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The Effect of Credit Circulation, Loan to Deposit Ratio (LDR), and Interest Rate on Return On Assets (ROA) Due to Non-Performing Loan (NPL) on Credit Unions in Indonesia

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Credit Union; LDR; ROA; NPL

ABSTRACT
Credit Unions or commonly known as CUs are quite developed in Indonesia, especially on the island of Kalimantan. One of the Credit Cooperative Centers that house Primary CU in Indonesia has service areas in 34 Provinces in Indonesia, namely the Credit Union Credit Cooperative Center Indonesia (PUSKOPCUINA). The CU under the auspices of the PUSKOPCUINA movement has grown very well and has become a reference for CUs in Indonesia in terms of development and empowerment. CU's contribution is still not significant in boosting national economic growth, so more comprehensive research is needed. The development of CU in Indonesia is inseparable from the development of the Return On Assets (ROA) contained in the CU. The Kalimantan credit union movement is under the auspices of PUSKOPCUINA which has different regional and cultural characteristics. This is what researchers see as necessary to research the Effect of Outstanding Credit, Loan to Deposit Ratio (LDR), and Loan Interest Rates on Return On Assets (ROA) Due to Default Credit (NPL) at Credit Unions in Indonesia. The research objective was to test and formulate solutions to problems arising from the influence of Outstanding Credit, Loan to Deposit Ratio and Loan Interest Rates on Return On Assets due to Non-Performing Loans. The method used was quantitative research with Path Analysis in the data processing. The research population was the CU movement in Indonesia with a sample of 40 CUs under PUSKOPCUINA. The data used was outstanding credit data, Loan to Deposit ratio, non-performing loans, loan interest rates, and return on assets of 40 CU at PUSKOPCUINA in 2015-2019 with the model used to analyze panel data called the panel data model analyzed using Path Analysis. The results of the study showed that the Loan to Deposit ratio, non-performing loans, and loan interest rates had a significant effect on the return on assets of CUs in Indonesia.

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INTRODUCTION

The Indonesian Credit Cooperative Movement (GKKI) started from the existence of a handful of God's people who were moved to care for marginalized communities, through a vehicle for Credit Union, after being inspired and receiving aspirations from the Seminar on Social Economic Life in Asia (SELA) which they attended in the 1960s. Father Karl Albreht SJ, initiated a study circle regarding Credit Union by bringing together several volunteers, including Mr Robby W Tulus, Michael Wuryadi (late), Ms Daisy Tanireja, and others.

Credit Union (CU) is an autonomous collection or association of people who join voluntarily to meet their economic, and socio-cultural needs and aspirations through institutions that they have and control together. CU values include self-help, personal responsibility, democracy, equality, solidarity and common ownership. According to the tradition of its founders, members of the Cooperative believe in ethical values such as honesty, openness, social responsibility and concern for others.

The presence of CUs in Indonesia has had a significant impact on lower-middle-income communities, especially rural communities that have not been touched by banking services. The presence of CU carries a noble mission as a true cooperative movement with the motto: you are difficult for me to help, I am difficult for you to help. This motto is translated by the CU movement in the form of community empowerment which emphasizes that humans are more important than money. This concept elevates human dignity as God's creatures to gain prosperity through the CU movement which was born through the principles: from members, by members, and for members.

In realizing the empowerment of members, CU seeks to meet the needs of members by providing empowerment services through savings products for member investments, loan services to support members' access to capital for productive purposes, and social services through solidarity with grief in the form of moral support and empathy for fellow members who experience calamities, such as illness, grief, affected by disasters and so on. The development of the CU movement can be seen from the development of Return On Assets which includes the number of outstanding loans, the Loan To Deposit Ratio and the number of non-performing loans (NPL) as well as internal policies through setting loan interest rates which continue to be carried out in line with market developments. The rapid development of CUs that have joined under the auspices of the Indonesian Credit Union Credit Cooperative Center (PUSKOPCUINA) indicates that there is an increase in the welfare of these CU members.

