

## THE INFLUENCE OF SAVINGS GROWTH, DEPOSIT GROWTH, AND CREDIT GROWTH ON PROFITABILITY IN VILLAGE CREDIT INSTITUTIONS (LEMBAGA PERKREDITAN DESA/LPD) IN TABANAN DISTRICT

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### **Abstract**

*Profitability is a company's ability to generate profit, demonstrated by the profit generated from sales and investment income. This study aims to determine the effect of savings growth, deposit growth, and credit growth on profitability in Village Credit Institutions (LPD) in Tabanan District. The population in this study includes all LPDs in Tabanan District. The sample used consists of 12 LPDs selected using the saturated sampling method. The type of data used is quantitative data. The data source is secondary data obtained from the LPLPD office in Tabanan Regency. The results of this study indicate that savings growth has a positive and significant effect on profitability, deposit growth has a negative and significant effect on profitability, and credit growth has a negative and significant effect on the profitability of LPDs in Tabanan District.*

**Keyword:** *Savings Growth, Deposit Growth, Credit Growth, and Profitability.*

### **INTRODUCTION**

The level of economic growth in Indonesia is inextricable. Village Credit Institutions (LPD) are rapidly developing non-bank financial institutions. LPDs play a role in managing village assets in the form of money and securities, and fulfill their functions. The majority of LPD's efforts support village development. In this context, the role of village lenders is crucial in their efforts to achieve village development, improve community welfare, achieve community self-reliance, and promote business development, especially micro-enterprises in rural areas.

The business activities of LPDs involve collecting funds from village members in the form of savings and deposits, then redistributing these funds as loans. Essentially, the primary goal of LPDs is to generate profit. The health of an LPD can be gauged by the amount of profit it generates over a period. The higher the LPD's ability to generate profit (profitability), the healthier it is, indicating its ability to endure various conditions.

LPDs require more attention to support the economy, especially in rural areas. They must maintain orderly administration and bookkeeping by producing monthly financial reports and annual balance sheets, income statements, and other necessary reports. Profit is a measure of the company's performance and its ability to generate income over a specific period, often referred to as profitability, which reflects an LPD's capability to earn profit during a given period.

Profitability is a ratio used to assess a company's ability to generate profit (Kasmir, 2019;198). Profitability growth illustrates the company's capability to earn profit within a specific period; the higher the profitability, the better, as it indicates increased prosperity and health of the financial institution. An LPD with high profit-generating capacity is efficient and effective in its operations. Profitability is a crucial indicator to measure a financial institution's performance. Based on these

developments, the community and investors can assess the financial performance of LPDs through financial report analysis. Analyzing financial reports primarily aims to determine profitability levels and assess risk or the overall health of a company. Profitability ratios show how effectively a company is managed in using its assets and capital.

Factors influencing profitability in this study include savings, credit, and deposits.

The first factor affecting profitability is savings. According to the Banking Act No. 10 of 1998, savings are deposits that can only be withdrawn according to agreed terms and conditions but cannot be withdrawn using checks, bilyet giro, or other similar instruments. In current banking practices in Indonesia, there are various types of savings, differing mainly in the facilities provided to savers, offering them multiple choices. Dharma et al. (2019) stated that savings growth positively affects profitability in LPDs in Denpasar City, meaning that the higher the savings growth, the higher the profitability. Conversely, Widyawati et al. (2022) found that savings do not affect profitability, indicating that higher savings growth does not necessarily increase LPD profits.

The second factor is deposits. According to the Banking Act No. 10 of 1998 (Kasmir, 2014:75), deposits are savings that can only be withdrawn at specific times based on an agreement between the depositor and the bank. Deposits positively affect profitability growth because funds saved in deposits are typically held for extended periods, allowing banks to use these funds for lending purposes, which can enhance LPD profitability. Dewi et al. (2019) found that deposits significantly positively affect profitability, indicating that as deposit growth increases, so does profitability. In contrast, Erawati and Badera (2015) found that deposits do not affect profitability, suggesting that deposit growth is not a determinant of profitability.

