

UDC 332

## EFFECT OF INTEREST RATES AND ASSET GROWTH ON FINANCIAL PERFORMANCE AT LPD IN BALI

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### ABSTRACT

LPD is a village-owned business entity for communities that carry out business activities in local villages such as in the form of deposits and savings and lending. LPD was founded in 1984 and experienced very rapid development. However, this significant development was not followed by good performance in LPD in several regions in Bali. There are 1,433 LPDs in Bali but 11.03% of LPDs in Bali are actually declared no longer operating. Financial performance is used to determine the quality of LPD by looking at its financial statements. Financial performance will be affected by interest rates and asset growth. The population in this study was 122 LPD. Sample determination techniques using simple random sampling and slovin are used to determine the sample size. The number of samples used was 55 LPD. The results showed that 1) interest rates negatively affect the financial performance of LPD in Bali, so that  $H_1$  was rejected, 2) asset growth had a positive effect on LPD's financial performance in Bali, so that  $H_2$  was accepted. The results of the coefficient of determination test are known to be the value of R Square at 0,91 or 91%. This shows that interest rates and asset growth have a very strong relationship with LPD's financial performance in Bali by 91%.

### KEY WORDS

Interest rates, asset growth, financial performance.

Law Number 10 of 1998 concerning Banks states that banks are intermediaries between fund providers and parties who need funds. Banking in Indonesia is divided into Commercial Banks and Bank Perkreditan Rakyat. Commercial banks function to provide transaction services related to money with a conventional business scope. Meanwhile, the Bank Perkreditan Rakyat functions to provide transaction services related to money with a smaller scope such as MSMEs (Friskihlah E & Lisbeth, 2018). In Bali, there is a financial institution called the Lembaga Perkreditan Desa (LPD) which is similar but not the same as the Bank Perkreditan Rakyat. LPD is a village-owned enterprise for communities that carry out business activities in local villages such as in the form of deposits and savings and lending (Peraturan Daerah Propinsi Bali Nomor 8 Tahun 2002 Tentang Lembaga Perkreditan Desa, 2002). The establishment of LPD is based on awig-awig (local policy) and Bali Provincial Regulation Number 8 of 2012. LPD only refers to local policies that are in accordance with the customs of the Balinese people and are not subject to central government rules. This makes LPD have autonomous and unique properties (Sadiartha, 2017). LPD was founded in 1984 and experienced very rapid development. However, this significant development was not followed by good performance in LPD in several regions in Bali. There are 1,433 LPDs in Bali but 11.03% of LPDs in Bali are actually declared no longer operating (Balitribunenews.co.id, 2017). Financial performance is used to determine the quality of LPD by looking at its financial statements (Mahaendrayasa & Putri, 2017). Financial performance will be affected by interest rates and asset growth. An increase in interest rates will increase the company's costs so that it will cause financial performance to decline. However, an improvement in financial performance can be achieved if the company

is able to reduce these costs. Good financial performance is also supported by maximum asset growth because the assets that continue to grow show an increase in sales, own capital and total company assets (Cahyani, 2018).

## LITERATURE REVIEW

### Agency Theory

Agency relationships create agency problems because the agent ignores the interests of the principal and maximizes the interests of himself even though the main goal of the company is to maximize the welfare of the owner of the capital. Since the relationship between shareholders and managers of the company corresponds to the definition of a pure agency relationship, it should not be surprising to learn that the problems associated with the "separation of ownership and control" in modern companies with spreading ownership are very closely related to the general problems of the agency (Jensen & Meckling, 1976). The principal must incur agency costs as a result of the relationship between the principal and this agent (Eisenhardt, 1989).

### Lembaga Perkreditan Desa (LPD)

Lembaga Perkreditan Desa (LPD) is a financial institution owned by Pakraman Village which is domiciled in the Pakraman Village wewidangan (Peraturan Pelaksanaan Peraturan Daerah Provinsi Bali Nomor 3 Tahun 2017 Tentang Lembaga Perkreditan Desa, 2017). LPD has a business field that includes receiving and collecting funds from village communities in the form of sesepela funds and sesepan funds, providing credit to village and village communities, providing credit to other village communities with cooperation between villages referring to the Bali Governor's Regulation and with applicable conditions. Receipt of loans with a maximum amount of one hundred percent of the amount of capital including reserves and retained earnings of financial institutions, excess liquidity is deposited in designated banks with adequate services and competitive interest in return. Chapter IV Article 7 Paragraph 2 states that LPD in carrying out its business fields must comply with the precautionary principle of LPD management regulated in the Governor's Regulation. LPD's rights consist of getting coaching and carrying out its operations. Meanwhile, the obligation of LPD is that LPD is obliged to carry out its operations in accordance with awig-awig, regional regulations and village regulations. Reporting reports on LPD activities, financial developments and LPD performance are reported by LPD management to village heads and LPDs every one month, quarterly and yearly. The annual accountability report must be reported by the LPD management at least three months after the LPD Financial Year ends in the Paruman Desa (Peraturan Pelaksanaan Peraturan Daerah Provinsi Bali Nomor 3 Tahun 2017 Tentang Lembaga Perkreditan Desa, 2017).

