

The Influence of the Growth of Earning Assets, Third Party Funds, Loan to Deposit Ratio, and Non Performing Loan to Rentability of Rural Bank

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Abstract. This study aimed to determine the influence of the growth of earning assets, third-party funds, loan to deposit ratio (LDR), and non performing loan (NPL) to rentability of rural bank in Badung Regency. The population of this study was all rural banks (BPR) in Badung regency which registered in Otoritas Jasa Keuangan (OJK), and published its financial statements in period 2013 - 2016. There were 208 samples data base on the population of 52 banks. Sample was determined by the purposive sampling to obtain 170 samples. The data in this study was a secondary data. Data was analyzed by simple linear regression and multiple linear regression using SPSS. The results of this study showed that (1) the growth of earning assets has significant influence on rentability, (2) the growth of third-party funds has significant influence on rentability, (3) loan to deposit ratio (LDR) has significant influence on rentability, (4) non performing loan (NPL) has significant influence on rentability, and (5) the growth of earning assets, third-party funds, loan to deposit ratio (LDR), and non performing loan (NPL) simultaneously has significant influence on rentability.

1. Introduction

Bank has a significant roles in country economic development. Rural bank (commonly reffered to Bank Perkreditan Rakyat) is one of the bank types which the operational activities intended to serve small and medium entrepreneur in the rural areas [1]. Banks are required to maintain public trust to perform its function as a financial intermediary. One of the ways to keep the public trust is keep maintain the bank's health level. Bank's health level showed the bank performance in managing assets and owned capital. Efficiency in bank performance can be known through the increased of rentability ratio.

The ammount of profit were not the absolute size to measure the bank's efficiency on the operational activity. Rentability is more important than profit for banks [2]. Efficiency can be determined by comparing the profit obtained with the capital used to generate the profit. Therefore, banks should pay more attention on how to increase the level of profitability rather than increase profits [2].

Management of BPR should always pay attention to the performance of its business as its importance role of rural banks for the economy of society, especially for the lower middle class. Rentability is an indicator that shows the company's management capability in generating profits. Rentability is usually

measured by return on assets (ROA) and BOPO ratio. Previous studies have identified growth in earning assets, growth in third party funds, loan to deposit ratio (LDR) and non-performing loan (NPL) as variables that affecting rentability. The growth of credit (earning asset) has negatively insignificant effect on profitability [3]. Other studies have shown a positive influence between the growth of earning assets and profitability [4], [5] and [6]. According to [4] showed that partially there is a positive and significant influence on the growth of savings on profitability. There is also a positive influence between third party funds and profitability [3] and [6]. Other studies show that the growth of third party funds has negatively effect on profitability [7]. According to [8], loan to deposit ratio (LDR) has a significant positive effect on rentability (ROA) of BPR in Blora Regency, while [2] showed that LDR has no significant effect on rentability. Then the results of researchers [2] and [8] showed non-performing loan (NPL) were not affect the profitability (ROA). Research conducted by [9] showed that NPL have a significant negative effect on ROA on banking companies listed on the Indonesia Stock Exchange.

Based on the results of previous research, the growth of earning assets, growth of third party funds, capital adequacy ratio (CAR), non performing loan (NPL), loan to deposit ratio (LDR), and operational efficiency (BOPO) were mentioned as the factors that influencing the bank's rentability. Based on the level of significance, then variable growth of earning assets, growth of third party funds, loan to deposit ratio (LDR), and non performing loan (NPL) were selected as the independent variable in this research. In addition, there were still differences in research results as the factors that influencing the rentability. This is the underlying researcher to conduct further analysis on the variables affecting rentability in Rural Bank under the title "The Influence of The Growth of Earning Assets, Third Party Funds, Loan to Deposit Ratio, and Non Performing Loan to Rentability of Rural Bank".

2. Methodology

This research uses the quantitative and secondary data which are taken from the financial reports of rural bank in Badung Regency year 2013 – 2016. The financial report of rural bank in Badung Regency can be downloaded from www.ojk.go.id. The sampling technique is purposive samping, based on criteria set by the researchers. The criteria are as follows: 1) Rural banks which are registered and have a main office in Badung Regency, 2) Submitted the financial statement from 2013 – 2016. Based on the criteria, there are 171 samples.

The method of analysis used in this research are simple regression analysis and multiple regression analysis. In a specific form, the regression model used for simple analysis was:

$$Y = a_1 + b_1X_1 \quad \dots\dots\dots (1)$$

$$Y = a_2 + b_2X_2 \quad \dots\dots\dots (2)$$

$$Y = a_3 + b_3X_3 \quad \dots\dots\dots (3)$$

$$Y = a_4 + b_4X_4 \quad \dots\dots\dots (4)$$

The regression model used for multiple analysis was:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 \quad \dots\dots\dots (5)$$

Dependent variable of this study is rentability which measured by return on assets (ROA). Explanation of dependent and independent variables along with their proxies are specified in Table 1.

