Pandia (2012), LDR states how far banks have used depositors' money to provide loans to their customers. And according to Ardrianto (2019) to measure the number of credits given, it can be done by comparing the number of customer funds used with the company's capital used and will result in an LDR calculation. And according to government regulations, the total loan to deposits that can be given is 110%.

Calculated by the formula:

Credit

Loan to Deposit Ratio = ----- X 100

Third Party-Funds

Bank Indonesia stipulates the following provisions:

1. For an LDR ratio of 110% or more credit (weighted) 0, it means that the liquidity of the bank is considered unhealthy.

2. For an LDR ratio below 110% given credit value (weighted) 100, meaning that bank liquidity is healthy.

The profitability of rural banks

Profitability is an indicator or measuring instrument of a company's performance. According to Gitman (2006), The difference between the book value of net assets per share and the share price. So, price to book value illustrates how much the market appreciates the book value of a company's stock. PBV shows how far a company can create corporate value relative to the amount of capital invested.

In this study, researchers did not use the PBV ratio because the rural bank is a private company, not a public company registered with the Financial Services Authority (OJK). Therefore, researchers only look at the profitability of banks from the fundamental factors, namely using Du Pont system analysis, namely by using ROA as a measure of the bank's performance profitability ratio. Lukman (2016) stated that the profitability ratio must be emphasized because to be able to continue his life, a company must be in favorable conditions. This ratio is one of the favorable indicators for the company compared to its total assets. ROA provides information to managers, investors, or analysts about the company's efficient management in using its assets to generate revenue. Its returns are shown as a percentage. The greater this ratio indicates the better the bank's performance (Harjito & Martono, 2010). ROA was used in this study because, in addition to the size of the bank's profitability, the ratio is also an indicator of the bank's managerial efficiency in managing assets for profit.

		After-tax oper	rating in	come
Return on Assets (ROA)	=			
			Asset	s
		Sales	After-	tax operating income
		X		
		Assets		Sales
		(assets turn ov	ver)	(operating profit margin)

Source: Brealey, Myers, and Marcus (2012)

According to Gitman, ROA, or sometimes called ROI (Return on Investment), measure the overall effectiveness of management in generating profit with its available assets. The higher the firm's return on total assets, the better.

The return on total assets is calculated as;

Earnings After Tax ROA =------ X 100%

Total Assets

### NPL's Influence on ROA

To know the ability of banks to ration the risk of not being able to receive loan repayments by the borrower is called the NPL (Mabruroh, 2004). if the value of non-performing loans on a small scale, then the responsibility of the bank will decrease, and vice versa. When the bank will provide loan funds to the borrower, then the bank must first look at the extent of the borrower's ability to fulfill his responsibilities. And when the loan has been given, then the lender must supervise the funds that have been given will be allocated where and whether the borrower fulfills his responsibilities in paying his debts. The Bank conducts checks, assessments, and bindings on collateral to reduce credit risk (Masyhud Ali, 2004).

Non-Performing Loan (NPL) is one of the measurements of the bank business risk ratio that shows the amount of non-performing credit risk in a bank. Gelos (2006) in his research tested the influence of NPL on bank ROA where the results showed significant negative results affecting the bank's performance meaning that the amount of bank credit risk affects the bank's performance so it is necessary to conduct further research that tests the influence of NPL on ROA. Based on the description can be formulated the first hypothesis, namely:

H<sub>1</sub> = Non-Performing Loan (NPL) negatively affects Rural bank profitability (ROA)

### LDR Influence On ROA

To find out the LDR value of a company studied, it can be done by measuring the total capital that can be collected by banks to be placed in the form of credit. The higher the LDR indicates the risk of bank liquidity condition, on the contrary. To determine the high or low funds given to third parties can be seen from the LDR level, if the higher the LDR value, the higher the funds needed to be distributed to third parties, and vice versa. With the distribution of large third-party funds, the bank will increase the bank's income (ROA). LDR has a positive effect on ROA (Gelos, 2006). Based on the description can be formulated the second hypothesis as follows:

 $H_2$  = Loan to Deposit Ratio (LDR) has a positive effect on rural bank profitability (ROA)

Hipothesis Paradigm  $X_1$   $H_1$  Y  $H_3$  Y  $X_2$   $H_2$ Figure 1. Framework

#### 3. Research Methodology

The type of research used in this research is quantitative research. The research methodology used in this research is descriptive and verification research method. The type of data used in the study is secondary data. Secondary data in the form of information generated from the analysis unit can be in the form of financial statements, sales result from reports, marketing results reports, production reports, procurement results reports, operational inspection reports, policies, etc. While the analysis unit as the primary data source in the form of information is generated directly from the analysis unit, the information in the form of statements from respondents (Edison, 2018).

