Analysis of Factors Affecting the Profitability of Village Credit Institutions in Banjarangkan Klungkung

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ABSTRACT

This study examines the factors affecting the ability of village credit institutions to obtain profits with profitability as a measuring tool. Credit turnover rate, debt management effectiveness, number of credit customers, capital and operating expenses were used as research variables. The determination method was a non-probability sampling method, especially purposive sampling. Data was collected by means of non-participant observation. The data were analyzed by multiple linear regression analysis. The test results show that credit turnover, debt management effectiveness, and capital provide a positive direction on profitability. The number of credit customers has no effect on profitability and the negative effect on profitability is shown by the BOPO variable. This study underlines several factors to support LPD earnings.

Keywords: BOPO, Credit Turnover Rate, Effectiveness of Debt Management, LPD Capital, Number of Credit Customers, Profitability, Village Credit Institution (LPD)
INTRODUCTION

Financial institutions remain challenging to reach in Bali, especially in its rural areas. For this reason, the Governor of Bali established village credit institutions called Lembaga Perkreditan Desa (LPD). It is a financial institution that collects and distributes community funds in a traditional village administrative area based on kinship. LPD is one of the non-bank institutions in rural areas with a large contribution to helping community businesses, especially in rural communities in Bali, which is often referred to as Desa Pakraman or Desa Adat, in the form of capital assistance for micro-economic community enterprises.

The success of the LPD is inevitable from its ability to earn profits. Profitability that comes from the profit/loss report reflects the company's efforts in empowering its current resources. The size of an LPD's profit depends on the management's ability to manage existing credit, debt, and capital. This is evident from its ability to regulate credit turnover in addition to its debt management and capital effectiveness.

One of LPD's activities is to provide loans or credit. It is the provision of money or bills based on a loan agreement between a bank and another party that requires the debtor to pay with interest. The income level is primarily determined by credit quality, and credit quality is related to the turnover rate (Dewi, 2010). Credit turnover is receivable turnover in a certain period. The higher the credit turnover rate, the better the credit quality and the higher the opportunity for LPDs to channel these funds back to the community. In the end, the more significant the proportion of receivables from lending by the LPD, the higher the LPD income leading to an increase in the resulting profitability.

Research on the effect of credit turnover on profitability by Sigid (2014) found that credit turnover positively affects profitability. The largest use of funds by LPD is the loan to obtain credit interest. The level of disbursement is shown through the credit turnover, which also shows how fast credit collections are. The higher the turnover rate, the faster the collection of receivables. This will in line with the growth rate of an LPD’s profitability.

Another important aspect of LPD operations is the effectiveness of debt management. Budayasa (2010) contended that debt management effectiveness affects the economic profitability of LPDs in Denpasar City for the period 2007-2009. LPD debt management theoretically suggests that the more effective debt management, the higher the profitability. This helps the progress of an LPD.

LPD sells trust to earn interest from credit sales since it affords to enlarge lending and attracts as many new customers as possible. Customer trust creates a sense of security to reduce customer perceptions of risks. Customer satisfaction is the company’s key strategy to gain a competitive advantage. The high and low number of credit customers affects the number of LPD operating profits, affecting profitability. This is in line with Tanaya, Susila, and Suwendra (2016), indicating that the number of credit customers positively affects profitability.

LPD needs to provide a minimum capital to eliminate or minimize the risks. If it does not have a minimum amount of capital, the LPD is at risk; it will be difficult for the LPD to operate properly. Capital is a critical factor of LPD progress as it is used to maintain the possibility of loss due to the asset movement, which basically comes from the majority of third-party funds (Dewi, 2010). Adequate LPD capital is beneficial to facilitating its operational activities (Sudirman, 2000).

Operating expenses on operating income (BOPO) also influence LPD profitability. It is the ratio between operating costs to operating income. It shows the efficiency in carrying
out the LPD's main business, especially credit, based on the number of collected funds. BOPO ratio has a negative effect on the financial performance of financial institutions (profit growth). This means that the smaller the BOPO, the more efficient the financial institution (Dewi, 2010).

This study was carried out because LPDs have their uniqueness. They are only found in the Province of Bali to tackle financial problems for rural communities. Profit is the main factor because it is the main domination to make the right decisions the management must make for the sake of its further survival. By determining the profitability, debt management effectiveness, the number of credit customers, as well as capital and operating expenses on operating income, we could see the LPD development and role.