The development of the number of CU assets is one of the indicators to measure whether the CU is growing and sustainable. The development of CU's Return On Assets (ROA) at PUSKOPCUINA also experienced a significant increase from 2015-2019 with an average ROA growth of 0.72%. The ROA each year is as follows: 2015 was 1.04%, 2016 was 0.20%, 2017 was 0.08%, 2018 was 1.32% and 2019 was 0.94%.

Non-Performing Loan (NPL), in the CU movement, is referred to as negligent credit. NPL is the main enemy of CU which must be minimized so that management activities are not seized for handling bad loans and focus on empowerment activities. The data on NPL at PUSKOPCUINA in 2015-2019 averaged IDR 823,972,047,622 or 13.19% of total assets. This shows that the NPL is still above the tolerance level, which is a maximum of 5%. In general, the NPL data is as follows from 2015-2019 respectively, namely 11.69%, 13.27%, 14.30%, 11.97%, and 14.71%.

An outstanding credit is the main heart of CU, where the ideal CU income of 95% comes from loan services paid by members (credit interest). The quality of outstanding credit is the main concern of CU management in addition to empowerment activities so that CU can continue to develop and sustainably raise the dignity of its members. In general, the 40 CUs under the PUSKOPCUINA movement experienced an increase in outstanding credit with fairly good quality. Loans are disbursed

by focusing on productive loans so that after members get a loan from CU, CU members can repay it on time and there is an increase in the household economy. The data on the development of outstanding credit can be described as follows, namely, in 2015 it was IDR 4,257,011,987,915 or 73.20% of total assets, in 2016 it was IDR 4,320,765,709,489 or 70.80%, in 2017 it was Rp4,142,603,299,693 or 66.79%, in 2018 it was IDR 4,365,288,005,957 or 68.28%, and in 2019 it was IDR 4,581,898,557,893 or 68.91%. Outstanding loans in percentage terms have decreased or on average from 2015-2019 amounted to 69.60% and this condition is still below the provisions, namely outstanding loans between 70-80% of total CU assets.

In general, the development of the Loan to Deposit Ratio (LDR) of CU members who joined the PUSKOPCUINA movement experienced ups and downs. However, it can be said to be a fairly normal and tolerable phenomenon because in 2019 there was a very significant increase from 2018, namely from IDR 5,082,131,772,729 to IDR 5,917,920,844,430 or equivalent to 116.45%.

Determination of Interest Rates for Primary CU Loans in the PUSKOPCUINA movement always pays attention to the development of market interest rates. As the institution that coordinates the Primary CUs in the movement, PUSKOPCUINA is not directly involved in setting the loan interest rate for each CU, but only provides a maximum range of numbers as material for consideration by the CU management in determining the draft Loan and Savings Interest Rates to be submitted at the Annual Members Meeting (RAT) to obtain the approval of the respective CU members. Loan interest rate data that applies to the 2015-2019 PUSKOPCUINA movement averages 11.94% as a reference interest rate for primary CU. From 2015 to 2019 there was a decrease in loan interest rates, which were originally 13.40% to 11.05%. The change in interest rates also refers to conditions of inflation and economic growth in Indonesia as well as interest rates set by banking institutions so that the interest set by the primary CU is not burdensome to its members.

The data above shows the development of the CU movement that has joined the PUSKOPCUINA which is spread across all provinces in Indonesia as many as 40 Primary CUs which have service areas in almost all rural areas. This development is experiencing fluctuations that cannot be separated from economic conditions. In general, the increase in ROA can be concluded as a continuous increase, due to the policy of the CU movement to require members to save every month through a savings product, namely Mandatory Savings, the amount of which depends on each Primary CU policy.