The third factor is credit growth. According to the Banking Act No. 10 of 1998 (Kasmir, 2014:85), credit involves the provision of money or equivalent claims based on an agreement between the bank and another party, with the borrower obligated to repay the debt with interest or profit sharing. Higher credit disbursed to the community indicates higher credit sales, automatically increasing company profits. Dharma et al. (2019) stated that credit growth positively affects profitability, meaning higher credit growth received by LPDs leads to increased profitability. Conversely, Kepramerin et al. (2019) found that credit does not affect profitability, indicating that the growth of credit in LPDs does not influence profitability due to some LPDs' inability to optimize their receivables effectively.

This research was conducted in Tabanan District, one of the districts in Tabanan Regency. Tabanan is known as a rice-producing area, with most of its population working as farmers, traders, fishermen, livestock breeders, artisans, and other occupations.

Table 1 Growth of Savings, Deposits, and Credit in Village Credit Institutions (LPD) in Tabanan District (2018-2022)

<b>Year</b>	<b>Savings Growth</b>	<b>Deposit Growth</b>	<b>Credit Growth</b>	<b>Profitability</b>
<b>2018</b>	0.2160	0.2537	0.2253	0.0309
<b>2019</b>	0.2330	0.1902	0.1122	0.0297
<b>2020</b>	0.0189	0.0703	-0.0211	0.0167
<b>2021</b>	0.0828	0.0890	0.0142	0.0153
<b>2022</b>	0.1376	0.1890	0.0468	0.0185

Sumber : Data diolah dari LPLPD Kabupaten Tabanan

Based on the table above, savings growth increased from 0.2160 in 2018 to 0.2330 in 2019, but dropped to 0.0189 in 2020 due to the Covid-19 pandemic, as people withdrew their savings to meet living needs. In 2021, it rose again to 0.0828, and in 2022 to 0.1376. Deposit growth decreased from 0.2537 in 2018 to 0.1901 and 0.0703 in 2019 and 2020, respectively, but increased to 0.0893 in 2021 and 0.1890 in 2022. Credit growth

## **METHOD**

### **1. Research Location**

This research is conducted at Village Credit Institutions (LPD) in Tabanan District, Tabanan Regency, through the Empowerment of Village Credit Institutions (LPLPD) of Tabanan Regency (Odhiambo & Nyasha, 2022).

### **2. Objek Penelitian**

The objects of this study are Savings Growth, Deposit Growth, and Credit Growth as independent variables, and Profitability as the dependent variable. Object Research

The variables analyzed in this study are:

1. Dependent Variable (Y): The variable that is affected or is the result of the independent variables. The dependent variable in this study is Profitability.
2. Independent Variables: Variables that influence or cause changes in the dependent variable.
  - a. X1: Savings Growth
  - b. X2: Deposit Growth
  - c. X3: Credit Growth

### **3. Operational Definition of Variables**

#### **1. Savings Growth (X1)**

Savings growth is the growth of funds from third parties in the form of savings collected by LPDs over a certain period. According to Trijayanti (2010), the measurement of savings growth is obtained from the difference between the savings of the comparison period and the previous period, expressed as a percentage (%). The formula for Savings Growth (SG) according to Trijayanti (2010) is:

$$s \quad PT = \frac{Savings_t - Savings_{t-1}}{Savings_{t-1}} \times 100\%$$

#### **2. Deposit Growth (X2)**

Deposit growth is the growth of third-party funds in the form of deposits collected by LPDs over a certain period. Deposits are third-party savings that can only be withdrawn at a specific time according to an agreement between the depositor and the bank. According to Trijayanti (2010), the measurement of deposit growth is obtained from the difference between the deposits of the comparison period and the previous period, compared to the deposits of the previous period, expressed as a percentage (%). The formula for Deposit Growth (DG) according to Trijayanti is:

$$PD = \frac{Deposito_t - Deposito_{t-1}}{Deposito_{t-1}} \times 100\%$$

#### **3. Credit Growth (X3)**

Credit growth is the development rate of the volume of credit given to third parties, which can increase the company's profitability. According to Trijayanti (2010), the measurement of credit growth is obtained from the difference between the credit given in the comparison period and the previous period, compared to the credit given in the previous period, expressed as a percentage (%). The formula for Credit Growth (CG) according to Trijayanti is:

$$PK = \frac{Kredit_t - Kredit_{t-1}}{Kredit_{t-1}} \times 100\%$$

#### 4. Profitability (Y)

Profitability is a company's ability to generate profit within a certain period. The measurement of profitability in this study uses the ROA (Return on Assets) ratio. According to Kasmir (2014:201), ROA is a ratio that shows the return on the total assets used in the company. ROA also reflects the turnover of assets measured by sales (Harahap, 2010:305).

$$ROA = \frac{\text{Laba Bersih}}{\text{Total Aktiva}} \times 100\%$$

#### 4. Data Types and Sources

##### 1. Data Types

- a. Qualitative Data: Data in the form of numbers that can be measured with counting units (Sugiyono, 2014:12). This study uses financial statements of LPDs.
- b. Quantitative Data: Data in the form of words, sentences, schemes, and pictures (Sugiyono, 2014:14). This data includes the values of savings, deposits, credit, and profitability, as well as qualitative data such as general descriptions and organizational structures of LPDs in Tabanan District.

##### 2. Data Sources

Secondary Data: Data obtained indirectly from the company, sourced from other sources such as individuals or documents (Sugiyono, 2014:40). The secondary data in this study is obtained from the financial department of the LPLPD Office in Tabanan Regency, in the form of financial statements.

##### 3. Population and Sample

###### a. Population

The population in this study includes all LPDs in Tabanan District, totaling 12 units.

###### b. Sample

A saturated sample technique is used when all population members are included as the sample. The sample comprises the financial statements of LPDs in Tabanan District from 2018-2022, with a total of 60 observations (12 units × 5 years).

#### 5. Data Analysis Techniques

The data analysis techniques used include Descriptive Statistical Analysis, Classical Assumption Tests (normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test), Multiple Linear Regression Analysis, Multiple Correlation Analysis, Determination Analysis, and t-tests.

### RESULTS AND DISCUSSION

#### 1. Descriptive Statistical Test Results

Table 1 Descriptive Statistical Test Results

	N	Minimu m	Maximu m	Mean	Std. Deviation
PT	60	-0,5190	0,7201	0,137663	0,2080177
PD	60	-0,6849	1,3687	0,158682	0,3091225
PK	60	-0,3883	0,5669	0,075482	0,1954281
ROA	60	-0,0610	0,0655	0,022230	0,0208274

Source: Processed Data, 2023

Pada Tabel 1, terlihat bahwa jumlah da Table 1 shows that the number of data points in this study is 60, with descriptive statistical results indicating:

1. The savings growth variable has a minimum value of -0.5190 and a maximum value of 0.7201, with a mean and standard deviation of 0.137663 and 0.2080177, respectively. b) The deposit growth variable has a minimum value of -0.6849 and a maximum value of 1.3687. The mean and standard deviation for deposit growth are 0.158682 and 0.3091225, respectively. c) The credit growth variable has a minimum value of -0.3883 and a maximum value of 0.5669, with a mean and standard deviation of 0.075482 and 0.1954281, respectively. d) The profitability variable has a minimum value of -0.0610 and a maximum value of 0.0655, with a mean and standard deviation of 0.022230 and 0.0208274, respectively.

2. Classic Assumption Test Results

1. Normality Test

Table 2 Normality Test Results

	Unstandardized Residual
N	60
Test Statistic	0,072
Asymp. Sig. (2-tailed)	.200

Source: Processed Data, 2023

The results of the normality test using the Kolmogorov-Smirnov method in Table 5.2 show that the Asymp Sig value is 0.200 > 0.05, indicating that the residual data in this study is normally distributed.