LITERATURE REVIEW

Agency Theory
The agency relationship perspective is the basis for understanding corporate governance (Putra, Wedasari, & Rahmasari, 2020). Agency theory is the basis of phenomena in reality that describe different interests in an organization, which must remain aligned in the end. It features many factors that should be taken into account. The theory states that an agency relationship exists when one party (the principal) hires another party (the agent) to perform a service, and in doing so, the principal delegates the authority to make decisions to the agent (Anthony & Govindarajan, 2005).

In LPD, Pakraman villagers are the principal, and LPD management is the agent. Every period, the management must report its activities in the form of annual reports, including balance sheets, profit and loss, changes in capital, and cash flow, to the residents of Pakraman through a village community. The LPD management is expected to run the business following the interests of the residents of the Pakraman village. This is in line with the concept of agency theory, in which one party called the principal (a resident of Pakraman village), hires another party called an agent (the LPD management).

Lembaga Perkreditan Desa (LPD)
The financial institution belongs to the traditional village in Bali with the main function of managing the financial potential of the traditional village. Its existence has long been proven to be very helpful for the welfare and interests of the traditional village. LPD is needed to realize the welfare of the customary law community (traditional village). LPD has provided economic, social, and cultural benefits to Krama Desa Pakraman (traditional villages) despite its governance improvement necessity.

LPD is a typical financial institution and only exists in the province of Bali. The existence of the LPD helps the community's business capital and collects funds from the community and distributes them in the form of credit also plays a role in traditional villages in the province of Bali. Banjarangkan is located in Klungkung District, with 20 LPDs operating (see Table 1).

Table 1. Names of LPDs in Banjarangkan Klungkung

<table>
<thead>
<tr>
<th>No</th>
<th>LPD Name</th>
<th>No</th>
<th>LPD Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>LPD Aan</td>
<td>11.</td>
<td>LPD Semaagung</td>
</tr>
<tr>
<td>2.</td>
<td>LPD Bakas</td>
<td>12.</td>
<td>LPD Sengkiding</td>
</tr>
<tr>
<td>3.</td>
<td>LPD Bumbungun</td>
<td>13.</td>
<td>LPD Sidayu Tojan</td>
</tr>
<tr>
<td>4.</td>
<td>LPD Jungut</td>
<td>14.</td>
<td>LPD Takmung</td>
</tr>
<tr>
<td>5.</td>
<td>LPD Koripan Tengah</td>
<td>15.</td>
<td>LPD Tegal Wangi</td>
</tr>
<tr>
<td>6.</td>
<td>LPD Lepang</td>
<td>16.</td>
<td>LPD Tihingan</td>
</tr>
</tbody>
</table>
Credit Turnover Rate
Credit is the provision of achievements by one party to another party, and that achievement will be returned in a certain period of time in the future accompanied by counter achievements in the form of interest (Suaerawan, 2017). A credit term relates to the use of one's money, services and goods and the promise to return them, which is usually accompanied by interest on the loan. The credit turnover rate is the volume of credit and the estimated time of collection by dividing the total credit by the average credit. Credit growth describes the level of development in the volume of credit disbursed to third parties to increase a financial institution's profitability. Annual credit growth affects profitability. On this basis, we proposed:
H1: Credit turnover has a positive effect on LPD Banjarangkan Klungkung profitability.

Debt Management Effectiveness
In an LPD, the importance of debt in development always needs to be considered in addition to its management. Debt management affects the success of LPD in increasing profitability. Liabilities management is shown by the calculation of spread management. Budayasa (2010) stated that debt management is relatively easier for the management because it can limit and ensure the parties who invest their capital. It is very important to manage debt because of the more effective debt management, the better the LPD finances. We hypothesized:
H2: The effectiveness of debt management has a positive effect on the profitability of LPD in Banjarangkan Klungkung

Number of Credit Customers
Credit is the availability of money or bills, where there is a loan agreement between the two parties, then the debtor is required to pay off the debt within a certain period with interest. Customer transactions are the bank's main source of income. In general, if an LPD experiences an increase in total customers, it will get high profits from customers. Based on the above definition, it can be concluded that a customer is a customer of a financial institution that has a savings and loan account. This means that the more customers, the more it affects profitability. We formulated:
H3: The number of credit customers has a positive effect on LPD profitability in Banjarangkan Klungkung

