THE INFLUENCE OF SAVINGS AND DEPOSITS ON THE CREDIT POSITION OF VILLAGE KREDIT INSTITUTIONS (LPD) IN GIANYAR DISTRICT DURING THE COVID-19 PANDEMIC

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Abstract:
The background of this research is to analyze the influence of savings and deposits on the credit position of LPDs in Gianyar District during the COVID-19 pandemic. The data used in this research is quantitative data, which includes the value of savings, deposits, and credit. Research on the Effect of Savings and Deposits on the Credit Position of Village Credit Institutions (LPD) in Gianyar District During the Covid-19 Pandemic. The object of this research is community savings funds (Savings and Deposits) and (Credit) in LPDs in Gianyar District. The data analysis technique used is Panel Data Regression Analysis, where the independent variables are Savings and Deposits while the dependent variable is Credit. The test results explain Savings and deposits, together with all the independent variables used in the research, can influence the credit position of Village Credit Institutions (LPD) in Gianyar District during the COVID-19 pandemic. Savings have had a significant effect on the credit position of Village Credit Institutions (LPD) in Gianyar District during the COVID-19 pandemic. Deposits have had a significant effect on the credit position of Village Credit Institutions (LPD) in Gianyar District during the COVID-19 pandemic.

Keywords: Savings, Deposit, Credit Position

INTRODUCTION

Banking is a sector that plays a vital role in the Indonesian economy. Banks are financial institutions whose main activity is collecting funds from the community and channeling these funds back to the community as well as providing other banking services. Banks are a place for companies, government, and private agencies or individuals to store their funds.

Microfinance Institutions (LKM) in Indonesia consist of commercial banks, the most famous being the government-owned Bank Bank Rakyat Indonesia (BRI) with its widespread Unit system, Rural Banks (BPR) which are subject to the Banking Law and Bank Indonesia regulations, as well as a non-bank financial institution with the name Rural Credit Fund Institution (LDKP) under the regulation of the Department of Home Affairs and the Provincial government. Indonesia also knows cooperatives subject to the Cooperative Law, pawnshops under the regulation of the Ministry of Finance. These local organizations are not regulated, such as social gatherings, and village-owned institutions, such as the Village Credit Agency (BKD).
In this case, one of the financial institutions owned by the village-level community is the Village Credit Institution (LPD). Village Credit Institutions (LPD) in Bali act as mediators for people who need funds and who have excess funds. The use and utilization of this LPD are aimed at businesses related to the interests of Traditional Villages and improving the standard of living of the community concerned through efforts to develop the potential of economic sectors in rural areas and participate in supporting regional development.

During the COVID-19 pandemic, the Village Credit Institution (LPD), an institution managed by Pekraman Village in Bali, was also affected by the current pandemic. It is because, in Bali itself, the majority of the population works in the tourism sector, which is also not spared. Affected by the Covid-19 virus pandemic. Tourism-supporting sectors, namely restaurants, and hotels, had to close temporarily because the government issued a lockdown policy and PPKM, which resulted in many people losing their jobs due to the impact of the COVID-19 pandemic.

One of the problems experienced by Village Credit Institutions is that many credits need to be paid in installments, as the name suggests; in fact, many customers still need to pay in installments. On the other hand, people also withdraw their funds from the LPD for daily needs. As a result, several LPDs experienced liquidity difficulties and decreased LPD profit capabilities.

Based on the background description above, researchers are interested in further research regarding consumer behavior titled "The Influence of Savings and Deposits on Credit Position at Village Credit Institutions (LPD) in Gianyar District During the Covid-19 Pandemic".

**Literature Review, Bank.** A bank is a financial institution whose primary activity is collecting funds from the public and channeling these funds back to the community as well as providing other banking services, meaning that a bank is a business entity that collects funds from the public in the form of savings and distributes them to the public in the form of Credit or in the form of – other forms in order to improve the standard of living of many people.

**Nonbank Financial Institutions.** Nonbank Financial Institutions are business entities that carry out business activities in the financial sector. They directly or indirectly raise funds by issuing securities and distributing them to the public to finance industry. Nonbank Financial Institutions include financing institutions (leasing, venture capital), pension funds, capital markets, pawnshops, and insurance businesses.