2. Multicollinearity Test

Table 3 Multicollinearity Test Results

Variabel	Collinearity Statistics	
	Tolerance	VIF
Pertumbuhan tabungan	0,856	1,169
Pertumbuhan deposito	0,836	1,196
Pertumbuhan kredit	0,753	1,327

Source: Processed Data, 2023

Table 3 shows that the tolerance values for savings growth, deposit growth, and credit growth are 0.856, 0.836, and 0.753, respectively, which are > 0.10, and the VIF values are 1.169, 1.196, and 1.327, respectively, which are < 10. Therefore, it can be concluded that there is no multicollinearity among the independent variables in the regression model.

3. Heteroscedasticity Test

Table 4 Heteroscedasticity Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.172	.045		3.783	.000
	PT	-.030	.040	-.106	-.757	.452
	PD	.050	.032	.222	1.557	.125
	PK	-.032	.044	-.108	-.718	.475

Source: Processed Data, 2023

The heteroscedasticity test results using the Glejser test in Table 5.4 show no signs of heteroscedasticity. This is evidenced by the significance values of the savings growth, deposit growth, and credit growth variables being 0.452, 0.125, and 0.475, respectively, all of which are greater than 0.05.

#### 4. Autocorrelation Test

Table 5 Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.967 <sup>a</sup>	.935	.931	.0054542	1.857

Source: Processed Data, 2023

From Table 5, it can be seen that the Durbin-Watson value is 1.857. Since the DW value lies between  $1.6889 < 1.857 < 2.3111$ , it can be concluded that there is no autocorrelation in the data.

### 3. Data Analysis Results

#### 1) Multiple Linear Regression Test Results

Table 6 Multiple Linear Regression Test Results

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-1,395	0,085		-16,492	0,000
PT	0,149	0,074	0,269	2,023	0,048
PD	0,075	0,060	0,169	1,256	0,214
PK	0,047	0,082	0,080	0,568	0,572

Based on the regression test results in the table above, the multiple linear regression equation can be obtained as follows:

$$\text{PROFIT} = -1,395 + 0,149\text{PT} + 0,075\text{PD} + 0,047\text{PK}$$

- 1)  $\alpha = -1,395$ ;  $-1,395$ ; this value means that if savings growth, deposit growth, and credit growth are zero, the profitability value is  $-1,395$ .
- 2)  $\beta_1 = 0,149$ ; this means that savings growth positively affects profitability, indicating that for every one-unit increase in savings growth, profitability increases by 0.149 units.
- 3)  $\beta_2 = 0,075$ ; this means that deposit growth positively affects profitability, indicating that for every one-unit increase in deposit growth, profitability increases by 0.075 units.
- 4)  $\beta_3 = 0,047$ ; this means that credit growth positively affects profitability, indicating that for every one-unit increase in credit growth, profitability increases by 0.047 units.

#### 2. Multiple Correlation Results

Based on Table 5.7, the R value is 0.935. This value is in the range of  $R > 0.75 - 1.00$ , indicating a very strong relationship between savings growth, deposit growth, and credit growth with profitability

#### 3. Determination Analysis

The results show that the Adjusted R<sup>2</sup> value is 0.931. This means that 93.1% of profitability is explained by savings growth, deposit growth, and credit growth, while 6.9% is explained by other factors outside this study.

#### 4. T-Test Results

The T-test is used to determine the significance of individual predictors within a regression model. In this study, the T-test was applied to assess the impact of savings growth, deposit growth, and credit growth on the profitability of rural credit institutions (LPDs) in Tabanan District. The results are summarized as follows:

1) The Impact of Savings Growth on Profitability

The T-test result for the effect of savings growth on profitability showed a significant t-value of 0.048, which is less than the 0.05 threshold ( $0.048 < 0.05$ ). This indicates that the growth in savings has a significant positive impact on the profitability of LPDs. The acceptance of hypothesis H1 implies that as savings grow, the profitability of these institutions increases. This result aligns with the notion that an increase in savings deposits provides LPDs with more funds to lend, thereby generating more interest income and enhancing overall profitability. The significance of this relationship highlights the importance of savings mobilization strategies for LPDs aiming to improve their financial performance.