LPD Capital
Sufficient LPD capital is vital because it facilitates LPD operational activities, where investment and fixed assets are necessary, and to obtain them, own capital is used. Own capital originating from community members has grown in line with the expected asset growth. The growth of own capital in question is the addition of direct deposits into capital by the public, either in the form of deposits or a share of profits included as capital. Community savings, which can be withdrawn at any time, and time savings (deposits) are not included in the LPD's own capital. We suggested:
H4: Capital adequacy has a positive effect on the profitability of LPD in Banjarangkan Klungkung

Operating Ratio (BOPO)
BOPO is the ratio of the ratio of operating expenses to operating income. Operational expenses can be defined as costs incurred by financial institutions in carrying out all their operational activities in order to achieve a financial institution's goals while operating
income is income received by financial institutions as a result of their operational activities. This ratio is used to measure the LPD's ability to manage its operational costs to obtain operating income. The smaller the BOPO ratio of a financial institution indicates the more efficient the financial institution is in carrying out its business activities and vice versa (Setyono, 2014).

H5: BOPO has a negative effect on LPD profitability in Banjarangkan Klungkung

Profitability

Profitability is the company's ability to earn profits concerning sales, total assets, and own capital (Kusumaningrum, 2018). Company's profit brings a significant impact on the sustainability of the company's operations. Profit becomes an indicator highly concerned by company stakeholders. Investors or potential investors also use analysis related to profitability to determine the company's performance over a period. There are many choices of proxies used to measure profitability, including return on assets, return on equity, or return on investment. The level of profitability affects investor policies in investment activities.

RESEARCH METHOD

The study was conducted at the LPD in Banjarangkan Klungkung. The object of this study was the LPD financial report. The data used is secondary data obtained from LPLPD. The population in this study was 30 LPDs. The sample was determined using a purposive sample under the criteria that the LPDs were actively operating, whose financial reports could be accessed during the research year (2017-2019). The total number of LPDs sampled is 20 LPDs with three years of observation (2017-2019) so the number of observations is 60.

Multiple Linear Regression Analysis

We used multiple linear regression analysis tested with a significance level of 0.05. It is used to describe the effect of independent variables on the dependent variable (Sugiyono, 2019, p. 200). The multiple linear regression model is formulated:

\[ P = \beta_1 \text{CTR} + \beta_2 \text{EDM} + \beta_3 \text{NCC} + \beta_4 \text{LPDC} + \beta_5 \text{BOPO} + e \]

where,

- P : Profitability
- \( \beta \) : Regression Coefficient
- CTR : Credit Turnover Rate
- EDM : Effectiveness of Debt Management
- NCC : Number of Credit Customers
- LPDC : LPD Capital
- BOPO : Operating Ratio
- e : Error Level

Descriptive Analysis

Descriptive statistics are used to analyze data by describing the data as they are without generalized conclusions or generalizations (Sugiyono, 2019).

Classical Assumption Test

Normality Test

This is done to find out whether confounding variables or residuals are normally distributed (Ghozali, 2016).
Multicollinearity Test
It is good that there is no correlation between independent variables, so this test is used to see if there is a correlation between the tolerance value and VIF from the test results (Ghozali, 2016: 103).

Heteroscedasticity Test
If the regression model has variation inequality and the residual of one observation and the other observations remain, it is called heteroscedasticity. It means that the regression model does not contain heteroscedasticity symptoms, and the regression model is good to use.

Autocorrelation
This test is used for research that uses the period between this year and the previous year to avoid errors.

Model Feasibility Test
Coefficient of Determination Test
This test is used to determine how the research model can explain the independent variables. In this study, the coefficient used is the value of adjusted R2 because it increases or decreases when a variable is added to the model (Ghozali, 2016).

F Test
It is to determine whether the independent variables simultaneously affect the dependent variable. If the annova significance value is 0.05, this model is said to fit with observational data or the independent variable can explain the dependent variable (Ghozali, 2016).

T Test
Hypothesis testing was conducted by t-test. The variables that show the effect can be seen from the resulting significance value, while the direction of the effect can be seen in the t-count value.