Nonbank financial institutions have roles including reducing hoarding, helping the household sector, helping small businesses, helping state and regional governments, helping the central government, lenders, providing liquidity, helping to reduce interest rates, and others. Nonbank financial institutions can be found in villages, for example, Village Banks, Village Lumbungs, Small People's Business Credit, Village Credit Agencies, and Village Credit Institutions (LPD).

**Village Credit Institution (LPD).** According to BPD Bali in 1996, the Village Credit Institution (LPD) is a financial institution owned by a traditional village which is a village equipment and operational unit and acts as a container for traditional village wealth in the form of money and other securities, so based on this definition, It can be concluded that the Village Credit Institution (LPD) is a savings and loan business entity owned by traditional villages to improve the standard of living of residents or traditional village communities, as well as to support the development of traditional villages and national development in general.

**Savings.** Savings are savings whose withdrawals can only be made according to certain agreed conditions but cannot be withdrawn by check, giro, or other similar instruments. Certain withdrawal
conditions in Savings mean that they are by the agreement made between the Bank and the customer. For example, the frequency of withdrawals, whether twice a week or every day and possibly at any time, is adjusted to the previous agreement.

**Deposit.** In other words, deposits are the third type of savings banks issue. The difference between deposits and savings, as previously explained, is that these deposits contain a longer-term or maturity element and cannot be withdrawn every day or at any time.

Deposit owners are usually called depositors. These depositors will be rewarded with interest on their deposits. For the Bank, the interest given to this is the highest interest when compared with savings, so some banks consider these deposits as expensive funds. Withdrawals on deposits are usually within one month. It means that withdrawals can only be made one month after opening the deposit. For example, a deposit with a period of one month opened on 18 August 2020; then, after one month has passed, the deposit can be withdrawn when it matures on 18 September 2020.

When withdrawing deposits, several facilities are used depending on the type of deposit. For example, time deposits use deposit slips, and deposit certificates use deposit certificates.

**Credit.** Credit comes from the Greek word "Credere," which means "trust," which means the credit giver's trust in the credit recipient that the Credit they distribute will be returned according to the agreement. "Credit is the provision of money or bills that can be equated with that. Based on an agreement or loan agreement between the Bank and another party which requires the borrower to pay off the debt after a certain period with interest."

**METHODS**

Research on the Effect of Savings and Deposits on the Credit Position of Village Credit Institutions (LPD) in Gianyar District During the Covid-19 Pandemic. The object of this research is community savings funds (Savings and Deposits) and (Credit) in LPDs in Gianyar District.

The technique used is the Panel Data Analysis model or pooled data. Analysis using panel data is an analysis where, in carrying out regression, the data used is collected individually (cross-section) and followed over a specific time (time series).

The conceptual framework in the research is described as follows:

![Conceptual Framework](image)

**RESULT AND DISCUSSION**

**Model Selection Test.** The selection of a panel data regression model is considered the most crucial part of the panel data estimation stage. Through this stage, it can be seen which estimation method is most appropriate for research (Mustain, 2016).

The Chow test is a test that aims to determine whether the best model to use is a fixed effect model or a standard effect model. By evaluating the importance of the fixed effect and examining the F-statistic
value, the optimal model amongst the two models can be identified (Basuki & Prawoto, 2016). In this test, a comparison will be carried out between two hypotheses, namely:

\[
\begin{align*}
H_0 & \quad = \text{Common effect} \\
H_a & \quad = \text{Fixed effect}
\end{align*}
\]

Rejection of the null hypothesis \((H_0)\) is based on calculating the statistical \(F\) value using the following formula:

\[
F_{Stat} = \frac{(ESS1 - ESS2)/(N - 1)}{(ESS2)/(NT - N - K)}
\]

Based on the theory explained by Baltagi (2005), the Hausman test is carried out to determine the best model between the random effect model and the fixed effect model, which should be used in research. This test works by testing whether there is a relationship between the model of one or more explanatory (independent) variables in the model. According to Ekananda (2016), the statistical value of the Hausman test can be calculated using calculations based on the Walad criteria, which are formulated as follows:

\[
\begin{align*}
\mathbf{w} &= q^\prime [q^\prime]^{-1}q \\
\leftrightarrow \mathbf{w} &= (\beta_{MET} - \beta_{MEA}) [(\beta_{MET} - \beta_{MEA})^{-1}(\beta_{MET} - \beta_{MEA}) - 1]
\end{align*}
\]

