



## Analysis of Credit and Liquidity Risk towards Profitability of Rural Bank (BPR) in the District of Bandung Registered in the Financial Services Authority (OJK) for the years 2014 To 2019

Ichwan Siddiq Mauludi; Eddy Winarso

Widyatama University, Bandung, West Java, Indonesia

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### **Abstract**

BPR is a financial institution that distributes funds to borrowers, especially to Medium, Small and Micro Enterprises (MSMEs) to increase income and improve the real sector economy. This research was conducted on 21 rural banks (BPR) in the District of Bandung, by analyzing the Non-Performing Loan (NPL) and the Loan to Deposit Ratio (LDR) on the performance of Rural Banks (BPR) as measured by using Return on Assets (ROA). Data obtained from the Financial Services Authority (OJK) and regulations issued by Bank Indonesia (BI) obtained using Eviews are rural bank financial reports from 2014 to 2019, it is found that NPL has an effect on ROA while LDR has no effect on ROA but simultaneously NPL and LDR has an effect on ROA. From the results of the Hypothesis test, it was found that the magnitude of the influence was 85.33% and the remaining 14.67% were other factors that were not examined. From the results of this study, it is hoped that OJK will be more strict in supervising BPR operations, especially in the District of Bandung and for BPR management it is hoped that it can increase ROA by channeling loans to borrowers on target so as not to increase NPL.

**Keywords:** *NPL; LDR; ROA; BPR; OJK; BI*

### **1. Introduction**

Based on the Law of the Republic of Indonesia of 1998, it explains that banking is everything that depends on a bank, including business activities, methods and processes in carrying out its business activities, and there is also a definition of a bank according to the Law of the Republic of Indonesia Number 10 of 1998 as "Agency an effort to collect funds from the public in the form of savings and distribute them to the community in order to improve the standard of living of the people at large ". Based on the important role of banks, banking institutions must always be safe and stable. The bank must fulfill all obligations in accordance with the regulations. Law Number 10 of 1998 discloses that based on the type of bank, it consists of:

- a) Commercial Bank, is a bank that can provide payment traffic services.
- b) Rural Bank, is a bank that accepts deposits only in the form of time deposits, savings deposits, and or other equivalent forms.

Rural Banks (BPR) began to emerge since the global crisis in 1998, almost the entire world experienced an economic crisis, namely with high inflation rates and very fluctuating foreign currency exchange rates. To overcome the economic crisis and improve domestic economic resilience, especially in Indonesia, namely to reduce the inflation rate, the government issued a monetary policy in October 1988 called PAKTO 88. Based on Presidential Decree NO. 38 which provides policies for establishing Rural Banks (BPRs).

With the issuance of Law No.7 concerning Banking 1992 (Law No.7 / 1992 concerning Banking), BPRs were given a clear legal basis as a type of bank other than Commercial Banks. With clear regulations and legal foundations, BPRs are growing rapidly based on data from the Financial Services Authority (OJK), the number of Rural Banks in Indonesia from 2014 to January 2019 as follows:

Table 1  
Rural Bank that is registered and supervised by OJK  
From 2014 to 2019

Year	The Number of Rural Banks
2014	1.643
2015	1.637
2016	1.633
2017	1.619
2018	1.597
2019 January	1.593

Source: <https://www.ojk.go.id/id/kanal/perbankan/Pages/Bank-Perkreditan-Rakyat.aspx>

Table 2  
BPR in West Java that is registered and supervised by OJK from 2014 to 2019

No	BPR in West Java	Number of BPRs in West Java
1	Kabupaten bandung	23
2	Kabupaten bandung barat	5
3	Kabupaten bekasi	34
4	Kabupaten bogor	27
5	Kabupaten ciamis	6
6	Kabupaten cianjur	16
7	Kabupaten Cirebon	34
8	Kabupaten Garut	11
9	Kabupaten Indramayu	23
10	Kabupaten Karawang	15
11	Kabupatenkuningan	2
12	Kabupatenmajalengka	6
13	Kabupatenpurwakarta	2
14	Kabupatensubang	18
15	Kabupatensukabumi	6
16	Kabupatensumedang	3
17	Kabupatentasikmalaya	30
18	Kota bandung	29
19	Kota bekasi	39
20	Kota bogor	7
21	Kota cimahi	7
22	Kota Cirebon	5
23	Kota depok	23
24	Kota sukabumi	2
25	Kota tasikmalaya	10

Bank Perkreditan Rakyat has different activities from commercial banks. The main activities of the BPR are:

1. to collect funds from the public in the form of deposits in the form of time deposits, savings deposits, and / or other forms equivalent.
2. Give praise.
3. Provide fees or placement of funds according to Sharia Principles, in accordance with regulations made by Bank Indonesia.
4. Transferring funds in the form of Bank Indonesia Certificates (SBI), deposits, certificates of deposit and / or savings to other banks.
5. What an RB cannot do is accept demand deposits, foreign exchange activities, and insurance.

Source: <https://www.ojk.go.id/id/kanal/perbankan/Pages/Bank-Perkreditan-Rakyat.aspx>

Based on the Regulation of the Financial Services Authority of the Republic of Indonesia Number 13 / POJK.03 / 2019 dated 29 April 2019 which came into effect in January 2020 concerning the Reporting of Rural Banks (BPR) and Sharia Rural Banks (BPRS) through the Financial Services Authority Reporting System , BPR and BPRS must make monthly reports online or offline that contain:

1. BPR / BPRS Monthly Reports
2. Business plans and reports on the realization of business plans
3. Other reports

BPR / BPRS monthly report contains:

1. Basic data
2. Statement of Financial Position
3. Administrative Accounts
4. Profit and loss
5. Detailed List of certain items in the Statement of Financial Position
6. Information related to violations and exceedances of maximum credit limits, and
7. Quarterly financial ratios

The monthly report submission period is no later than the 10th of the following month.