CU or commonly referred to in the Ministry of Cooperatives as a Savings and Loans Cooperative (KSP) has the advantage of a tool for monitoring financial performance issued by WOCCU called the PEARLS Monitoring System (read: Monograph 4, issued by WOCCU, David C. Richardson). Compare this with CAMEL applied by banks. So, with this tool, KSP CU, one of 44 financial ratio indicators in PEARLS, must maintain a liquidity ratio between 10 to 20% of total assets or at least 15% of total deposits and savings entrusted by members. So, based on international experience (with 8 years of research in Latin America), if the KSP maintains the above liquidity ratio, the KSP is unlikely to default when a member withdraws their deposit or savings. If any KSP CU violates this provision, the Puskopdit has been given a warning and immediately assisted, because the risk is very high. Today primary CUs are encouraged to develop SHG (self-help group) and SHI (self-help individual). The point is to encourage members to become social entrepreneurs through savings and loans at CU. Second, several CUs have carried out spin-offs (expansion) by facilitating the establishment of real sector cooperatives to provide non-financial services to members to support the entrepreneurship spirit of members. As stated above, the Main Data for Credit Cooperatives (INKOPDIT) shows as many as ±3 million CU members in Indonesia.

The results of research on CU that have been carried out on asset developments show that there is a direct and significant relationship between savings, loan interest rates, and outstanding credit on the development of CU assets (Pratiwi et al., 2019). However, this relationship must be carried out by using instruments that are very careful so as not to cause or increase the number of bad loans or in CU

terms it is called negligent credit. These studies on average use different variables and none of them directly see the effect of Loan to Deposit Ratio (LDR), loan interest rates, and outstanding credit on the development of CU Return On Assets (ROA) due to Non-Performing Loans (NPLs).

In general, the conditions mentioned above are divided into 34 regions in Indonesia, where CU members are domiciled and join the Kalimantan credit union movement under the auspices of PUSKOPCUINA which have different regional and cultural characteristics. This is what researchers see as necessary to do research on the Effect of Circulating Credit, Loan to Deposit Ratio (LDR), and Loan Interest Rates on Return On Assets (ROA). Consequences of Negligent Credit (NPL) at Credit Unions in Indonesia.

Loans can be interpreted as goods or services that are the obligation of one party to be paid to another party following a written or oral agreement, which is stated or implied and must be repaid within a certain period (Ardiyos, 2014). In the CU movement, Credit can only be given to Members (who have attended basic education or credit education) and are actively saving every month regularly. Members who have shown a member mentality, which is done by saving regularly, show sincerity, the ability to pay in instalments and good faith (Efendi, 2016). So getting credit is not the right of every member, but trust for the member concerned . one of the standards in deciding whether to accept or reject a member's credit and the majority of the entire Credit Union movement adheres to the 5C analysis and although it is not the same from one CU to another. Binding provisions in the Management Policy Pattern, Field Survey Results, and the character of the borrower (NN, 2022).

Loan to Deposit Ratio (LDR) is the ratio between the amount of credit granted to the number of third-party funds collected from the public consisting of current accounts, savings, and time deposits (deposits). This ratio is used to see how much third-party funding sources are generally short-term used to finance illiquid assets such as credit. According to Riyadi (2015), Loan To Deposit Ratio (LDR) is the ratio of total credit to Third Party Funds (DPK) collected by the Bank. According to Cashmere (2014), LDR (Loan To Deposit Ratio) is a ratio used to measure the composition of the amount of credit given compared to the number of public funds and own capital used. According to Pandia (2012), the Loan to Deposit Ratio is a ratio that states to what extent the bank has used the money of depositors (depositors) to provide loans to its customers. In other words, the amount of money used to provide loans is money that comes from the deposit of the storage (Sahdini et al., 2021).

The interest rate is the price of the use of investment funds. The interest rate is one indicator in determining whether someone will invest or save (Boediono, 2013). Bad credit is a condition where the customer is no longer able to pay part or all of its obligations to the bank as promised (Kuncoro and Suhardjono, 2002) because of the bank's external and internal actors. Bad credit in the CU movement is Non-Performing Loan (NPL). Bad loans are divided into instalments (principal, or interest, or principal and interest), 1 (one) month default, 2-3 months negligent, 4-12 months negligent, and 13 months and above. handling of negligent credit is focused on NPL 1-3 months. Where according to the view of the CU movement, members who are negligent for 1-3 months are members whose 90% can still be motivated and billed to become active members. While NPL above 4 months requires special handling and is almost certain, later if the collection has been successfully carried out until the loan is paid off, the member will not become an active member, even leaving the CU member (NN, 2022).