2) The Impact of Deposit Growth on Profitability

The T-test result for the effect of deposit growth on profitability revealed a t-value of 0.214, which is greater than the 0.05 significance level ( $0.214 > 0.05$ ). This indicates that the growth in deposits does not have a statistically significant impact on the profitability of LPDs. Consequently, hypothesis H2 is rejected. This finding suggests that despite the potential for deposits to provide a stable source of funding, their growth alone does not directly translate into increased profitability for LPDs. It could be that the cost of servicing deposits or the nature of the deposit agreements may offset any potential benefits to profitability. Therefore, LPDs might need to focus on other factors, such as the terms of deposit agreements and the effective utilization of deposited funds, to realize profitability gains.

3) The Impact of Credit Growth on Profitability

The T-test result for the impact of credit growth on profitability showed a t-value of 0.572, which is also greater than the 0.05 significance threshold ( $0.572 > 0.05$ ). This indicates that the growth in credit does not have a significant effect on the profitability of LPDs, leading to the rejection of hypothesis H3. This outcome suggests that simply increasing the volume of credit extended to borrowers is not sufficient to enhance profitability. Factors such as the quality of the credit portfolio, interest rates, and the efficiency of credit management practices play crucial roles in determining the profitability impact of credit growth. For LPDs, this means that improving credit management processes, ensuring rigorous credit assessments, and maintaining high loan recovery rates are essential strategies to translate credit growth into profitability.

## **5. Research Discussion**

a) Effect of Savings Growth on Profitability

The discussion of this research focuses on the effect of savings growth on profitability at Village Credit Institutions (LPD) in Tabanan District. The results of the study indicate that savings growth has a significant positive effect on profitability with a beta coefficient of 0.269 and a significance value of 0.048. A significance value smaller than 0.05 ( $0.048 < 0.05$ ) indicates that the first hypothesis (H1) is accepted, meaning that the greater the savings growth in LPD Tabanan District, the profitability of the LPD will increase.

The results of this study are in line with the findings of Putra and Vidyantari (2023) who also found that savings growth has a significant positive effect on profitability growth at LPD Kintamani District, Bangli Regency. In this study, 54 LPDs were used as samples from a total of 60 LPDs in the Kintamani area. The analysis techniques applied were the classical assumption test, multiple linear regression analysis, f test, t test, and coefficient of determination. The similarity of findings between this study and Putra and Vidyantari's study confirms that savings growth is

an important factor in increasing LPD profitability, both in Tabanan District and Kintamani District.

In addition, research conducted by Sastrawan, Cipta, and Yudiaatmaja (2016) also supports the results of this study. Their study at LPD Desa Pakraman Banjar for the period 2007-2012 found that savings growth partially had a positive and significant effect on profitability. This study used a causal quantitative design and analyzed the data with multiple linear regression. Their results showed that savings growth, both simultaneously with credit growth and partially, had a significant effect on LPD profitability. This finding adds to the evidence that savings growth is an important determinant in increasing LPD profitability.

When compared, these three studies provide a consistent picture of the importance of savings growth for the profitability of microfinance institutions such as LPDs. Although there are differences in the geographical context and time period of the study, the results still show a positive effect of savings growth on profitability. This shows that LPDs that are able to increase savings from their customers can improve their overall performance.

In the context of LPDs in Tabanan District, the results of this study have significant practical implications. LPD managers need to focus on strategies that can increase the amount of savings from customers. These strategies can include improving customer service, introducing new attractive savings products, or effective marketing campaigns to attract more customers. Thus, LPDs can increase their savings base, which in turn will increase profitability. Theoretically, the results of this study strengthen the existing literature on the relationship between savings growth and profitability of microfinance institutions. This study confirms previous findings and adds new evidence from the context of LPDs in Tabanan District. It also opens up opportunities for further research, for example by exploring other factors that may affect LPD profitability or by conducting comparative studies between LPDs in different regions.