Based on the provisions issued by the OJK, BPR must be managed properly and professionally because BPR has a very important role in society, especially in areas that are not reached by commercial banks. BPRs are given the flexibility to pass on credit to informal business groups that have small capital which are classified as MSMEs (Medium, Small and Micro Enterprises).

Based on the regulations issued by OJK, one of the main activities of BPR is to distribute credit to people who need working capital for business activities, especially for MSME activities, with easy requirements and not too stressing on complicated administrative requirements because the target of credit is the informal sector community. Loans disbursed are not necessarily categorized as healthy, or run smoothly. There are several obstacles, including not fulfilling the obligations of the borrower (debtor) to return the principal and interest to the BPR or also caused by macro factors that cause the debtor to default.

With the aforementioned matters, what is known as a Non Performing Loan (NPL), namely nonperforming loans that are not paid by the debtor on time.

The types of financial ratios used for consideration are various, including LDR (loan to deposit ratio), NPL (non performing loan), ROA (Return on assets) etc. LDR (Loan to Deposit) is commonly used to measure the ability to pay its obligations, NPL is used to measure a bank's ability to manage non-performing loans, while ROA is to measure bank profits.

According to research (Ahmad) shows that LDR has a negative and significant effect on profitability (ROA).

According to (Rita Septiani) NPL partially negative and insignificant effect on profitability at PT. BPR Pasarraya Kuta period 2010-2014, while partially LDR has a positive but not significant effect on profitability at PT. BPR PasarrayaKuta 2010-2014. Non Performing Loans (NPL) are business risks from lending activities carried out by management as measured by a ratio that shows the ability of BPR management to manage disbursed non-performing loans (Iswi Hariyani, 2010). The higher the NPL ratio, the greater the number of non-performing loans which results in the cessation of the BPR's operations. Then the NPL is one of the ratios to assess the quality of BPR performance.

The source of income from the BPR is interest income from loans extended to debtors. To provide loans to customers, BPRs, apart from using their own capital, also use third party funds, namely depositors who save their funds in the BPR. In other words, the amount of money used to provide loans is the money that comes from the depositors (depositors). So the management must be accountable for the use of these funds, measurement is carried out using the Loan to Deposit Ratio (LDR) which has a positive effect on BPR performance, because of the existence of these funds, management can channel loans to customers by earning interest income which can be measured through BPR performance through ROA (Return on Asset). So the researchers are interested in researching "ANALYSIS OF CREDIT AND LIQUIDITY RISK TOWARDS PROFITABILITY OF RURAL BANK (BPR) IN THE DISTRICT OF BANDUNG REGISTERED WITH THE FINANCIAL SERVICES AUTHORITY (OJK) FOR 2014 TO 2019" In this study researchers focused on Rural Banks in the District of Bandung from 2014 to 2019 which were registered with the Financial Services Authority with the following data:

The total number of rural banks in the Bandung District is 23 BPR Incomplete data for the period 2014 - 2019 2 BPR

The BPRs that were processed as research samples were 21 BPRs

## 2. Literature Review

The definition of rural banks according to Bank Indonesia (BI) is a type of bank that is known to serve micro, small and medium-sized entrepreneurs with locations that are generally close to places where people need them.

Based on Law Number 7 of 1992 and amended by Law Number 10 of 1998, BPR is a bank financial institution that accepts deposits only in the form of time deposits, savings and / or other equivalent forms and distributes funds as an RB business.

BPR is a business entity that collects funds from the public in the form of savings and distributes it to the public in the form of credit or in other forms in order to improve the standard of living of the people, many who carry out business activities conventionally or based on sharia principles which in their activities do not provide services in payment traffic.

The main function of BPRs is to extend credit to micro, small and medium entrepreneurs, but also to receive savings from the public. In distributing credit to the public using the 3T principle, namely on time, on quantity, on target, because the credit process is relatively fast, the requirements are simpler, and understands the customer's needs very well.

*The principles of the Rural Bank are:*

In conducting its business, BPRs are based on economic democracy using the principle of prudence. Economic democracy is an Indonesian economic system that is run in accordance with Article 33 of the 1945 Constitution which has 8 positive characteristics as a support and 3 negative characteristics that must be avoided (free fight liberalism, etatism, and monopoly).

*The purpose of the Rural Bank*

*BPR establishment has the following objectives:*

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 villages can avoid loan sharks, pengijon and moneylenders
3. Serving capital needs with easy and simple credit procedures as possible because those who are served are relatively low-educated people
4. Participate in mobilizing capital for development needs and helping people save and save by providing a place that is close, safe, and easy to save money for small savers.

*Target Rural Banks (BPR)*

Serving the needs of farmers, ranchers, fishermen, traders, small entrepreneurs, employees, and retirees because this target has not been reached by commercial banks and to create more equitable banking services, equitable business opportunities, equal distribution of income, and so that they do not fall into the hands of moneylenders (loan sharks and pengijon).

*In Lending to avoid problem loans:*

The RB must have confidence in the debtor's ability and ability to pay off his debts in accordance with the agreement.

RBs are required to comply with Bank Indonesia regulations regarding the maximum credit limit, the provision of guarantees, or other similar matters, which can be performed by the BPR to a borrower or a group of related borrowers, including companies in the same group as the BPR. The maximum limit is not more than 30% of the capital in accordance with the provisions stipulated by Bank Indonesia.

RBs are required to comply with Bank Indonesia regulations regarding the maximum credit limit, the provision of guarantees, or other similar matters, which can be done by BPRs to shareholders (and families) who have 10% or more of the paid-up capital, members of the board of commissioners (and their families), members of the board of directors (and their families), other BPR officials.