Return on Assets (ROA) is one of the indicators that have been set by Bank Indonesia in assessing the condition of banking profitability in Indonesia (Lalujan et al., 2016). Return on Assets or in Indonesian called the rate of return on assets is a ratio used to measure the level of efficiency of a company in managing assets to generate profits within one year. The greater the ROA of a bank, the greater the level of profit achieved by the bank and the better the position of the bank in terms of asset use. To measure the soundness of a bank, there is a small difference between the calculation of ROA

based on theory and the calculation method based on Bank Indonesia regulations. Theoretically, the calculated profit is after-tax profit, while in the CAMEL calculation, the calculated profit is profit before tax (Dendawijaya, 2009).

Several previous studies related to research topics, including: If you do not use financing/credit instruments, it is feared that it will reduce the number of Assets (Putra & Haryaningsih, 2021). Interest Rates and GDP simultaneously have no effect on ROA with a significance value of 1.66 and F calculated by 1.835 (Cahyani, 2018). Efficiency BOPO operations/Operating Costs to Operating Income have a significant effect on ROA/Return On Assets. The Effect of NPL/Non-Performing Loan on ROA/Return On Assets is not significant (Harun, 2009). Loan to Deposits Ratio (LDR) and credit growth rate (CGR) do have a negative relationship, but the effect is not significant on NPL (Kusuma & Haryanto, 2016). The exchange rate has no significant effect on non-performing loans at PT Bank State Savings (Persero) Padang Branch (Roza Linda, 2015). Capital Adequacy Ratio has a positive and insignificant effect on Return On Assets, Loans to Deposit Ratio has a positive and insignificant effect on Return On Assets, and Non-Performing Loan has a negative and significant effect on return on assets (Warsa & Mustanda, 2016). The value of business volume and the amount of debt has a dominant influence on the formation of SHU (Yuliani et al., 2017). Member Savings and Non-Performing Loans have a very strong and unidirectional influence (Nurhayati, 2022). Non-Performing Loans (NPL) affect Return On Assets (ROA) (Ali & Roosaleh Laksono, 2017).

The research objective is to test and formulate solutions to problems arising from (1) the Effect of Outstanding Credit on the Return On Assets (ROA) of Credit Unions; (2) the Effect of Savings on the Return On Assets (ROA) of Credit Unions; (3) the Effect of Loan Interest Rates on Return On Assets (ROA) of Credit Unions; (4) effect of Outstanding Credit on Credit Union Non-Performing Loans (NPL); (5) the Effect of Total Savings on Credit Union Non-Performing Loans (NPL); (6) the Effect of Loan Interest Rates on Credit Union Non-Performing Loans (NPL); and (7) effect of Outstanding Credit, Loan to Deposit Ratio (LDR), Loan Interest Rate on Return On Assets (ROA) through the presence of Non-Performing Loans (NPL).

METHOD

This type of research was a type of quantitative research that emphasizes the analysis is on numerical (numerical) data processed using statistical methods with two variables namely the independent variable (influence) and the dependent variable influenced) (Retnawati, 2017). Quantitative data was sourced from 40 CUs at the Indonesian Credit Union Credit Cooperative Center (PUSKOPCUINA) in 2015-2019. The research population was the CU movement in Indonesia with a sample of 40 CU who are under the auspices of the PUSKOPCUINA movement because their service areas are in all provinces in Indonesia. The variables in this study consisted of the independent variables (independent variables), namely outstanding loans, Loan to Deposit Ratio (LDR), and interest rates on loans and the dependent variable (dependent variable), namely bad loans (Non-Performing Loans) and Return On Assets (ROA). Credit Unions. Using path analysis as an extended regression model was used to test the alignment of the correlation matrix with two or more models of causal relationships compared by researchers (Ilyas et al., 2021).

