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Influence of loan to deposit ratio (LDR), non-performing loan (NPL) and provision for losses of productive assets (PLPA) on return on asset (ROA) in BPR Jujur Arghadana period 2019-2023

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ABSTRACT (9 PT)

This research was conducted to analyze the influence of Loan to Deposit Ratio (LDR), Non-Performance Loans (NPL), and Allowance for Productive Asset Losses (PPAP) on Return on Assets (ROA) at BPR Honest Arghadana for the 2019-2023 period. The sampling technique was carried out using a purposive sampling method with the criteria of Honest BPR Arghadana which publishes complete financial reports every year for the 2019-2023 period. Before the analysis is carried out, analysis requirements are first tested including normality test, multicollinearity test, heteroscedasticity test and autocorrelation test. The data analysis technique was carried out using the multiple linear regression analysis method using the SPSS 21 program tool. Proving the hypothesis was carried out using the T test and F test. The results of the research simultaneously stated that LDR, NPL and PPAP together had an effect on ROA of 24, 3%. Meanwhile, partial research results state that the LDR, NPL and PPAP variables do not have a significant effect on ROA.

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1. Introduction

A bank is a business entity with a function as a financial intermediary between parties who have excess funds and parties who lack funds(Fure, 2016). The main goal of a bank is to make a profit and increase the wealth of its shareholders in the hope of supporting the survival of a bank(Taolin, Manek, & Nokas, 2021). People's Credit Bank (BPR) is a bank financial institution whose credit distribution reaches many Micro, Small and Medium Enterprises (MSMEs). Credit distribution to the public is the largest productive asset in BPR which is the main source of income and has an impact on the ability to earn profits(Supeno & Hendarsih, 2020).

The main activity carried out by BPR is the provision of credit, however the provision of credit carried out by banks carries risks in the form of non-smooth credit payments which are called Non-Performing Loans (NPL).(Nurfitriani, 2021). Non-Performing Loan (NPL) or commonly known as problem credit is a situation where the customer is no longer able to pay part or all of his obligations to the bank as agreed in the credit payment.(Piliang, 2019).

The Loan to Deposit Ratio (LDR) financing ratio is also considered to be a benchmark in assessing bank health. Because the LDR ratio indicates how far the bank's ability to repay withdrawals made by depositors(Nurfitriani, 2021). Loan To Deposit Ratio (LDR) is a comparison between the amount of credit given and the amount of funding sources originating from public funds such as current accounts, savings and term savings.(Piliang, 2019).

A bank that can always maintain good performance, especially a good level of liquidity, is likely to have an increase in the value of the shares of the bank concerned in the secondary market and the amount of funds from third parties collected.(Ariyani, 2010). The increase in share value and the amount of third party funds is an indicator of increasing public trust in the bank concerned(Sintha, 2014).

The level of bank health can be assessed from several indicators. One of the main indicators used as the basis for assessment is the financial report of the bank concerned(Harun, 2016). Based on financial reports, a number of financial ratios can be calculated which are commonly used as a basis for assessing the level of bank health. The assessment of a bank's health level includes an assessment of six aspects, namely CAMELS (Capital, Assets, Management, Earning, Liquidity, Sensitivity to Market Risk)(Kusumawardani, 2014). The capital aspect includes CAR, the assets aspect includes NPL and PPAP, the earnings aspect includes NIM and BOPO, the liquidity aspect includes LDR(Ayu & Yuliana, 2011).

Information about banking financial position, banking performance, banking cash flow, and other information relating to financial reports can be obtained from banking financial reports.(Fatimah, 2020; Putra & Juniarti, 2016). To understand information about financial reports, financial report analysis is needed, which includes calculations and interpretation of financial ratios(Putra & Juniarti, 2016).

According to banking experts, commercial banks are profit-oriented financial institutions. The main objective of bank operations is to achieve maximum profitability. The profitability ratio is the net result of a number of company policies and decisions(Utami & Murwaningsari, 2017). Profitability according to Munawir is the company's ability to generate profits during a certain period. To measure a bank's profitability ratio, it usually uses Return On Assets (ROA)(Fernos, 2017; Iswandi, 2022). The greater the ROA of a bank, the greater the level of profit achieved by the bank and the better the bank's position in terms of asset use(Ariyanti, Sukadana, & Suarjana, 2022).