Source: <https://www.gurupend Pendidikan.co.id/bank-perkreditan-rakyat/>

*Non Performing Loan (NPL)*

According to Mahmoeddin (2010) NPL is non-performing loans due to deliberate factors and / or external factors beyond the control of the debtor. NPL is calculated based on the ratio between the number of non-performing loans compared to the total credit in accordance with BI Circular Letter Number 12/11 / DPNP dated March 31, 2020 using the formula:

$$\text{Non Performing Loan} = \frac{\text{Credit Problem}}{\text{Credit extended}} \times 100 \%$$

Based on BI Circular Number 3/33 / DPNP dated December 14, 2001, the criteria for assessing the soundness level of the Non-Performing Loan (NPL) ratio are:

Table 2  
NPL Ratio Health Criteria

Ratio	Predicate
NPL $\leq$ 5 %	Healthy
NPL $>$ 5 %	Unhealthy

Source: <https://www.bi.go.id>

According to Ismail (2010: 122) non-performing loans are grouped into 5, namely:

- credit is classified as smooth if the payment is on time, the development of the account is good and there are no arrears in principal and interest according to the agreement.
- credit is classified as special mention if there are arrears in principal and or interest payments of up to 90 days.
- credit is classified as substandard if there are arrears in principal and or interest payments that have exceeded 90 days to less than 180 days.
- credit is classified as bad if it can be in arrears in principal and or interest payments between 180 days to 270 days.
- credit is classified as bad if there are arrears in principal and or interest payments that have exceeded 270 days.

#### ***Loan to Deposit Ratio (LDR)***

According to Pandia (2012) LDR states how far a bank has used the money of depositors to provide loans to its customers. Calculated by the formula:

$$\text{Loan to Deposit Ratio} = \frac{\text{Credit}}{\text{Third-party funds}} \times 100$$

Bank Indonesia set the following provisions:

- An LDR ratio of 110% or more is given a credit (weight) of 0, meaning that the bank's liquidity is considered unhealthy.
- An LDR ratio below 110% is given a credit score (weight) of 100, meaning that the bank's liquidity is healthy.

This ratio is an indicator of the vulnerability and capability of a BPR. We recommend that the LDR is in the range between 85% - 110%.

According to Frianto (2012: 128) Loan to deposit ratio is a ratio that states how far a bank has used depositors' money to provide loans to its customers. With.



### ***Rural Bank Performance***

According to Gitman (2006: 352) company performance is the actual value per share that will be obtained if the company's assets are sold according to the share price. So Price to Book Value proves how high the market is when it appreciates the book value of the company's shares. PBV proves the extent to which the company is able to make firm value relative to the total invested capital.

In this study, researchers did not use the PBV ratio because BPR is a private company not a public company registered with the Financial Services Authority (OJK). Therefore, researchers only look at banking performance from its fundamental factors, namely using the Du Pont system analysis, which are:

$$\begin{array}{r} \text{Return On Assets (ROA)} \\ = \frac{\text{After - tax operating income}}{\text{Assets}} \\ = \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{After - tax operating income}}{\text{sales}} \\ \text{(assets turn over)} \qquad \qquad \qquad \text{(operating profit margin)} \end{array}$$

Source: Brealey, Myers and Marcus (2012)

ROA shows the profit for the company; thus, final income (EAT) is divided by total assets. Previous; it has been said that the company's profit is shown by EBIT. And to compare two companies, you should use ROA. If using ROA; can be said to be a "firm-ROA" where the profit consideration is really the operating business profit. If ROA2 is used, it can be said to be 'net-ROA'; where the profit consideration is final net profit. Hence there are two measures of ROA; namely:

$$\begin{array}{l} ROA1 = \frac{EBIT}{AKTIVA\ TOTAL} = \frac{EBIT}{TA} \\ ROA2 = \frac{EAT}{AKTIVA\ TOTAL} = \frac{EAT}{TA} \end{array}$$

Source; Dr. Said KelanaAsnawi (2015) (Asnawi, 2015)

Profitability describes the company's ability to earn profits through all its capabilities and resources, such as the activities of a company, including banks. The level of profitability with the ROA approach aims to show the level of efficiency of asset management carried out by the bank concerned. ROA is an indicator of a bank's ability to obtain returns on a number of assets owned by the bank.

### 3. Research Methodology

This research uses quantitative methods, the unit of analysis is the financial statements of BPRs registered with the Financial Services Authority (OJK) relating to Non-Performing Loans (NPL), Loan to Deposit Ratio (LDR), and Return On Assets (ROA) from 2014 to 2019 based on observations and complete data, there are 21 BPRs as follows:

Table 3  
Rural Bank (BPR) in the district of Bandung  
Registered in The Financial Services Authority (OJK)

No	Code	Serial Number	BPR Name
1	B01	600190	PT. BPR BINA SONO ARTHA
2	B02	600278	PT. BPR SEMBADA
3	B03	600307	PT. BPR PANJAWAN MITRAUSAHA
4	B04	600402	PT. NPR MURIA HARTA NUSANTARA
5	B05	600406	PT. BPR HAYURA ARTALOLA
6	B06	601333	PT. BPR KERTAMULIA
7	B07	601336	PT. BPR PANGANDARAN
8	B08	601354	PT. BPR SARIKUSUMA SURYA
9	B09	601356	PT. BPR MITRA KANAKA SANTOSA
10	B10	601358	PT. BPR JUJUR ARGHADANA
11	B11	601361	PT. BPR DUTA PASUNDAN
12	B12	601366	PT. BPR BANDUNG KIDUL
13	B13	601798	PT. BPR NUSANTARA BONA PASOGIT 26
14	B14	601901	PT. BPR BRATA NUSANTARA
15	B15	601997	PT. BPR BALEENDAH RAHAYU
16	B16	602012	PT. BPR JELITA ARTA
17	B17	602046	PT. BPR MITRA RUKUN MANDIRI
18	B18	602048	PT. BPR NUSANTARA BONA PASOGIT 27
19	B19	602051	PT. BPR GUNADHANA MITRASEMBADA
20	B20	602567	PT. BPR DUTA ARHA SEJAHTERA
21	B21	602638	PT. BPR KERTA RAHARJA