The population in this study was Rural Bank Bandung period 2014 - 2019 which amounted to 29. The sampling technique used in this research is nonprobability sampling with the purposive sampling method. Based on the sample criteria, the sample in this study is Rural Bank Bandung period 2014 - 2019 which amounts to 24 companies because of 29 rural banks, 5 of which have incomplete data from 2014 to 2019 needed to conduct this research, so that can be used to conduct research that amounts to 24 rural banks. Here are 24 rural banks used as research data:

0	Code	Serial Number	Name of Rural Bank
	A01	600166	PT. Rural Bank Pandu Rheksa Berkah
	A02	600180	KOP Rural Bank Tanjung Raya
	A03	600184	PT. Rural Bank Bara Ujung Berung
	A04	600311	PT. Rural Bank Karyajatnika Sadaya
	A05	600765	PT. Rural Bank Bina Maju Usaha
	A06	600806	PT. Rural Bank Ratna Artha Pusaka
	A07	601284	PT. Rural Bank Artha Mitra Kencana
	A08	601326	PT. Rural Bank Artha Niaga Finatama
	A09	601329	PT. Rural Bank Nata Citraperdana
0	A10	601340	PT. Rural Bank Permata Dhanawira
1	A11	601345	PT. Rural Bank Bahtera Masyarakat Jabar
2	A12	601346	PT. Rural Bank Emas Nusantara Sentosa
3	A13	601347	PT. Rural Bank Lexi Pratama Mandiri
4	A14	601350	PT. Rural Bank Mitra Parahyangan
5	A15	601363	PT. Rural Bank Pundi Kencana Makmur
6	A16	601791	PT. Rural Bank Sentral Investasi Prima
7	A17	601890	PT. Rural Bank Ukabima Lumbung Sejahtera
	A17 A18		
8	A19	601891	PT. Rural Bank Karya Guna Mandiri
9		602000	PT. Rural Bank Citra Dana Rahayu
0	A20	602054	PT. Rural Bank Trisurya Marga Artha
1	A21	602055	PT. Rural Bank Daya Lumbung Asia
2	A22	602563	PT. Rural Bank Metro Asia Mandiri
3	A23	602612	PT. Rural Bank Artha Karya Usaha
4	A24	602053	PD. Rural Bank Kota Bandung

Table 3. People's Credit Banks Registered with the Financial Services Authority

The types and data sources used in this research are secondary data sourced from <u>www.ojk.go.id</u> (Financial Services Authority). The data analysis used in this study is multivariate analysis. Multivariate analysis is the analysis of several variables in a single relationship or set of relationships (Hair et al, 2010:2). The multivariate analysis used in this study is a multiple linear regression analysis. Statistical software used in this research is SPSS Vers.20 Software.

# **Operational Variable**

Based on the variables that will be discussed, the operational variables of the research are as follows:

Variable	Indicator	Scale	Instrument
IndependentNon-PerformingLoan(NPL) (X1)	NPL NPL= X 100% Credit Total	Ratio	Financial Statement
Independent Loan to Deposit Ratio (LDR) (X <sub>2</sub> )	Credit LDR= X 100% Third Party-Funds	Ratio	Financial Statement
Dependent Return of Assets (ROA) (Y)	of Earnings After Tax ROA=X 100 % Total Assets		Financial Statement

Table 4.	Operational	Variable
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### 4. Results and Discussion

Based on the results of the partial hypothesis test, the results obtained in this study are as follows:

# Table 5. Partial Hypothesis Test Results

Model			Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	1.574	1.527		1.030	.305
NPL (X <sub>1</sub> )	189	.046	324	-4.078	.000
LDR (X <sub>2</sub> )	.022	.022	.083	1.038	.301

# Coefficients

a. Dependent Variable: ROA (Y)

After testing the collected data, it produces a hypothesis that has been tested as follows:

1. Based on the partial hypothesis test results in the regression model above obtained the NPL variable significance value of 0.000 < 0.05. So, it can be concluded that H1 or the first hypothesis is acceptable. Meaning there is an influence of NPL (X1) on ROA (Y) on the rural bank in Bandung.

2. Based on the results of partial hypothesis testing in the regression model above obtained the value of LDR variable significance of 0.301 > 0.05. So, H2 or the second hypothesis is rejected. This means that there is no influence of LDR (X2) on ROA (Y) on the rural bank in Bandung.

Based on the results of simultaneous hypnotic testing obtained the following results:

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	305.588	2	152.794	8.682	.000 <sup>b</sup>
Residual	2481.487	141	17.599		
Total	2787.075	143			

Table 6. Simultaneous Hypothesis Test Results

# ANOVA

a. Dependent Variable: ROA (Y)

b. Predictors: (Constant), LDR (X<sub>2</sub>), NPL (X<sub>1</sub>)

Based on table 6 of the SPSS output, the Sig value is known. is 0.000. Because of Sig's grades. 0.000 < 0.05, then following the basis of decision making in the F test it can be concluded that the hypothesis accepted or in other words NPL (X1) and LDR (X2) simultaneously affect the ROA (Y) in the rural bank in Bandung.