Table 1. Dependent and independent variables

Symbol	Variables	Equation
Y	Return on Assets Ratio	Profit Before Tax / Total Assets x 100%
X ₁	Growth of Earning Assets	$\frac{\text{Earning Assets}_{(t)} - \text{Earning Assets}_{(t-1)}}{\text{Earning Assets}_{(t-1)}} \times 100\%$
X ₂	Growth of Third Party Funds	$\frac{\text{Third Party Funds}_{(t)} - \text{Third Party Funds}_{(t-1)}}{\text{Third Party Funds}_{(t-1)}} \times 100\%$
X ₃	Loan to Deposit Ratio	Total Loans / Total Deposits x 100%
X ₄	Non Performing Loan	Non Performing Loans / Total Loans x 100%

The hypothesis on this study are as below:

- H₁ : There is a significant relation between The Growth of Earning Assets and Rentability
- H₂ : There is a significant relation between The Growth of Third Party Funds and Rentability
- H₃ : There is a significant relation between Loan to Deposit Ratio and Rentability
- H₄ : There is a significant relation between Non Performing Loan and Rentability
- H₅ : There is a significant relation simultaneously between The Growth of Earning Assets, Third Party Funds, Loan to Deposit Ratio, Non Performing Loan and Rentability

3. Result and Discussion

Testing hypothesis by using regression test have passed the test of normality, multicollinearity, autocorrelation and heteroskedasticity. While the result of the regression test for rural banks can be seen on Tabel 2 and 3:

3.1 Simple Regression Analysis

The t-test findings of rural banks in Badung Regency show that the significant value of growth of earning assets is 0,010, and it is lower than alpha ($\alpha = 0,05$). Thus, H₁ is acceptable. It indicates that growth of earning assets has positive significant influence towards the dependent variable of return on assets (ROA). It means the higher the growth of earning assets is, the bigger the rentability of banks will be. It is accordance with the research conducted by [4] and [6]. Meanwhile, this result is inversely proportional to the research conducted by [3] stating that growth of earning assets has negative influence and insignificant towards the dependent variable of return on assets (ROA).

The t-test findings of rural banks in Badung Regency show that the significant value of growth of third party funds is 0,018, and it is lower than alpha ($\alpha = 0,05$). Thus, H₂ is acceptable. It indicates that third party funds has positive significant influence towards return on assets (ROA). It means the higher third party funds is, the bigger the rentability of banks will be. It is accordance with the research conducted by [4] and [10]. Meanwhile, this result is inversely proportional to the research conducted by [7] stating that third party funds has insignificant influence towards return on assets (ROA).

The t-test findings of rural banks in Badung Regency show that the significant value of loan to deposit ratio is 0,011, and it is lower than alpha ($\alpha = 0,05$). Thus, H₃ is acceptable. It indicates that loan to deposit ratio has positive significant influence towards return on assets (ROA). It means the higher loan to deposit ratio is, the bigger the rentability bank will be. It is accordance with the research conducted by [8] and [11]. Meanwhile, this result is inversely proportional to the research conducted by [12] stating that loan to deposit ratio has insignificant influence towards return on assets (ROA).

Whereas the t-test findings of rural banks in Badung Regency show that the significant value of non performing loan is 0,003, and it is lower than alpha ($\alpha = 0,05$). Thus, H₄ is acceptable. It indicates that non performing loan has negative significant influence towards return on assets (ROA). It means the lower non performing loan is, the bigger the rentability bank will be. It is accordance with the research conducted by [9]. Meanwhile, this result is inversely proportional to the research conducted by [8] and [11] stating that non performing loan has insignificant influence towards return on assets (ROA).

Table 2. The Summary of Simple Regression Analysis

Variable	R	R Square	t	Sig
Growth in Earning Assets	0,203	0,041	2,603	0,010
Growth in Third Party Funds	0,186	0,035	2,380	0,018
Loan to Deposit Ratio	0,200	0,040	2,572	0,011
Non Performing Loan	0,235	0,055	-3,040	0,003

3.2 Multiple Regression Analysis

The F-test findings of rural banks in Badung Regency show that the significant value of growth of earning assets, growth of third party funds, loan to deposit ratio, and non performing loan simultaneously is 0,000, and it is lower than alpha ($\alpha = 0,05$). Thus, H_5 is acceptable. It indicates that growth of earning assets, growth of third party funds, loan to deposit ratio, and non performing loan simultaneously has significant positive influence towards the dependent variable of return on assets (ROA). The R square of 0,098 shows that 9,8% of the variability of the bank rentability measured through the ROA can be explained through the variance of the independent variables, and the rest of 90,2% was explained through the other causes. Based on the factore disclosed, then the four independent variables are supporting factors that influence the rentability. The weak simultaneous influence of 9.80% conceptually due to the independent variables has significant influence rentability yet partially a weak influence on rentability.

Table 3. The Result of Multiple Regression Analysis

Variable	B	T	Sig
(Constant)	0,725	0,603	0,547
Growth in Earning Assets	0,934	1,397	0,164
Growth in Third Party Funds	0,483	1,453	0,148
Loan to Deposit Ratio	0,035	2,521	0,013
Non Performing Loan	-0,067	-1,943	0,054
R	0,348		
R Square	0,121		
Adjusted R Square	0,098		
F Statistic	0,000		

4. Conclusion

From the result above, we can conclude that in partially and simultaneously, The growth of earning assets, the growth of third party funds, loan to deposit ratio, and non performing loan are the factors that influencing the rural bank profitability. Therefore, the management of rural bank in Badung Regency need to pay attention to the growth of earning assets, the growth of third party fund, loan to deposit ratio, and non performing loan as the factors that influencing the rural bank rentability. The research concludes that the influence between independent variables and dependent variable is low. The independent variable gives 9,80% contribution to rentability, and the rest of 90,20% could be determined by the other variables that were not included in this research. Thus because, the other variables have to get attention in manage the rentability of rural bank.

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