In this study, the independent variables were outstanding credit, savings, and loan interest rates at credit unions, while the explanation of the independent variables in this study was as follows: Outstanding Credit (X1) represents the amount of credit distributed/circulated to active members of the 40 (forty) CUs at PUSKOPCUINA from 2015-2019 in units of billions of Rupiah. Loan to Deposit Ratio (LDR) (X2) is the total amount of all credit extended to CU members recorded in the balance sheet divided by the total amount of the member's savings both from Principal Savings, Compulsory Savings and Voluntary Savings of active members at 40 (forty) CU at PUSKOPCUINA from 2015-2019 in units of billions of Rupiah. Loan Interest Rate (X3) is the highest interest rate as a reference for 40 (forty) CUs in PUSKOPCUINA in setting loan interest rates for active members who borrow

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from 2015-2019 in percentage units (%) per year.

While the dependent variable is bad loans and credit union assets at PUSKOPCUINA in 2015-2019. The explanation was as follows: Non-Performing Loans (Y1) is the total number of problem loans (not paid in instalments/paid by members to CU) until the end of the financial year (as of December 31) which is separated into 4 (four) categories, namely: default credit of 1 (one) month, default credit of 2-3 months, default credit of 4-12 months, and default credit of more than 13 months in units of billions of Rupiah. Return On Assets (ROA) (Y2) is the total rate of return on institutional assets lent through credit to members in the form of residual operating results (SHU) before tax divided by the total assets (assets) of CU recorded in the balance sheet consisting of current assets and non-current assets in units of billions of Rupiah. In granting loans/credit to active members, credit comes from current assets, namely cash or savings kept at government banks or national banks originating from members' savings as well as loan instalments and other CU income following the Cooperative Law of year number 25 of 1992.

RESULTS AND DISCUSSION

Results

The results of the study were made with two models, namely the direct effect equation of the first model and the second model, as follows:

Direct Effect Equation first model (MODEL I)

Model I Y1= 0.901 1 - 0.092 2 - 0.053 3 + 1
(0.000) (0.412) (0.196)

It can be seen that the significance level of the three variables in the first model has different values. The X1 variable, namely Circulating Loans, has a significance value of 0.000 which is smaller than 0.05 so this variable has a significant effect on the Y1 variable, namely NPL. The significance value of the LDR or X2 variable is 0.412 which is greater than 0.05 so the LDR variable has no significant effect on NPL (Y1). Then, the X3 variable, namely the Loan Interest Rate, has a significance value of 0.196 which is greater than 0.05, which means that the Loan Interest Rate variable has an effect but is not significant on the NPL (Y1).

Error value :
Error I (e1) = 1 2
= 1 0.671
= 0.329
= 0.57
Information:
e: Residual/error
R2: Coefficient of determination/R Square

Based on the above calculations, it can be concluded that the variable interest rates on loans, Outstanding Credit and LDR have an effect of 0.671 or 67.1% on NPL. While the remaining 0.329 or the remaining 32.9%, is the influence of other variables outside of the loan interest rate variables, Outstanding Credit and LDR are not included in this model.

Normality test

The normality test results use the Kolmogorov test and are described in the form of a P-Plot curve and a Histogram of the regression results can be seen in Fig. 1-Fig. 3.

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One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		198
Normal Parameters[a,b]	Mean	.0002384
	Std. Deviation	3.16816E+10
Most Extreme Differences	Absolute	.215
	Positive	.209
	Negative	-.215
Test Statistic		.215
Asymp. Sig. (2-tailed)		.000[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