### Financial Performance

The financial state of an enterprise that is the result of many management decisions is a picture of financial performance. Customers and other investors really need financial performance information because it can be used as a basis for investing their money (Azzahra & Nasib, 2019). Financial performance is analyzed in five stages, namely: 1) reviewing financial statements, 2) making calculations, 3) making comparisons, 4) conducting interpretations, 5) looking for and providing solutions to the problems found (Azzahra & Nasib, 2019). There are two hypotheses in this study, namely: H<sub>1</sub>: interest rates have a positive effect on financial performance and H<sub>2</sub>: asset growth has a positive effect on financial performance.

## METHODS OF RESEARCH

This type of research data is quantitative data. This study aims to empirically analyze the effect of interest rates and asset growth on financial performance in LPD in Bali from 2017 to 2019 by taking the scope of LPD in Badung Regency. The data of this study used

secondary data taken from LPD's financial statements deposited into LPLPD of Badung Bali Regency. This location was chosen because Badung Regency is the largest contributor to the regional budget in Bali which comes from its tourism. Tourism growth and income will certainly improve the welfare of the surrounding community so that it will affect the financial performance of LPD in Badung Regency. The LPD population in Badung Regency is 122. Sample determination technique using simple random sampling. This technique is a random sampling of a population regardless of the strata present in that population so that it is judged to be more accurate. The sample magnitude is measured using the slovin formula. The sample amounts studied are as follows:

$$n = \frac{N}{N \cdot e^2 + 1}$$

Where: n= Number of Samples; N= Total Population; e= Allowed error limit is 10%.

From the formula above, the sample amount is obtained as follows:

$$n = \frac{122}{122 \cdot (0,1)^2 + 1} = \frac{122}{2,22} = 54,95$$

Thus, the number of samples used was 54.95 LPD rounded to 55 LPD. Financial performance is measured using Return on Assets (ROA). Interest rates are measured by the percentage of the amount of interest income against the amount of credit disbursed. Meanwhile, asset growth is measured by the change in total assets in a certain month against the previous month. The analysis tool in this study used SPSS Statistic 25. The tests used in this study are classical assumption tests consisting of: 1) normality tests, 2) multicholinerity tests, 3) autocorrelation tests, 4) and heteroskedasticity tests. Other tests used are model feasibility test (Test F) and hypothesis testing of t test.

## RESULTS AND DISCUSSION

Descriptive statistics on the effect of interest rates, asset growth, and financial performance on sample companies are described in Table 1.

Table 1 – Descriptive Statistical Variable Research Company Sample

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Interest Rate	165	,00	9,30	2,0006	1,76146
Asset Growth	165	-30,50	111,00	13,9103	14,10145
Firm Performance	165	,20	7,00	2,9673	1,34192
Valid N (listwise)	165				

Based on Table 1, It can be seen that the average interest rate on LPD in Bali, especially in Badung Regency, is 2% with a minimum value of 0% and a maximum of 9,30%. The asset growth variable shows an average value of 13,91% with a minimum value of -30,5% and a maximum of 111%. Meanwhile, financial performance shows an average value of 2,97% with a minimum value of 0,20% and a maximum of 7,00%.

The results of the normality test of the effect of interest rates and asset growth on financial performance after transforming data into Natural Logarithms (Ln) obtained Kolmogorov Smirnov's value of 0,057 with an Asymp value. Sig. (2-tailed) by 0,200. This value is greater than the significance value of 5% or 0,05 so the residual data is normally distributed.

The results of the multicholinerity test of the effect of interest rates and asset growth on financial performance showed a VIF value of 1,005. The VIF value indicated on those variables is less than 10. Therefore, it can be concluded that there is no multicholinerity from the influence of interest rates and asset growth on financial performance.

The results of the autocorrelation test on the effect of interest rates and asset growth on financial performance using the durbin watson two-step method showed that the value of

durbin watson was 1,679 with a value of  $dL = 1,45$  and  $du = 1,68$  ( $1,45 < 1,679 < 4-du$  (2,32)). Thus d statistics are in the area of no autocorrelation or regression model created containing no autocorrelation symptoms so it is feasible to use predicting.