RESULTS

Descriptive Statistics
Table 2. Descriptive Statistics (N = 60)

<table>
<thead>
<tr>
<th>Construct</th>
<th>Min.</th>
<th>Max.</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Turnover Rate</td>
<td>2.51</td>
<td>7.31</td>
<td>4.5218</td>
<td>1.02332</td>
</tr>
<tr>
<td>Effectiveness of Debt Management</td>
<td>-.07</td>
<td>.13</td>
<td>-.0081</td>
<td>.03490</td>
</tr>
<tr>
<td>Number of Credit Customers</td>
<td>74.00</td>
<td>957.00</td>
<td>269.9333</td>
<td>209.60001</td>
</tr>
<tr>
<td>LPD Capital</td>
<td>.09</td>
<td>.45</td>
<td>.2460</td>
<td>.07643</td>
</tr>
<tr>
<td>Operating Ratio</td>
<td>.46</td>
<td>.83</td>
<td>.6870</td>
<td>.08359</td>
</tr>
<tr>
<td>Profitability</td>
<td>.06</td>
<td>.51</td>
<td>.2410</td>
<td>.08678</td>
</tr>
</tbody>
</table>

Notes: M = Mean, SD = Standard Deviation

Table 2 illustrates that the test data shows the observed values (N) of the minimum, maximum, mean and standard deviation of each internal factor studied. Starting from the first line, namely the credit turnover rate, the effectiveness of debt management, the third line is the number of credit customers, the fourth line describes the LPD capital, the next line describes the operational ratio data value and the last table line represents profitability.
Multiple Linear Regression Analysis

### Table 3. Regression Results

<table>
<thead>
<tr>
<th>Construct</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Turnover Rate</td>
<td>.040</td>
<td>.006</td>
<td>.474</td>
</tr>
<tr>
<td>Effectiveness of Debt</td>
<td>.611</td>
<td>.251</td>
<td>.246</td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Credit</td>
<td>2.400E-5</td>
<td>.000</td>
<td>.058</td>
</tr>
<tr>
<td>Customers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LPD Capital</td>
<td>1.188</td>
<td>.108</td>
<td>1.046</td>
</tr>
<tr>
<td>Operating Ratio</td>
<td>-.826</td>
<td>.105</td>
<td>-.795</td>
</tr>
</tbody>
</table>

**Notes.** R² = .13 (p < .01) **p < .01

Based on the results of the multiple linear regression analysis in Table 3, the following regression equation can be made:

\[
PF = 1.294 + 0.040TPK + 0.611EPU + 2.400E^{-5}JNK + 1.188ML - 0.826BOPO
\]

According to the test results, the equation describes the direction and influence of each independent variable on the dependent variable in a positive or negative direction. The constant value (α) of 1.294 indicates that if the value of the credit turnover rate, debt management effectiveness, number of credit customers, LPD capital, and BOPO are equal to zero, then profitability is worth 1.294 units.

The credit turnover rate coefficient (β₁) explains that if the credit turnover rate increases by one unit, the company's profitability will increase by 0.040 units assuming other variables are constant. The coefficient value of debt management effectiveness (β₂) explains that if the value of debt management effectiveness increases by one unit, the company's profitability will increase by 0.000024 units assuming other variables remain.

The LPD capital coefficient value (β₄) explains if the LPD capital value increases by one unit, the company's profitability will increase by 1.188 units assuming other variables are constant. The BOPO coefficient value (β₅) explains that if the BOPO value increases by one unit, the company's profitability will decrease by -0.826 units assuming other variables are constant.

**Classic Assumption**

**Normality**

The test results show that the residual value in the model is normally distributed. The one-sample Kolmogorov-Smirnov value is 0.126 with Asymp. Sig (2-tailed) 0.200 is greater than the level of significance, which is 0.05 or 5%.

**Multicollinearity**

The collinearity statistics value of the credit turnover rate (TPK) has a tolerance value of 0.719 and a VIF value of 1.391. The debt management effectiveness (EPU) has a tolerance value of 0.395 and a VIF value of 2.532. The variable number of credit customers (JNK) has a tolerance value of 0.632 and a VIF value of 1.582. The LPD capital variable (ML) has a tolerance value of 0.449 and a VIF value of 2.229. The operating expense to operating income (BOPO) has a tolerance value of 0.392 and a VIF value of 2.550. All variables have a tolerance value of more than 0.10 (10%) or a VIF value of less than 10. This signifies no multicollinearity symptoms.

**Autocorrelation**

The test results explain that there is no autocorrelation. This is based on the Durbin-Watson value of 1.831, greater than 1.76711 (du), and the value of 4–du (4-1.76711)
2.2012. The calculation of the statistical value was obtained from the number of data samples as many as 60 (n = 60) and the number of independent variables as many as 6 (k = 6).