In developing business and managing risks, BPRs are required to form an Allowance for Productive Asset Losses (PPAP) which is as explained in POJK 33 of 2018. In carrying out business activities related to productive asset management, especially in the credit sector, BPRs must always pay attention to the principle of prudence. and sound credit principles(Safitri & Atmadja, 2022). Therefore, it is necessary to align the provisions regarding the quality of productive assets and the formation of allowances for write-offs of BPR productive assets with several related provisions to create a productive, healthy and competitive people's credit banking industry. This change in collectibility will of course also change the PPAP because the PPAP calculation is also based on the collectibility of credit from debtors and the collectibility of placements with other banks. There are many BPRs that continue to strive to provide the best service to the community and of course without any losses. Every bank, especially BPR, certainly hopes for optimal profits when running a business in the financial sector.

During the Covid-19 pandemic, all industries experienced problems in various ways, especially the economy. BPR is one of those affected, where the largest funds that have been distributed in the form of credit were given to MSMEs affected by the pandemic. This condition hampers credit returns from MSME customers, both principal and interest. Repayment of credit principal installments and interest is the main source of income for BPR. The performance of the quality of credit that has been disbursed determines the smooth receipt of principal and credit interest(Setiawan & Priyastiwi, 2021). This condition will certainly have an impact on BPR's profitability performance, so that it will also experience a decline due to the impact of the Covid-19 pandemic.

In its operations, PT BPR JUJUR ARGHADANA experienced several obstacles which can be seen in the financial publication report in the ROA section because credit distribution which was affected by the Covid-19 pandemic for approximately 2 years had a significant impact on the recovery of banking performance in general.

Based on the data presented above, the researcher assumes that profitability or ROA at BPR Honest Arghadana is influenced by these factors including LDR, NPL and PPAP. This is in line with several previous studies conducted by Krisna Hidajat (2017) showing that LDR is partially significant to the ROA of banks listed on the IDX for the 2010-2013 period at a significance level of less than 5% (0.01%, 0, respectively). .01% and 0.6%), while NPL and PPAP have no significant effect on ROA as indicated by a significance level value greater than 5%, namely 88.2% and 72.7% respectively. Meanwhile, together it is proven to have a significant effect on ROA at a significance level of less than 5%, namely 0.01%(Hidajat, 2017). Research bySudarmawanti & Pramono, 2017shows that NPL has a positive effect on Return On Assets (ROA). This result is different from the research results Khamisah et al., 2020that NPL has no effect on Return On Assets (ROA). Meanwhile, research by Syarifuddin and M. Yamin (2018) shows that the results of calculations, tests and discussions prove that Non-Performing Loans (NPL) and Loan to Deposit Ratio (LDR) have a negative effect on Return on Assets (ROA).(Syarifuddin & Noch, 2018).

Based on the identification of the problem described above, the author formulates the problem in the following question, "Do Loan to Deposit Ratio (LDR), Non-Performing Loans (NPL), Provision for Loss of

Productive Assets (PPAP) have an effect on Return on Assets (ROA) at PT BPR JUJUR ARGHADANA for the period 2019 - 2023?"

2. Research Method

This research uses a quantitative approach because it aims to investigate events that have occurred (financial reports for the past several years) and analyze the relationship between independent variables and the dependent variable.(Mukhid, 2021).

The method used is descriptive and verification to answer how big the influence of NPL, PPAP, LDR is on the ROA of PT BPR Honest Arghadana for the 2019-2023 period. The data analysis technique was carried out using the multiple linear regression analysis method using the SPSS 21 program tools. Proving the hypothesis was carried out using the T test and F test. There are two sources of information in this research: 1) Primary data, obtained from interviews with employees of BPR Honest Arghadana Bandung. 2) Secondary data, obtained from various sourcesincluding books, journals, internet, theses, mass media, expert opinions, and relevant company data.

3. Results and Discussions

PT BPR Honest Arghadana's performance data for the 2019-2023 period is the main material for research to assess the bank's health level by analyzing the bank's financial condition including LDR, NPL, PPAP and ROA to determine the profitability obtained as a benchmark for assessing the bank's financial performance.

Based on statistical analysis using the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test as prerequisite tests and multiple linear regression analysis as a research hypothesis test, the following results were obtained:

Table 1. Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		16
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	6.67037172
Most Extreme Differences	Absolute	.090
	Positive	.078
	Negative	-.090
Test Statistic		.090
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Based on the SPSS output table, it is known that the Asymp.Sig (2-tailed) significance value of 0.200 is greater than 0.05. So in accordance with the basis for decision making in the Kolmogorov-Smirnov normality test above, it can be concluded that the data is normally distributed. Thus, the normality assumptions or requirements in the regression model have been met.