Fig. 1 *Kolmogorov test*

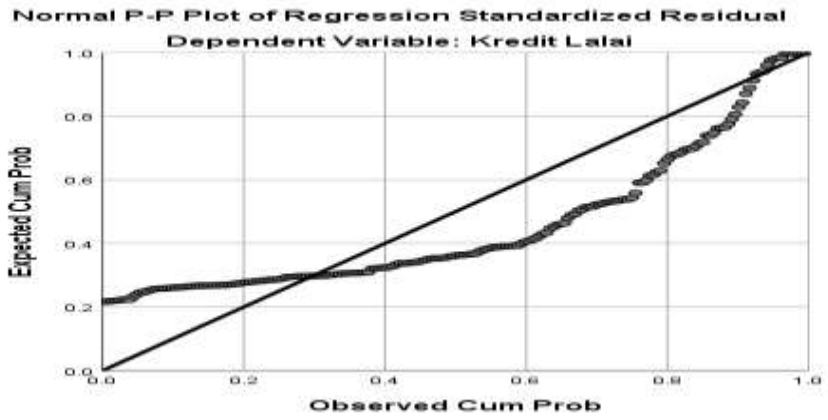

Fig. 2 *Dependent Variable P-Plot Curve: NPL*

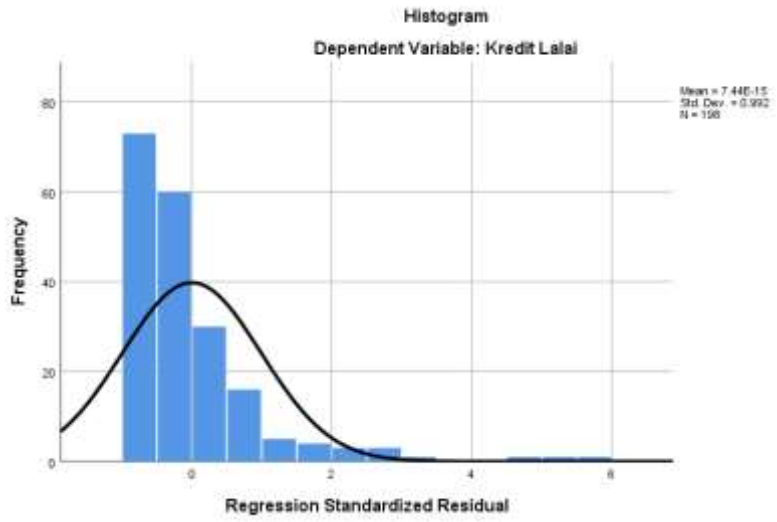

Fig. 3 *Histogram of Dependent Variable Regression Results: NPL*

Because the significance level of the Kolmogorov test is 0.000 < 0.05, the data are not normally distributed. This is supported by the line on the P-Plot curve that is not in line with the existing diagonal line.

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Table 1
Multicollinearity Test

Coefficients[a]								
Model		**Unstandardized B**	**Coefficients Std. Error**	**Unstandardized Coefficients Beta**	**T**	**Sig.**	**Collinearity Tolerance**	**Statistics VIF**
1	(Constant)	2.010E+11	2.483E+11		.810	.419		
	Outstanding Credit	-1737762316	4068886491	-.067	-.427	.670	.205	4.870
	Loan To Deposit Ratio (LDR)	-2.899E+10	4.360E+10	-.080	-.665	.507	.354	2.824
	Loan Interest Rate	-2278304722	5439399801	-.064	-.419	.676	.221	4.555

a. Dependent Variable: NPL

Due to the tolerance value (standard: >0.10) and VIF (standard: <10) on the variables X1, X2, X3, and Y1, then each variable is not detected as multicollinearity symptoms (see Table 1).

Heteroscedasticity Test

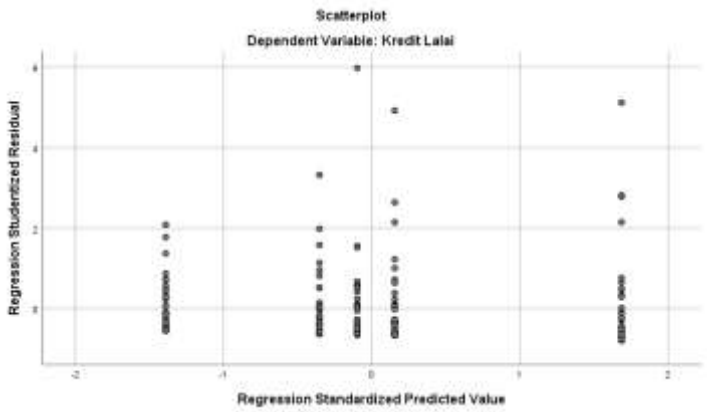

Fig. 4 *Heteroscedasticity Test Results, Dependent Variable: NPL*

Based on Fig. 4, the results of the heteroscedasticity test using a scatterplot, it can be seen that the plotting points do not spread around the number 0 and have a special pattern that forms waves, widens and narrows. So it can be ascertained that model 1 is detected as experiencing symptoms of heteroscedasticity.