Source: <https://www.ojk.go.id> (processed)

Operational Variables

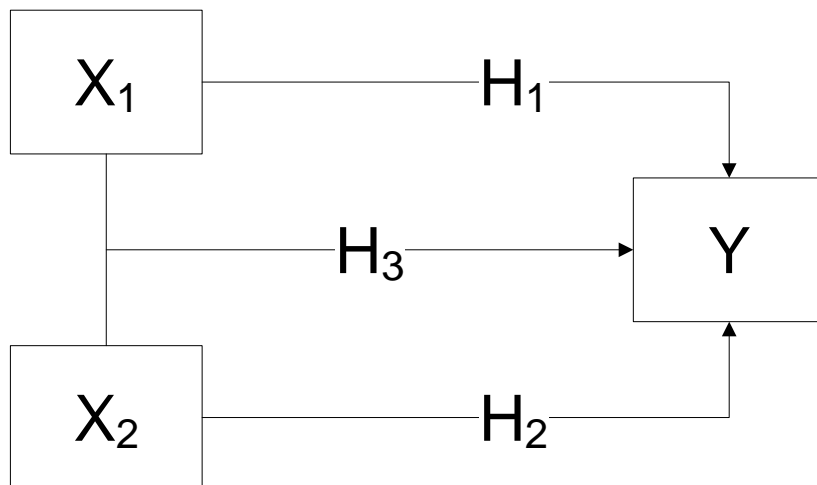
Based on the variables to be discussed, the operational variables of the research are as follows:

**Table 4**  
**Operational Variable**

Variable	Indicator	Scale	Instrument
Independent Non Performing Loan (NPL) (X <sub>1</sub> )	$\frac{\text{Total Non-Performing Loan}}{\text{Total Credit}} \times 100\%$	Ratio	Financial Statement
Independent Loan to Deposit Ratio (LDR) (X <sub>2</sub> )	$\frac{\text{Credit}}{\text{Third-Party Funds}} \times 100\%$	Ratio	Financial Statement
Dependent Return On (ROA) (Y)	$\frac{\text{Earnings After Tax}}{\text{Total Assets}} \times 100\%$	Ratio	Financial Statement

Hypothesis design

Hypothesis Paradigm



## Figure 2 Hypothesis Paradigm

$X_1$  = Non Performing Loan (NPL)

$X_2$  = Loan to Deposit Ratio (LDR)

$Y$  = BPR Performance - Return On Assets (ROA)

$H_1$  = Non Performing Loan (NPL) has a negative effect on BPR Performance (ROA)

$H_2$  = Loan to Deposit Ratio (LDR) has an effect on BPR Performance (ROA)

$H_3$  = Non Performing Loans (NPL) and Loan to Deposit Ratio (LDR) simultaneously have an effect on BPR Performance (ROA)

### *Regression analysis*

Regression analysis is used to measure the existing relationship between variables to show the direction of the relationship between the independent variable and the dependent variable. The results of panel data regression with the pooled least square or common fixed effect model are as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$$

$Y$  : Return On Asset

(ROA)  $\alpha$  : Constant  $\beta_1, \beta_2$  : The regression coefficient for each independent variable

$X_1$  : Non Performing Loan (NPL)

$X_2$  : Loan Deposit Ratio (LDR)  $e$   
: Error term

## 4. Results and Discussion

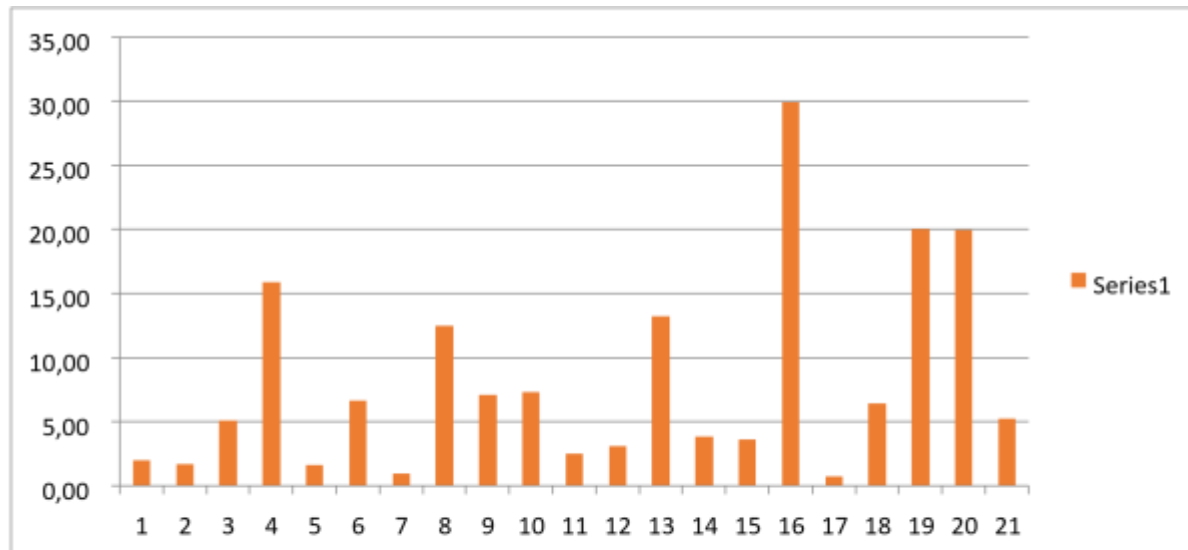
### *Descriptive statistics*

#### 1. Non Performing Loan (NPL)

BPR NPLs in the District of Bandung from 2014 to 2019 are as follows:

**Table 5**  
**Rural Bank (BPR) in the district of Bandung**  
**Registered in The Financial Services Authority (OJK)**

No	Code	Serial Number	BPR Name	NPL						Average	Information
				2014	2015	2016	2017	2018	2019		
1	B01	600190	PT. BPR BINA SONO ARTHA	0.00	0.49	0.97	1.40	4.60	4.26	1.95	Healthy
2	B02	600278	PT. BPR SEMBADA	0.00	0.00	6.75	2.01	0.96	0.50	1.70	Healthy
3	B03	600307	PT. BPR PANJAWAN MITRAUSAHA	18.39	9.72	0.22	0.44	1.07	0.54	5.06	Healthy
4	B04	600402	PT. NPR MURIA HARTA NUSANTARA	8.03	19.43	6.41	17.90	23.92	19.60	15.88	Unhealthy
5	B05	600406	PT. BPR HAYURA ARTALOLA	1.43	1.50	1.60	1.51	0.97	2.45	1.58	Healthy
6	B06	601333	PT. BPR KERTAMULIA	8.94	12.19	4.81	5.66	4.37	3.95	6.65	Unhealthy
7	B07	601336	PT. BPR PANGANDARAN	0.56	0.77	0.61	1.19	0.78	1.78	0.95	Healthy
8	B08	601354	PT. BPR SARIKUSUMA SURYA	5.32	8.88	11.56	17.87	15.70	15.65	12.50	Unhealthy
9	B09	601356	PT. BPR MITRA KANAKA SANTOSA	7.73	4.22	9.17	8.93	6.85	5.60	7.08	Unhealthy
10	B10	601358	PT. BPR JUJUR ARGHADANA	5.46	3.73	5.90	6.51	3.97	18.42	7.33	Unhealthy
11	B11	601361	PT. BPR DUTA PASUNDAN	3.12	2.37	3.20	3.21	2.01	1.06	2.50	Healthy
12	B12	601366	PT. BPR BANDUNG KIDUL	3.45	3.06	2.36	3.78	2.75	3.31	3.12	Healthy
13	B13	601798	PT. BPR NUSANTARA BONA PASOGIT 26	5.58	4.74	8.95	17.70	22.35	19.94	13.21	Unhealthy
14	B14	601901	PT. BPR BRATA NUSANTARA	1.92	0.88	1.96	8.95	8.28	1.00	3.83	Healthy
15	B15	601997	PT. BPR BALEENDAH RAHAYU	6.30	0.77	4.18	3.13	3.09	4.28	3.63	Healthy
16	B16	602012	PT. BPR JELITA ARTA	20.68	25.29	39.59	29.51	21.28	43.45	29.97	Unhealthy
17	B17	602046	PT. BPR MITRA RUKUN MANDIRI	0.84	1.05	0.73	0.62	0.61	0.32	0.70	Healthy
18	B18	602048	PT. BPR NUSANTARA BONA PASOGIT 27	3.15	8.97	6.57	6.60	8.20	4.96	6.41	Healthy
19	B19	602051	PT. BPR GUNADHANA MITRASEMBADA	11.91	6.70	16.81	30.99	32.61	21.09	20.02	Unhealthy
20	B20	602567	PT. BPR DUTA ARHA SEJAHTERA	30.24	35.46	14.34	10.61	13.17	15.91	19.96	Healthy
21	B21	602638	PT. BPR KERTA RAHARJA	7.58	8.70	5.14	4.85	4.33	1.00	5.27	Healthy
			Average	7.17	7.57	7.23	8.73	8.66	9.00	8.06	13
			Maximum	30.24	35.46	39.59	30.99	32.61	43.45	43.45	8
			Minimum	0.00	0.00	0.22	0.44	0.61	0.32	0.00	



Source: <https://www.ojk.go.id> processed

Based on table 5 according to the provisions of Bank Indonesia that the NPL requirement of less than or equal to 5% is healthy and above 5% is unhealthy, it is found that 9 BPRs or 42% of BPRs in Bandung District are in healthy condition while the other 52% are declared unhealthy. The lowest NPL is 0.22 for BPR PanjawanMitrasaha while the highest NPL is 43.45 for BPR JelitaArta.

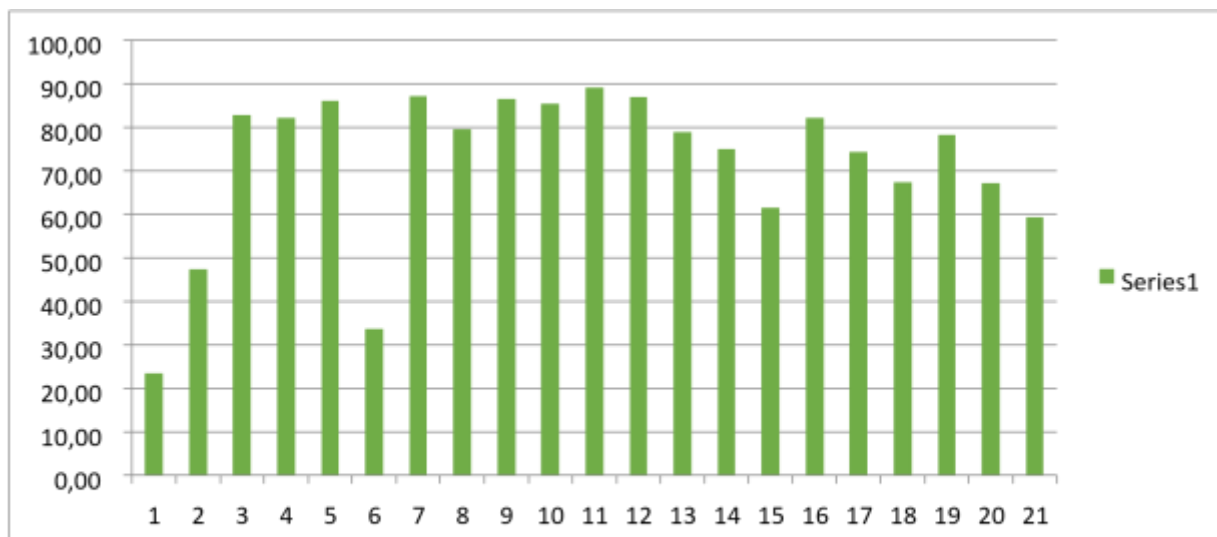
### 1. Loan to Deposit Ratio (LDR)