Where:

\[
\begin{align*}
\beta_{MET} &= \text{vector slope fixed effect model} \\
\beta_{MEA} &= \text{vector slope random effect model}
\end{align*}
\]

When the \(p\)-value is smaller than the significance level used, the decision is to reject \(H_0\), and the conclusion is that the model used is the fixed effect model.

3. Lagrange Multiplier (LM) is used to find out which model is most appropriate, whether the Random Effect model or the Common Effect (OLS) model. Breusch Pagan developed this Random Effect significance test. The Breusch Pagan method for Random Effect significance testing is based on the residual values from the OLS method (Baltagi, 2005; Ekananda, 2016). This test can be calculated using the following formula:

\[
LM = \frac{nT \sum_{1=0}^{nT} e_i^2}{2(T-1) \left[ \sum_n \sum_{t=1}^{T-1} e_i^2 \right]}
\]

<table>
<thead>
<tr>
<th>Test</th>
<th>P-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chow</td>
<td>0.0000</td>
<td>Fixed Effect</td>
</tr>
<tr>
<td>Husman</td>
<td>0.3217</td>
<td>Random Effect</td>
</tr>
<tr>
<td>LM</td>
<td>0.0000</td>
<td>Random Effect</td>
</tr>
</tbody>
</table>

Source: Results processed by researchers with STATA 14.0 (attachment 3)
Based on the test results shown in the table above, it can be concluded that random effects are the best model to use in estimating savings and deposit variables, which are tested against the credit position of village credit institutions (LPD) in Gianyar District during the COVID-19 pandemic.

Based on the estimated results of the Chow test, it shows that the p-value of the Chow Test is 0.0000, which is smaller than the significance level used, namely 0.05. In the Chow test, when the p-value is smaller than the significance level, the model used is a fixed effect. Next, the Hausman Test has a value of 0.3217. It means that the best model used in this research is the random effect model.

After carrying out the Chow test and Hausman test, the LM test was carried out to test the related model in the Hausman test, a consistent model used in the research. Based on the table above, the LM test result is worth 0.000. Therefore, the random effect model is the best model or the appropriate model to be used in estimation in this research.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.5618</td>
<td>0.552</td>
</tr>
<tr>
<td>LNTAB</td>
<td>0.5728</td>
<td>0.000**</td>
</tr>
<tr>
<td>LNDEBO</td>
<td>0.2161</td>
<td>0.044**</td>
</tr>
</tbody>
</table>

**Table 2. Panel Data Test Table 4.3 Random Effect Model Estimates**

Based on the results of the test analysis above, it can be explained that LNTAB (savings) has a coefficient of 0.5728 and a P-value of 0.000, and LNDEPO has a coefficient of 0.5728 and a P-value of 0.044, then R-Squared 0.8943 and F-Stat 0.0000.

**Classic Assumption Test Heteroscedasticity Test.** The heteroscedasticity test is used to determine the condition of the residual variance-covariance structure matrix to determine whether the analysis model has elements of heteroscedasticity or not (Breusch & Pagan, 1979). It is carried out through the BreuschPagan test, as follows:

a) If the Prob > Chi2 value is more significant than 0.05, then H0 is accepted. Namely, there is no heteroscedasticity in the analysis model.

b) If the Prob > Chi2 value is smaller than 0.05, then H0 is rejected. Namely there is heteroscedasticity in the analysis model.

<table>
<thead>
<tr>
<th>Prob &gt; Chi2</th>
<th>0.2540</th>
</tr>
</thead>
</table>

**Table 3. Heteroscedasticity Test Results**

Source: Author's analysis results with STATA 14.0 (Appendix 2a)
From the results of the heteroscedasticity test above, the Prob>Chi2 value is 0.2540, which means that the data used does not contain elements of heteroscedasticity.