Below will be presented the results of coefficient testing determination as follows:

# Table 7. Determination Coefficient Test Results Model Summary

# **Rural Bank in Bandung City**

odel	R	R Square	Adjusted R Square	Std. The Error of the Estimate	
	.331ª	.110	.097	4.19514	
_	$\Delta$ Durdistance (Constant) LDD (X) NDL (X)				

a. Predictors: (Constant), LDR ( $X_2$ ), NPL ( $X_1$ )

Based on the SPSS output table "Model Summary" above it is known that the coefficient value of determination or R Square is 0.11. The R Square value is 0.11 or equal to 11%. The number means that the variables NPL (X1) and LDR (X2) simultaneously (together) affect ROA (Y) by 11% the remaining 89% is influenced by other factors that are not studied.

# NPL's Influence on ROA

Based on the partial hypothesis test results in the regression model above obtained the NPL variable significance value of 0.000 < 0.05. So, H1 or the first hypothesis is acceptable. This means that there is an influence of NPL (X1) on ROA (Y) in rural banks in Bandung.

To know the ability of banks to ration the risk of not being able to receive loan repayments by the borrower is called the NPL (Mabruroh, 2004). Bank liability in credit risk can be reduced if the yield of the common credit score decreases, and vice versa. When the bank will provide loan funds to the borrower, then the bank must first look at the extent of the borrower's ability to fulfill his responsibilities.

And when the loan has been given, then the lender must supervise the funds that have been given will be allocated where and whether the borrower fulfills his responsibilities in paying his debts. The Bank conducts checks, assessments, and bindings on collateral to reduce credit risk (Masyhud Ali, 2004).

The results of this study are in line with the results of a previous study conducted by Gelos (2006) which said that NPL has a significant negative effect on ROA which means that the NPL reflects credit risk, NPL reflects credit risk, the smaller the NPL the less credit risk borne by the bank. Banks in providing credit must analyze the ability of the debtor to repay his obligations. And when the loan has been given, then the lender must supervise the funds that have been given will be allocated where and whether the borrower fulfills his responsibilities in paying his debts. The bank conducts checks, assessments, and bindings on collateral to reduce credit risk.

### The Influence of LDR on ROA

After a partial hypothesis test, a regression model with a significance value greater than 0.05 is 0.301, so H2 or the second hypothesis is rejected. So, it can be concluded that H2 or the second hypothesis is unacceptable or rejected. This means that there is no influence of LDR (X2) on ROA (Y) on Rural banks in Bandung.

To find out the LDR value of a company studied, it can be done by measuring the total capital that can be collected by banks to be placed in the form of credit. The higher the LDR indicates the risk of bank liquidity condition, on the contrary, vice versa. To determine the high or low funds given to third parties can be seen from the LDR level, if the higher the LDR value, the higher the funds needed to be distributed to third parties, and vice versa.

The results of this study are contrary to the results of previous research conducted by Gelos (2006) who said the higher the LDR, the higher the funds disbursed to third party funds. With the distribution of large third-party funds, the bank will increase the bank's income (ROA). then the LDR has a positive effect on ROA, so it can be concluded based on this research the higher the LDR, the funds disbursed to third party funds will not necessarily be high as well.

### Conclusion

Based on the results of the study using regression analysis panel data obtained the following conclusions:

1. The results showed that NPL affects ROA rural banks in Bandung period 2014 - 2019.

2. The results showed that LDR does not affect ROA rural banks in Bandung period 2014-2019.

3. The results showed that the NPL level of rural banks in Bandung is still in the category of not good in its financial flow, and the level of rural bank LDR Bandung city is maximal this is indicated by the data of rural bank LDR Bandung which is already in the healthy category in its financial flow.

### Suggestions

Researchers provide the following suggestions:

1. For Rural bank management can keep the NPL remains below 5% so that in the long term it can improve the performance of rural bank while paying attention to the inclusion of the third-party funds in a reasonable Loan to Deposit Ratio so that management is free to develop the business by channeling credit to debtors more to obtain profit that will affect the improvement of rural bank performance.

2. For the Financial Services Authority (OJK) as an institution that supervises and provides education to rural banks to provide regulations and policies that encourage the rural bank to grow in channeling credit to the rill sector so that the economic sector can grow and GDP will increase, especially in the MSME sector.

3. For researchers to further add other variables such as CAR, BOPO, NIM, CR to provide a good picture and mapping of Rural bank to provide non-misleading information to both depositors, debtors, and Rural bank management.

### Limitation and Study Forward

This research was limited to the Rural Bank of Bandung City. Also, this research focuses only on the influence of Non-Performing Loan and Loan to Deposit Ratio on the Profitability (ROA) at Rural Bank of Bandung City.

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