**Heteroscedasticity**

Symptoms of heteroscedasticity are not found in the model due to the significant value of the credit turnover rate of 0.984, the effectiveness of debt management of 0.389, the number of credit customers of 0.193, LPD modal capital of 0.057, and BOPO of 0.480, all of which are greater than 0.05.

**Model Feasibility Test**

**F Test**

The model in this study is feasible because the significance value of P value is 0.000, which is smaller than 0.05. This shows that the five independent variables can predict or explain the LPD profitability, which means that the credit turnover rate, debt management effectiveness, number of credit customers, LPD capital, and operating expenses significantly affect the operating income.

**R2 Test**

The adjusted R2 value is 0.763. This shows that the LPD profitability can be significantly affected by credit turnover rate, debt management effectiveness, number of credit customers, LPD capital, and operating expenses on operating income by 76.3%, and 23.7% is explained by other variables outside the regression model.

**T-test**

The test results show that the regression coefficient value of the credit turnover rate is 0.040 with a sig of 0.000 smaller than the significance level of 0.05. This concludes that the credit turnover rate positively affects profitability and is in accordance with the first hypothesis.

The test results show that the regression coefficient value of debt management effectiveness is 0.611 with a significance of 0.018, smaller than the significance level of 0.05. This leads to the conclusion that debt management effectiveness positively affects profitability and is in accordance with the second hypothesis.

The test results also show that the regression coefficient value of the number of credit customers is 0.000024, with a significance of 0.468 greater than the significance level of 0.05. This concludes that the number of credit customers does not affect profitability and is not in accordance with the third hypothesis.

The test results show that the regression coefficient value of LPD capital is 1.188 with a significance of 0.000, which is smaller than the significance level of 0.05. It can be concluded that LPD capital has a positive effect on profitability and is in accordance with the fourth hypothesis.

The test results show that BOPO regression coefficient value is -0.826 with a significance of 0.000, smaller than the significance level of 0.05. This concludes that LPD capital has a negative effect on profitability and is in accordance with the fifth hypothesis.

**DISCUSSION**

The first conclusion is in accordance with the test results that the credit turnover rate positively influences profitability. Good credit turnover also provides good operating income so that high operating income generates good profits. The results of this study
are in accordance with Swastini (2012), contending that credit turnover has a positive effect on profitability.

The second conclusion is that debt management effectiveness has a positive effect on profitability. This means that management’s ability to manage funds from the third party supports the success of LPD in generating profits. The results of this study are in accordance with Handayani (2018), suggesting that debt management effectiveness has a positive effect on profitability.

The third conclusion is the number of credit customers does not affect the profitability of LPD Banjarangkan Klungkung. This happens because the number of credit customers is not accompanied by their obedience in fulfilling the credit payment obligations, although the number is quite high. Even though the number of credit customers is not too high, if the customer pays the credit obligations, it supports the LPD profit. The results of this study are in accordance with Dewi, Atmadja, and Herawati (2018), concluding that the number of credit customers does not affect profitability.

The fourth conclusion is that LPD capital positively affects LPD profitability. Capital for an organization, especially for LPD operational activities, is critical, without which it will experience difficulties. The results of this study are in line with Sasongko (2013), contending that LPD capital has a positive effect on profitability.

The final conclusion is that the operational ratio measured using BOPO negatively affects the profitability of LPD Banjarangkan Klungkung. Operating expenses that exceed revenues are certainly not good for the sustainability of a company's activities. This study corroborates Susanti (2014), concluding that BOPO has a negative effect on profitability.

CONCLUSION

This study aims to determine the factors that affect the profitability of LPD by using the variables of credit turnover rate, the effectiveness of debt management, number of credit customers, LPD capital, and BOPO. Multiple linear regression analysis was used as a data analysis technique with a total of 60 observations from 20 LPDs in Banjarangkan Klungkung. By considering credit turnover rate, debt management effectiveness, and LPD capital, this study provides input and consideration to the LPDs to optimize the credit turnover rate, debt and capital management effectiveness, and control operational ratios, which are proven to have a negative effect on profitability. This study was conducted on 20 LPDs in Banjarangkan Klungkung. Future researchers should expand their research locations in other districts/cities to carry out more comprehensive results. As the observation period was from 2017 to 2019, further researchers are strongly advised to use the latest research year.

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DECLARATION OF CONFLICTING INTERESTS
The authors have declared no potential conflicts of interest concerning the study, authorship, and/or publication of this article.
REFERENCES