**Multicollinearity Test.** The type of multicollinearity test in this research is the VIF (Variance Inflation Factor) test using the probability value results. If the Centered VIF value is greater than 1 and smaller than 10, then in this research model, there are no multicollinearity problems. However, if the Centered VIF value is smaller than 1 and greater than 10, then in this study, there is a multicollinearity problem (Ekananda, 2016).

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNDEPO</td>
<td>2.3657</td>
</tr>
<tr>
<td>LNTAB</td>
<td>3.4560</td>
</tr>
</tbody>
</table>

*Source: Author's analysis results with STATA 14.0 (Appendix 2c)*

The results of the multicollinearity test above show that both the Deposit and Savings variables do not have multicollinearity problems because the centered Variance Inflation Vector values are > 1 and < 10, which respectively have values of 2.3657 and 3.4560.

**Autocorrelation Test.** In carrying out the serial correlation test in this research, the panel data autocorrelation test method developed by Wooldridge was used. Implementation of the Wooldridge Test is carried out in STATA 14.0 software via the "xtserial" command (syntax). Hypothesis testing in the panel data autocorrelation test using the Wooldridge test applies, namely:

H0: There is no autocorrelation in the first difference.

HA: There is autocorrelation in the first difference.

<table>
<thead>
<tr>
<th>Wooldridge Test</th>
<th>F (1,32) = 3.712</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.0630</td>
</tr>
</tbody>
</table>

*Source: Author's analysis results with STATA 14.0 (Appendix 2b)*

Based on the results of the autocorrelation test in Table 4.4, the results show that H0 is accepted because the F-count is smaller than the F-table, and the p-value is 0.0630, more significant than the test significance level (u) of 0.05. It can be concluded that the model has fulfilled the autocorrelation assumption, or in other words, there is no first-order autocorrelation in the research model used.

**Statistical Test Results, F test.** The calculated F value in this analysis is used to test whether the use of variables in the research model is correct or not and whether the results obtained from the research can be trusted or not. In this case, implementing the F-test aims to determine the influence of the independent variable on the dependent variable, whether there is an influence or not (Gujarati, 2016).

In order to evaluate the influence of independent variables on the dependent variable, the F test is used. This F test can be explained using analysis of variance (ANOVA) (Gujarati, 2004).

a) $H_0 = \text{the regression coefficient } \alpha \text{ is not significant if the Sig value. } > 0.05 (5\%).$

b) $H_1 = \text{the regression coefficient } \alpha \text{ is significant if the Sig value. } < 0.05 (5\%).$
Table 6. Heteroscedasticity Test Results

<table>
<thead>
<tr>
<th>Test Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob&gt;Chi2</td>
</tr>
<tr>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: Results processed by researchers with STATA 14.0 (Appendix 5)

Based on the table above, the results of the random effect model analysis have an F test value of 0.000, which is smaller than the significance level used, namely 0.05. When the F test value is below the significance level, it can be said that together, all the Independent variables (Savings and Deposits) used in the research can influence the credit position, which is the Dependent variable in village credit institutions (LPD) in Gianyardi District during the COVID pandemic.

Coefficient of Determination (R2). According to Gujarati (2004), the Adjusted R2 Test is the magnitude of the overall influence of the independent variable on the dependent variable contained in the model. It is used to describe the ability of the model to explain the variations that occur in the independent variable on the dependent variable. In this case, R2 explains the significance level in the F test, written in percentage form.

One important characteristic of R2 is that the more explanatory variables in a model, the higher the R2 value. The following is the statistical formula for the R test:

\[
R^2 = \frac{1 - (1 - R^2)(n - 1)}{n - k}
\]

Table 7. Heteroscedasticity Test Results

<table>
<thead>
<tr>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimation Model</td>
</tr>
<tr>
<td>R-Squared</td>
</tr>
</tbody>
</table>

Source: Results processed by researchers with STATA 14.0 (Appendix 5)

Based on the results of the Determination Coefficient Test above, it can be seen that the results using the random effect estimation model obtained an r-squared value of 0.8943 or 89.43 percent. It means variations in the Savings and Deposit variables can explain variations in the credit position variable at village credit institutions (LPD) in Gianyar District during the COVID-19 pandemic by 89.43 percent.