#### b) The Effect of Deposit Growth on Profitability

The discussion on the effect of deposit growth on profitability at the Village Credit Institution (LPD) in Tabanan District shows that deposit growth has a positive beta coefficient of 0.169 with a significance value of 0.214. Because this significance value is greater than 0.05 ( $0.214 > 0.05$ ), the second hypothesis stating that deposit growth has a significant positive effect on profitability at LPD in Tabanan District is rejected. This means that the size of deposit growth at LPD in Tabanan District does not significantly affect its profitability.

These results indicate that even though there is growth in deposits, it does not necessarily increase LPD profitability. One of the main reasons is the possibility that LPD does not optimize the use of funds collected through deposits. Funds received through deposits may not be managed effectively, so they do not contribute significantly to LPD profits. If LPD cannot balance between funds collected and funds distributed, then high fluctuations in the amount of deposits can cause losses or decrease profits.

Previous research by Putra and Vidyantari (2023) entitled "The Effect of Savings Growth, Deposit Growth, and Credit Growth on Profitability Growth in LPD Kintamani District, Bangli Regency" supports this finding. Their research shows that deposit growth and credit growth do not have a significant effect on profitability growth in LPD Kintamani District. In the study, 54 LPDs were used as samples from a total of 60 LPDs in the Kintamani area. The analysis techniques applied include classical



assumption tests, multiple linear regression analysis, f-tests, t-tests, and coefficients of determination. Their results show that although there is growth in deposits, this does not have a significant impact on LPD profitability.

The findings of these two studies indicate that other factors may be more dominant in influencing LPD profitability than deposit growth. One possibility is the efficiency in fund management and the rate of return on investments made by LPDs. If the funds collected from deposits are not invested or used optimally, then their contribution to profitability will be minimal.

In addition, LPDs may face challenges in managing liquidity and credit risks. If LPD does not have an effective mechanism to manage this risk, then fluctuations in the amount of deposits can cause financial problems that reduce profitability. Therefore, it is important for LPD to have a solid risk management strategy to ensure that funds collected from deposits can be used efficiently and profitably

c) The Effect of Credit Growth on Profitability

The discussion on the effect of credit growth on profitability at Village Credit Institutions (LPD) in Tabanan District shows that the beta coefficient is positive at 0.080 with a significance value of 0.572. Because this significance value is greater than 0.05 ( $0.572 > 0.05$ ), the third hypothesis stating that credit growth has a significant effect on profitability is rejected. This means that the high and low credit growth does not have a significant effect on the profitability of LPDs in Tabanan District.

These results indicate that even though there is credit growth, it does not have a direct impact on increasing LPD profitability. One of the main reasons is that many LPDs may not be able to optimize their receivables properly. When LPDs are unable to manage and collect credit effectively, the credit growth that occurs will not contribute to increased profits.

Previous research by Putra and Vidyantari (2023) at LPD Kintamani District, Bangli Regency, also found that credit growth had no significant effect on profitability growth. In their study, using 54 LPDs as samples and multiple linear regression analysis techniques, the results showed that despite credit growth, it did not have a significant impact on LPD profitability. The consistency of these findings indicates that other factors may be more influential in increasing LPD profitability compared to credit growth. Effective credit management, timely collection, and good credit risk management may be key factors that have a greater influence on profitability. If LPDs are able to manage their receivables better, then credit growth can contribute more significantly to profitability.

## **CONCLUSION**

1. The effect of savings growth on profitability shows that savings growth has a positive and significant effect on profitability. This result means that the greater the savings growth of Village Credit Institutions (LPD) in Tabanan District, the profitability will increase. Conversely, if savings growth decreases, profitability also decreases.
2. The effect of deposit growth on profitability shows that deposit growth does not have a significant effect on profitability. This means that the small growth of deposits at Village Credit Institutions (LPD) in Tabanan District does not affect the profitability of the LPD. Conversely, if the deposit growth is higher, profitability increases.
3. The effect of credit growth on profitability shows that credit growth does not affect profitability. This means that the low credit growth at Village Credit

Institutions (LPD) in Tabanan District does not affect profitability. Conversely, if the credit growth is higher, profitability increases

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