Direct Effect Equation second model (MODEL II)
Model I Y2= 0.879 1 + 0.156 2 - 0.023 3 - 0.044Y1 + 2
(0.000) (0.000) (0.025) (0.012)

It can be seen that the significance level of the four variables in the second model has different values. The X1 variable, namely Circulating Credit, has a significance value of 0.00 which is smaller than 0.05 so the variable has a significant effect on Y2, namely ROA. The significance value of the LDR or X2 variable is 0.00 less than 0.05 so the LDR variable has no significant effect on Y2, namely ROA. Then, the X3 variable, namely the loan interest rate, has a significance value of 0.025 which is smaller than 0.05 which means that the loan interest rate variable has a significant effect on Y2, namely ROA. Finally, the Y1 variable, namely NPL, has a significance value of 0.012 which is smaller than 0.05, so the NPL variable has a significant effect on Y2, namely ROA.

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Error value :
Error II (e2) = 1 *R* 2
= 1 0.981
= 0.019
= 0.137
Information:
e: Residual/error
R2: Coefficient of determination/R Square

Based on the above calculations, it can be concluded that the variable interest rates on loans, Outstanding Credit and LDR and NPL have an effect of 0.981 or 98.1% on ROA. While the remaining 0.019 or 1.9%, is the influence of other variables outside of the loan interest rate variable, Circulating Credit and LDR and NPL which are not included in this model.

Normality test
The results of the normality test use the Kolmogorov test and are described in the form of a P-Plot curve and a Histogram of regression results with the dependent variable LDR can be seen in Fig. 5-Fig. 7.

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		198
Normal Parameters[a,b]	Mean	.0000359
	Std. Deviation	1.23304E+11
Most Extreme Differences	Absolute	.220
	Positive	.220
	Negative	-.186
Test Statistic		.220
Asymp. Sig. (2-tailed)		.000[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

Fig. 5 *Kolmogorov test*

Fig. 6 *Dependent Variable P-Plot Curve: LDR*

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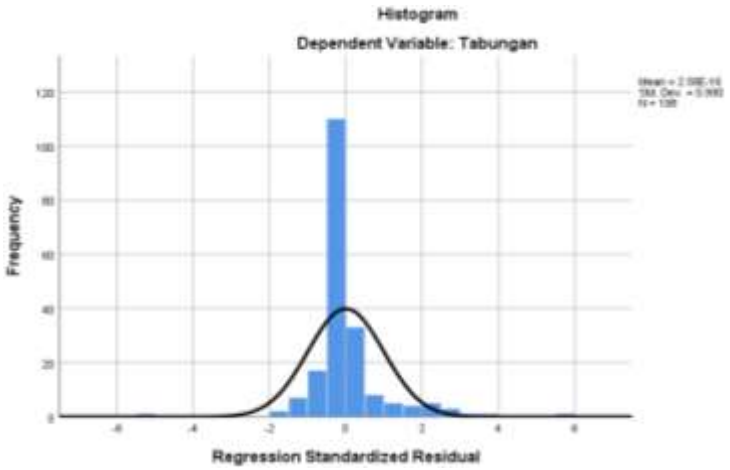

Fig. 7 *Histogram of Dependent Variable Regression Results: LDR*

Because the significance level of the Kolmogorov test is 0.000 < 0.05, the data are not normally distributed. This is supported by the line on the P-Plot Curve and the histogram graph that is not in line with the existing diagonal line and is high on one side only.