Table 2 – Normality Test Results

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		151
Normal Parameters <sup>a,b</sup>	Mean	,0000000
	Std. Deviation	1,30158460
Most Extreme Differences	Absolute	,057
	Positive	,057
	Negative	-,041
Test Statistic		,057
Asymp. Sig. (2-tailed)		,200 <sup>c,d</sup>
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Table 3 – Multicholinerity Test Results

Coefficients <sup>a</sup>							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3,008	,179		16,764	,000	
	Interest Rate	-,148	,058	-,194	-2,553	,012	,995
	Asset Growth	,018	,007	,192	2,530	,012	,995

a. Dependent Variable: Firm Performance

Table 4 – Autocorrelation Test Results

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,172 <sup>a</sup>	,029	,015	,36041	1,679

a. Predictors: (Constant), LAG\_LNX2, LAG\_LNX1  
b. Dependent Variable: LAG\_LNY

The results of the heteroskedasticity test of the effect of interest rates and asset growth on financial performance showed significance values of 0,332 and 0,243, respectively, greater than 0,05 so that it can be concluded that there is no heteroskedasticity problem on the effect of interest rates and asset growth on financial performance.

Table 5 – Heteroscedasticity Test Results

Coefficients <sup>a</sup>						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	,464	,085		5,486	,000
	LNIR	-,026	,026	-,080	-,973	,332
	LNPA	-,037	,032	-,096	-1,173	,243

a. Dependent Variable: ABS\_RES1

Based on the results of the coefficient of determination test, it is known that the value of R Square is 0,91 or 91%. This shows that interest rates and asset growth have a very strong relationship with LPD's financial performance in Bali by 91% while the remaining 9% is influenced by other variables outside this research model.

Table 6 – Coefficient of Determination Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change
1	,302 <sup>a</sup>	,091	,080	,50170	,091

Model feasibility tests are performed to determine whether or not a regression model is feasible. Based on the results of processing data shows the significance value of  $F = 0,000 < \alpha = 0,05$ . This suggests that the model used in the study was rated feasible.

Table 7 – Model Feasibility Tests Result

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4,097	2	2,049	8,139	,000 <sup>b</sup>
	Residual	40,776	162	,252		
	Total	44,873	164			

a. Dependent Variable: LNFP  
b. Predictors: (Constant), Asset Growth, Interest Rate

Based on the results of the data process, it shows that the value of interest rate significance is 0,222. This value is greater than the significance value of 0,05 so it can be concluded that the interest rate has a significant effect on the financial performance of LPD in Bali. The significance of asset growth is 0,046 if rounded to 0,05. This value is equal to the significance value of 0,05 so it can be concluded that asset growth has a significant effect on LPD's financial performance in Bali.

Table 8 – Hypothesis Test Result

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,349	,381		6,161	,000
	LNIR	-,146	,119	-,099	-1,226	,222
	LNPA	,286	,142	,163	2,013	,046

a. Dependent Variable: Firm Performance

### The effect of interest rates on the financial performance of LPD

The results showed that interest rates negatively affected LPD's financial performance in Bali, especially in Badung Regency, so that  $H_1$  was rejected. This means that an increase in interest rates will reduce financial performance because interest rates are used by the government in reducing consumption in the form of bank loans and money supply as well as to control the stability of the national economy. High interest rates will increase the opportunity cost of bank loans. Interest rates have a far-reaching impact so they must be closely scrutinized. Because an individual's decision to buy assets, invest his funds and daily consumption needs will be influenced by LPD interest rates. The increasing interest rate will cause the interest expense on loans to increase so that LPD's profit will decrease which will also cause a decrease in LPD's financial performance. The negative influence of interest rates on financial performance shows that rural communities in Bali, especially Badung Regency, pay more attention to interest rates in carrying out their banking activities in LPD with the aim of getting bonuses. The results of this study are in accordance with Cahyani (2018) which states that interest rates negatively affect the ROA of BPRS in Indonesia.

### The effect of asset growth on financial performance

The results showed that asset growth had a positive effect on LPD's financial performance in Bali, especially in Badung Regency so that  $H_2$  was accepted. This means that assets that continue to grow will also improve financial performance. Assets that continue to experience growth will be able to become one of the factors for creating new businesses or products on LPD in Bali so that it will increase LPD's revenue and of course financial performance will be better. For example, current assets in the form of cash if current assets experience growth, then the company will not be too burdened with costs at the end of each period. The results of this study are in line with Mariani (2019) which states that asset growth has a positive effect on profitability.

## CONCLUSION AND SUGGESTIONS

Based on the results and discussions in the previous section, several conclusions can be drawn, namely: 1) interest rates negatively affect LPD's financial performance in Bali, so that  $H_1$  is rejected; 2) asset growth has a positive effect on LPD's financial performance in Bali, so that  $H_2$  is accepted.

The results of this study provide additional empirical evidence on the effect of interest rates and asset growth on LPD financial performance in Bali, especially in Badung Regency. Some suggestions that can be given are:

- for subsequent researchers to no longer examine similar variables because considering the  $R^2$  value of 91% which states that there is a very strong relationship between the influence of interest rates and asset growth on the financial performance of LPD in Bali. But subsequent researchers are advised to develop the subject of the study into other banking sectors;
- for LPD to keep an eye on interest rates and asset growth in order to improve financial performance.

This research year is limited to the 2017 to 2019 period only and the research subjects are also limited to LPD only so that it cannot be used to predict all banks in Indonesia.

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