The Loan to Deposit ratio for BPRs in the District of Bandung from 2014 to 2019 is as follows:

Table 6  
Rural Bank (BPR) in the district of Bandung  
Registered in The Financial Services Authority (OJK)

No	Code	Serial Number	BPR Name	LDR						Average	Information
				2014	2015	2016	2017	2018	2019		
1	B01	600190	PT. BPR BINA SONO ARTHA	57.17	20.23	15.47	18.09	14.86	14.87	23.45	Healthy
2	B02	600278	PT. BPR SEMBADA	69.84	79.48	34.66	33.06	30.08	36.45	47.26	Healthy
3	B03	600307	PT. BPR PANJAWAN MITRAUSAHA	66.22	85.86	87.92	90.31	88.57	78.03	82.82	Healthy
4	B04	600402	PT. NPR MURIA HARTA NUSANTARA	84.56	60.93	89.63	87.03	91.37	78.97	82.08	Healthy
5	B05	600406	PT. BPR HAYURA ARTALOLA	77.10	78.60	78.59	94.35	95.05	93.02	86.12	Healthy
6	B06	601333	PT. BPR KERTAMULIA	37.92	29.10	33.36	32.26	36.75	32.91	33.72	Healthy
7	B07	601336	PT. BPR PANGANDARAN	86.35	83.71	86.16	87.94	87.95	90.94	87.18	Healthy
8	B08	601354	PT. BPR SARIKUSUMA SURYA	83.84	84.43	79.41	77.91	74.38	77.41	79.56	Healthy
9	B09	601356	PT. BPR MITRA KANAKA SANTOSA	94.34	92.01	76.39	83.86	83.55	88.18	86.39	Healthy

10	B10	601358	PT. BPR JUJUR ARGHADANA	84.62	85.85	76.52	84.71	90.01	90.27	85.33	Healthy
11	B11	601361	PT. BPR DUTA PASUNDAN	86.42	96.32	70.17	67.36	112.22	101.64	89.02	Healthy
12	B12	601366	PT. BPR BANDUNG KIDUL	74.67	88.97	94.00	97.26	86.64	79.90	86.91	Healthy
13	B13	601798	PT. BPR NUSANTARA BONA PASOGIT 26	84.38	83.36	73.24	80.03	76.33	76.25	78.93	Healthy
14	B14	601901	PT. BPR BRATA NUSANTARA	82.36	98.52	92.44	105.62	66.89	4.00	74.97	Healthy
15	B15	601997	PT. BPR BALEENDAH RAHAYU	69.29	64.63	59.82	61.80	55.69	57.20	61.41	Healthy
16	B16	602012	PT. BPR JELITA ARTA	99.33	115.84	84.18	66.64	66.70	59.81	82.08	Healthy
17	B17	602046	PT. BPR MITRA RUKUN MANDIRI	78.13	69.01	77.04	75.42	74.50	71.73	74.31	Healthy
18	B18	602048	PT. BPR NUSANTARA BONA PASOGIT 27	68.65	66.59	67.43	70.73	62.78	63.15	67.31	Healthy
19	B19	602051	PT. BPR GUNADHANA MITRASEMBADA	82.71	89.07	92.91	92.21	64.07	48.63	78.27	Healthy
20	B20	602567	PT. BPR DUTA ARHA SEJAHTERA	69.46	45.58	62.66	66.56	87.70	70.45	67.07	Healthy
21	B21	602638	PT. BPR KERTA RAHARJA	65.67	68.21	76.50	70.22	71.07	4.00	59.28	Healthy
			Average	76.33	75.54	71.83	73.49	72.72	62.75	72.11	21
			Maximum	99.33	115.84	94.00	105.62	112.22	101.64	115.84	
			Minimum	37.92	20.23	15.47	18.09	14.86	4.00	4.00	

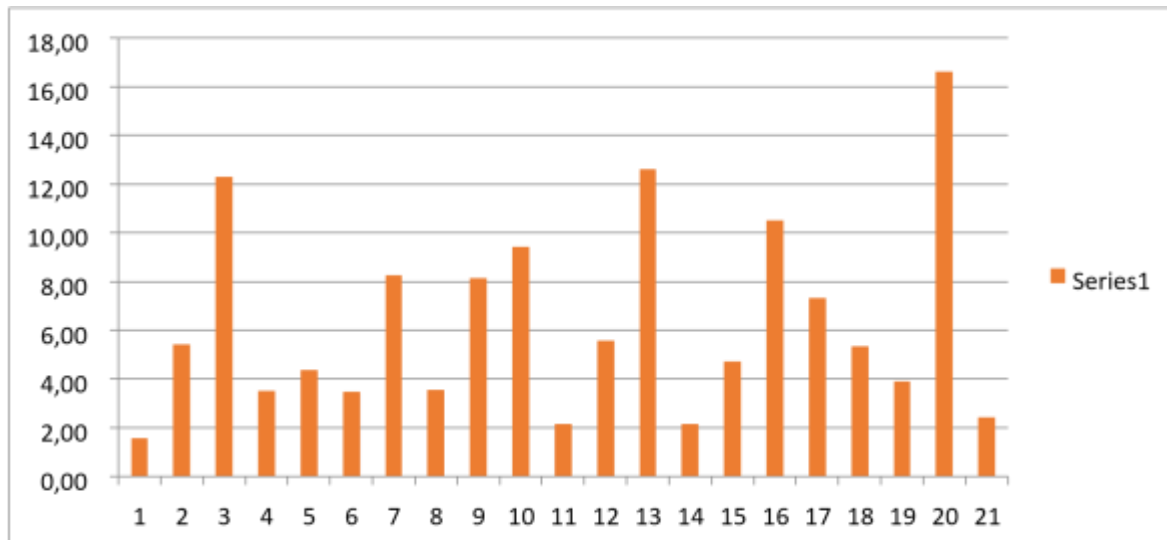


Based on table 6 according to the provisions of Bank Indonesia that the LDR relationship less than or equal to 110% is healthy and above 110% is not healthy, it is found that all BPRs in Bandung District are in the healthy category because LDR is below 110%, the lowest LDR is