Table 2
Multicollinearity Test

Coefficients[a]								
Model		**Unstandardized B**	**Coefficients Std. Error**	**Unstandardized Coefficients Beta**	**T**	**Sig.**	**Collinearity Tolerance**	**Statistics VIF**
1	(Constant)	-7.192E+10	9.705E+11		-.074	.941		
	Outstanding Credit	-1729359133	1.588E+10	-.012	-.109	.913	.205	4.875
	Loan To Deposit Ratio (LDR)	5989606639	1.703E+11	.003	.035	.972	.353	2.831
	Loan Interest Rate	7961595749	2.123E+10	.038	.0375	.708	.221	4.526
	NPL	**4.366**	**.280**	**.0748**	**15.584**	**.000**	**.994**	**1.006**

a. Dependent Variable: LDR

Due to the tolerance value (standard: > 0.10) and VIF (standard: <10) on the variables X1, X2, X3, Y1 and Y2, multicollinearity symptoms were not detected for each variable (see Table 2).

Heteroscedasticity Test

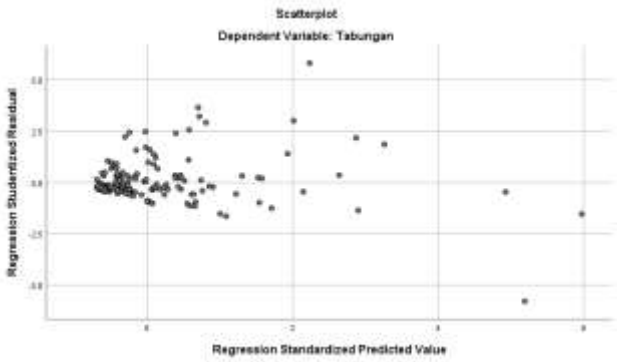

Fig. 8 *Heteroscedasticity Test Results*

Based on the above, showing the results of the heteroscedasticity test using a scatterplot, it can be seen

that the plotting points do not spread around the number 0 and have a special pattern that forms waves, widens and narrows. So it can be ascertained that model 1 is detected as experiencing symptoms of heteroscedasticity.

Discussion

Based on the above calculations, it can be concluded that the loan interest rate, Outstanding Credit and LDR variables have an effect of 0.671 or 67.1% on NPL. Meanwhile, the remaining 0.329 or 32.9% is the influence of other variables outside of the loan interest rate variable, Outstanding Credit and LDR are not included in the model I, while the loan interest rate, Outstanding Credit and LDR and NPL have an effect of 0.981 or 98.1% on ROA. Meanwhile, the remaining 0.019 or 1.9% is the influence of other variables outside of loan interest rates, Outstanding Credit and LDR and NPL which are not included in model 2.

The results of this study are also in line with several previous studies, although specifically, some things cause slight differences, when viewed from the research objectives it can be explained that outstanding credit, LDR, and loan interest rates affect ROA because business activities carried out other than empowering members are businesses save loans to maintain the continuity of the CU and as part of a way to obtain capital to finance empowerment activities and other operational activities.

Outstanding credit, LDR, and loan interest rates also affect NPLs. The greater the number of loans granted without strictly implementing the 5C principles, the higher the NPL, as well as the interest rates on loans. The greater the interest rate given, it will burden CU members in repaying loans so the amount of savings owned by members is also a very determining factor in preventing the amount of NPLs in a CU.

The percentage of outstanding loans will directly impact/potentially increase the NPL rate and will affect the ROA of a CU. The principle of prudence in managing CU must be upheld by CU management in addition to the main goal of empowering members. CU must not be complacent in pursuing profit, but must continuously manage members to become quality members. Qualified CU members will make CU healthy according to WOCCU directives through the PEARLS Analysis.

CONCLUSIONS

Based on the results of research and data processing carried out, it could be concluded that Credit Circulation, Loan to Deposit Ratio, and Deposit Interest Rates had a significant effect on the Return On Assets of Credit Unions in Indonesia. Meanwhile, Loan Interest Rates, Circulating Credit, and Loan to Deposit Ratio and Non-Performing Loans (NPL) had no significant effect on the Return On Assets of Credit Unions in Indonesia.

Looking at the results of the research above, the authors would like to provide suggestions for further, more comprehensive research by taking samples of all Credit Cooperative Centers (CU) in West Kalimantan, which serves as a barometer for the development of CUs in Indonesia.

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