Savings Variable. Based on the results of the panel data regression analysis shown in Table 4.3 above, the savings variable influences the credit position of village credit institutions (LPD) in Gianyar District during the COVID-19 pandemic. The estimation results show that the savings variable has a significant effect on the credit position of village credit institutions (LPD) in Gianyar District during the COVID-19 pandemic because it has a p-value that is smaller than the 5% significance level with a probability value of 0.000. The influence that the savings variable has on the credit position of village credit institutions (LPD) in Gianyar District during the COVID-19 pandemic is also positive, namely 0.5728; if there is an increase in savings of 1%, then the credit position of village credit institutions (LPD)
in Gianyar District during the COVID-19 pandemic, it will increase by 0.5728 percent assuming caters Paribus.

In theory, the analysis results in this research have their concept, where the influence of the savings variable on credit position has a positive influence. If we refer to research conducted by Yuliawan (2016), the influence of savings has a negative relationship with credit position. It is due to the tendency for someone to put their money into savings if the interest rate is high because it will benefit customers because of the interest rate given on their savings.

However, during the COVID-19 pandemic, economic conditions have a different situation, where a person must maintain his business, which is one of the sources of a person's livelihood or economy. Even though interest rates are high, someone will still take out banking credit products to help the continuity of their business.

On the other hand, the increase in savings was also followed by an increasing credit position, where interest rates were low because, during the COVID-19 pandemic, economic conditions were in an unstable or uncertain position. Someone who has money in cash will tend not to get benefits because there is no interest given or is not in a safe position, so someone will tend to put their money in a safe place, namely in banks and other financial institutions that can be trusted (Sugandi, 2021).

**Deposit Variables.** Based on the results of the panel data regression analysis shown in Table 4.3 above, the deposit variable influences the credit position of village credit institutions (LPD) in Gianyar District during the COVID-19 pandemic. The estimation results show that the deposit variable has a significant effect on the credit position of village credit institutions (LPD) in Gianyar District during the COVID-19 pandemic because it has a p-value that is smaller than the 5% significance level with a probability value of 0.044. The correlation that the deposit variable has with the credit position at village credit institutions (LPD) in Gianyar District during the COVID-19 pandemic is also positive, namely 0.2161 if there is an increase in deposits of 1%, then the credit position at village credit institutions (LPD) in Gianyar District during the COVID-19 pandemic will increase by 0.2161 percent assuming caters Paribus.

In the results of this research, Marwa Elnahass and Teng Li (2021) state that a society's tendency, apart from being vigilant, is also to have the concept of sustainability or stabilization of the assets or wealth they own, where this becomes part of the source of a person's life.

The correlation between the deposit variable and the credit position, which has a positive influence, is a form of economic behavior in society that maintains the continuity of the business assets owned through financing or the continuity of life owned. However, society also still wants to maintain the value of other assets owned in safe and profitable positions, such as deposits during the COVID-19 pandemic, so this becomes a different condition when there is an increase in deposits, credit conditions also increase (Sari et al., 2021).

**CONCLUSION**

1. Savings and deposits, together with all the independent variables used in the research, can influence the credit position of Village Credit Institutions (LPD) in Gianyar District during the COVID-19 pandemic.
2. Savings have had a significant effect on the credit position of Village Credit Institutions (LPD) in Gianyar District during the COVID-19 pandemic.
3. Deposits have had a significant effect on the credit position of Village Credit Institutions (LPD) in Gianyar District during the COVID-19 pandemic.

**Suggestion.** Based on the conclusions above, the author provides the following suggestions:

1. It is hoped that all LPDs in Gianyar District will be able to maintain and improve service performance in collecting savings and deposit funds from the community during a pandemic like the current one.
2. LPD management should be more careful in determining the steps in providing Credit to prospective debtors so that the risk of lousy Credit can be minimized during a pandemic like now.
3. This research is only initial research regarding the influence of savings and deposits on the credit position of LPDs in Gianyar District during the COVID-19 pandemic, which, of course, has many shortcomings and requires improvement. It is hoped that future researchers will be able to research this problem more deeply and, in particular, develop research into similar research.

**REFERENCES**


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