**Table 7**  
**Rural Bank (BPR) in the district of Bandung**  
**Registered in The Financial Services Authority (OJK)**

No	Code	Serial Number	BPR Name	ROA						Average	Informatio n
				2014	2015	2016	2017	2018	2019		
1	B01	600190	PT. BPR BINA SONO ARTHA	3.86	2.03	1.48	0.82	0.62	0.56	1.56	Positive
2	B02	600278	PT. BPR SEMBADA	0.00	3.35	1.39	7.74	2.62	17.35	5.41	Positive
3	B03	600307	PT. BPR PANJAWAN MITRAUSAHA	29.65	33.33	4.11	1.11	2.55	2.93	12.28	Positive
4	B04	600402	PT. NPR MURIA HARTA NUSANTARA	2.23	0.80	9.98	3.39	4.42	0.23	3.51	Positive
5	B05	600406	PT. BPR HAYURA ARTALOLA	5.48	5.42	3.98	2.92	4.15	4.22	4.36	Positive
6	B06	601333	PT. BPR KERTAMULIA	6.04	3.00	3.64	3.26	3.03	1.86	3.47	Positive
7	B07	601336	PT. BPR PANGANDARAN	5.81	5.85	7.34	9.62	9.14	11.68	8.24	Positive
8	B08	601354	PT. BPR SARIKUSUMA SURYA	3.76	2.60	2.20	2.44	5.14	5.07	3.54	Positive
9	B09	601356	PT. BPR MITRA KANAKA SANTOSA	11.40	7.49	7.94	7.55	8.47	5.92	8.13	Positive
10	B10	601358	PT. BPR JUJUR ARGHADANA	10.65	7.71	11.67	10.50	10.73	5.26	9.42	Positive
11	B11	601361	PT. BPR DUTA PASUNDAN	1.53	0.75	0.27	1.59	5.65	3.09	2.15	Positive
12	B12	601366	PT. BPR BANDUNG KIDUL	4.95	4.92	5.02	6.37	6.17	5.91	5.56	Positive
13	B13	601798	PT. BPR NUSANTARA BONA PASOGIT 26	4.28	4.57	4.55	2.54	17.08	42.61	12.61	Positive
14	B14	601901	PT. BPR BRATA NUSANTARA	4.65	0.75	0.89	2.21	2.50	2.00	2.17	Positive
15	B15	601997	PT. BPR BALEENDAH RAHAYU	4.38	5.25	4.20	5.05	4.73	4.63	4.71	Positive
16	B16	602012	PT. BPR JELITA ARTA	5.69	16.27	13.46	10.27	5.83	11.64	10.53	Positive
17	B17	602046	PT. BPR MITRA RUKUN MANDIRI	8.42	6.98	6.71	6.40	7.95	7.43	7.32	Positive
18	B18	602048	PT. BPR NUSANTARA BONA PASOGIT 27	5.11	5.42	4.66	6.28	6.32	4.34	5.36	Positive
19	B19	602051	PT. BPR GUNADHANA MITRASEMBADA	0.10	0.70	20.08	0.75	1.75	0.00	3.90	Positive
20	B20	602567	PT. BPR DUTA ARHA SEJAHTERA	55.09	19.69	12.89	5.22	3.99	2.89	16.63	Positive
21	B21	602638	PT. BPR KERTA RAHARJA	2.34	2.78	2.57	2.44	2.49	2.00	2.44	Positive
			Average	8.35	6.65	6.14	4.69	5.49	6.74	6.35	21
			Maximum	55.09	33.33	20.08	10.50	17.08	42.61	55.09	
			Minimum	0.00	0.70	0.27	0.75	0.62	0.00	0.00	





Source: <https://www.ojk.go.id> processed

Based on table 7, it is obtained data that 21 BPR in Bandung District have good performance which shows a positive number or equal to 100%. The highest ROA was 55.09 for BPR Duta Arha Sejahtera while the lowest ROA was 0.00 for BPR GunadhanaMitrasembada and BPR Sembada. This means that all BPRs in Bandung District BPR management must strive to maintain or increase ROA. Because ROA is a measure of management performance in company finances.

## 5. Hypothesis Test Results

### Partial Test (*t-test*)

The *t* test speaks to prove the theoretical hypothesis on the empirical basis. The significance level used is 5% ( $\alpha = 0.05$ ), meaning that it is likely that the results of drawing conclusions have a probability of 95% or an error tolerance of 5%, so the provisions of the *t* test are as follows:

- If  $\text{Prob} < 0.05$  and  $t_{\text{count}} < t_{\text{Table}}$  then  $H_0$  is accepted and  $H_a$  is accepted.
- If  $\text{Prob} < 0.05$  and  $t_{\text{count}} > t_{\text{Table}}$  then  $H_0$  is accepted and  $H_a$  is accepted.

If the observation of the number ( $n$ ) = 52 and the number of independent research variables ( $k$ ) = 2, it will produce  $df = n - k - 1 = 52 - 2 - 1 = 49$ , the value of *t* Table obtained is 1,677 partial test results (*t* test) as follows:

Table 8  
T Test  
Rural Bank (BPR) in the district of bandung test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.938474	0.348871	8.422797	0.0000
NPL	-0.078873	0.030079	-2.622166	0.0118
LDR	0.017420	0.003393	5.133592	0.0000

#### Non Performing Loan (NPL)

H01:  $\beta_1 \neq 0$  NPL has a negative effect on ROA

Ha1:  $\beta_1 = 0$  NPL has a positive effect on ROA

The results of the t test (partial), the value of Prob = 0.0118 < 0.05 indicates the significance value and the tcount value of -2.622166, the ttable value is 1.675, the result of tcount < ttable or -2.622166 < 1.675, it can be concluded that H0 is accepted and Ha is rejected. This means that partially the NPL variable has a negative effect on ROA. The test results show that it is in accordance with the theory that a high NPL will reduce ROA and a low NPL will increase ROA.