Table 2. Multicollinearity Test

Coefficients[a]

Model	Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1 (Constant)	7164.594	14680.392		.488	.634		
LDR	.552	.284	.632	1.943	.076	.590	1.696
NPL	-.477	.532	-.323	-.897	.387	.479	2.086
PPAP	-72.093	146.840	-.140	-.491	.632	.764	1.308

a. Dependent Variable: ROA

Based on the Coefficient output table in the Collinearity Statistics section, it is known that the Tolerance values for LDR, NPL and PPAP are 0.590, 0.479 and 0.764 which are greater than 0.10. Meanwhile, the respective VIF values are 1.696, 2.086, 1.308 < 10.00. So referring to decision making in the multicollinearity test, it can be concluded that there are no symptoms of multicollinearity in the regression model.

Table 3. Heteroscedasticity Test

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	-11584.859	7371.112		-1.572	.142
	LDR	-.013	.143	-.030	-.088	.931
	NPL	.136	.267	.193	.509	.620
	PPAP	115.907	73.729	.471	1.572	.142

a. Dependent Variable: Abs_RES

Based on the output table above, it is known that the significance value (Sig.) for each variable is 0.931, 0.620, 0.142 respectively. Because the significance value of the three variables above is greater than 0.05, it can be concluded that there are no symptoms of heteroscedasticity or can be called homoscedasticity in the regression model.

Table 4. Autocorrelation Test With Runs Test

Runs Test

	Unstandardized Residual
Test Value[a]	-.63166
Cases < Test Value	8
Cases >= Test Value	8
Total Cases	16
Number of Runs	10
Z	.259
Asymp. Sig. (2-tailed)	.796

a. Median

Based on the SPSS output table, it is known that the Asymp.Sig (2-tailed) value is 0.796 > 0.05, so it can be concluded that there are no symptoms of autocorrelation.

Table 5. Autocorrelation Test

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.503[a]	.253	.066	7.45770

a. Predictors: (Constant), PPAP, LDR, NPL

Based on the output table above, it is known that the coefficient of determination value is 0.253. This figure means that the LDR, NPL and PPAP variables simultaneously influence the ROA variable by 25.3%. Meanwhile, the rest is influenced by other variables that were not studied.

Table 6. Analysis of Variance

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	225.575	3	75.192	1.352	.304[b]
	Residual	667.408	12	55.617		
	Total	892.983	15			

a. Dependent Variable: ROA

b. Predictors: (Constant), PPAP, LDR, NPL

Based on the output table above, it is known that the significance value in the F test is 0.304. Because Sig. 0.304 > 0.05, so it can be concluded that the coefficient of determination value cannot be used to predict the contribution of variable X simultaneously to variable Y.

Table 7. Multiple Linear Regression Analysis Results

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	7164.594	14680.392		.488	.634
	LDR	.552	.284	.632	1.943	.076
	NPL	-.477	.532	-.323	-.897	.387
	PPAP	-72.093	146.840	-.140	-.491	.632

a. Dependent Variable: ROA

Based on the output table above, it is known that the significance value of each variable is 0.076, 0.387, 0.632 > probability 0.05, so it can be concluded that the first hypothesis is rejected. This means that there is no influence of LDR, NPL and PPAP on ROA.

4. Conclusion

Based on the results of research using statistical data analysis in the classical assumption test, it shows that the data is normally distributed because it has a value of 0.200. There are no symptoms of multicollinearity as evidenced by the Tolerance values for LDR, NPL, and PPAP of 0.590, 0.479, and 0.764 which are greater than 0.10. Meanwhile, the respective VIF values are 1.696, 2.086, 1.308 < 10.00. The variance is homoscedastic because the significance value of each variable is greater than 0.05 and there are no symptoms of autocorrelation as indicated by the Asymp.Sig (2-tailed) value of 0.796 > 0.05. Furthermore, the results of the hypothesis test show that the variables LDR, NPL and PPAP partially have no effect on ROA because the significance value of each variable is 0.076, 0.387, 0.632 > probability 0.05. However, based on the coefficient of determination value, it shows that the LDR, NPL and PPAP variables simultaneously influence the ROA variable by 25.3%. Meanwhile, the rest is influenced by other variables that were not studied. This research certainly has shortcomings in one way or another, such as the variables and results studied. Therefore, it is hoped that future researchers will be able to enrich their research in terms of the variables studied so that the results obtained will be more varied regarding things that can have an influence on ROA. Apart from that, in terms of observation period, research scope, comparison of research objects between bank holdings can also be carried out to obtain maximum results.

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