#### Loan Deposit Ratio (LDR)

H01:  $\beta_1 \neq 0$  LDR has a negative effect on ROA

Ha1:  $\beta_1 = 0$  LDR has a positive effect on ROA

The results of the t test (partial), the value of Prob = 0.000 < 0.05 shows the significance value and the tcount value of 5.133592, the t-table value is 1.675, the results of tcount > ttable or 5.133592 > 1.675, it can be concluded that H0 is rejected and Ha is accepted. This means that partially the LDR variable has a positive effect on ROA. The test results show a theoretical agreement that LDR will increase ROA.

#### Simultaneous Hypothesis Test (F-Test)

Simultaneous test is used to test jointly or simultaneously affect the independent variable on the dependent variable. The hypothesis is as follows:

Ho1,24  $\neq \beta$ : NPL and LDR have no effect on ROA.

Ho1,24  $= \beta$ : NPL and LDR have no effect on ROA

The following conditions:

- If the probability value is less than or equal to the Sig. (Prob  $\leq$  0.05) and Fcount > Ftable then Ha is rejected and H0 is accepted, which means that it has a significant effect.
- if the probability value is less than or equal to the Sig. (Prob  $\geq$  0.05) or Fcount < Ftable then Ha is accepted and H0 is rejected, which means that it has no significant effect.

F test statistic  $\alpha = 5\%$ . Df = k1 and df2 = n-k (54 - 2 = 52) the value of F table = 3.168

Table 9  
Uji F  
Rural Bank (BPR) in the district of bandung test

Weighted Statistics			
R-squared	0.565649	Mean dependent var	1.826615
Adjusted R-squared	0.499552	S.D. dependent var	3.175306
S.E. of regression	1.067403	Sum squared resid	52.41009
<b>F-statistic</b>	<b>8.557882</b>	Durbin-Watson stat	1.906489
<b>Prob(F-statistic)</b>	<b>0.000001</b>		

Probability Value: Prob (F-statistic) 0.00001 <0.05 indicates that the test is significant and the t value is 8.557882 > t table 3.168, then the hypothesis Ho is rejected and Ha is accepted, it can be concluded that the NPL and LDR have a significant effect together - equal (simultaneously) to ROA.

### Model Fit Test (Goodness of Fit)

The coefficient of determination (R<sup>2</sup>) aims to measure how far the model's ability to explain the variation in changes in the independent variable contributes to changes in the dependent variable. The coefficient of determination is between zero and one. A small R<sup>2</sup> value means that the ability of the independent variables to contribute to changes in the dependent variable is limited and a value close to one means that the independent variables provide almost all information on changes in the independent variable that can contribute to the variation of the dependent variable.

The test results are as follows:

Table 10  
Model Summary  
Rural Bank (BPR) in the district of bandung test  
Tabel Uji Koefisien Determinasi

Weighted Statistics			
R-squared	0.565649	Mean dependent var	1.826615
Adjusted R-squared	0.499552	S.D. dependent var	3.175306
S.E. of regression	1.067403	Sum squared resid	52.41009
F-statistic	8.557882	Durbin-Watson stat	1.906489
Prob(F-statistic)	0.000001		

The coefficient of determination (R<sup>2</sup>) in the form of an R-squared value of 0.565649, meaning that the variability of changes in the independent variable NPL and LDR contributes to the variability of the dependent variable ROA 56.56%, and the remaining 43.44% is a variable that is not researched, it can be concluded the waste model is in a moderate state.

## **Conclusion**

Based on the results above, it can be concluded as follows:

1. Non-Performing Loans (NPLs) for rural banks in the District of Bandung can be said to be still under control and reasonable, namely 50% are under the provisions of Bank Indonesia and the other 50% are above Bank Indonesia regulations, but in the short term it can be overcome due to microeconomic factors that affect the occurrence increase in NPL.
2. The Loan to Deposit Ratio (LDR) of BPR in Bandung District is very good because everything is below the limit set by Bank Indonesia, which means that management is very careful in managing third party funds in lending to customers selectively so that the principle of prudence is still considered by BPR management.
3. Overall Return on Assets (ROA) can be said to be good even though there are still BPRs whose return on assets is still negative, but it is still considered reasonable due to external factors.
4. Non Performing Loans (NPL) and Loan to Deposit Ratio (LDR) simultaneously have a positive effect on BPR performance by 11% the rest are other factors not examined.

## **Suggestion**

Researchers provide the following suggestions:

1. BPR management can maintain the NPL to remain below 5% so that in the long term it can improve the performance of the BPR, while still paying attention to the inclusion of third party funds in a reasonable Loan to Deposit Ratio so that management is free to develop its business by channeling more credit to borrowers so that obtaining a profit that will have an effect on improving BPR performance.
2. For the Financial Services Authority (OJK) as an institution that supervises and provides education to BPRs to provide regulations and policies that encourage rural banks to grow in channeling credit to the real sector so that the economic sector can grow and GDP will increase, especially in the MSME sector.
3. For the next researcher, add other variables so as to provide a good description and mapping of the BPR so as to provide information that is not misleading to both depositors, debtors and BPR management.

## **Future Research**

1. For the next researcher, add other variables so as to provide a good description and mapping of the BPR so as to provide information that is not misleading to both depositors, debtors and BPR management.
2. If further research can be widely used, it is best if the subjects of further research do not just come from BPRs in the District of Bandung, but from other areas as well.

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