

THE EFFECT OF CAPITAL AND LIQUIDITY RISK TO PROFITABILITY ON CONVENTIONAL RURAL BANK IN INDONESIA

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ABSTRACT

The role played by banks in the financial system in Indonesia which led to the stability of the banking sector is a very important part in the assessment of the stability of the financial system in a comprehensive manner. Banking financial institutions in particular are very vulnerable to the economic turmoil that often occurs. Economic policies of the government to address the economic crisis that hit today should not only macro-oriented, but also oriented on the micro sector, which by enhancing the role of rural banks as one of the financial institutions sector, which is microeconomic oriented. This study aims to determine the effect of Capital and Liquidity Risk To Profitability on Conventional Rural Bank in Indonesia. The independent variable in this study is the Capital Adequacy Ratio (CAR) or capital risk ratio and Loan Deposit Ratio (LDR) or liquidity ratio, while the dependent variable is the Return on Assets (ROA) ratio or profitability ratio. The research data is secondary data obtained from the Directory of Bank of Indonesia during the year of 2013. Method used in this research are Double Linear Regression. The results showed that: capital risk (CAR) and liquidity (LDR) have a significant effect on profitability (ROA) on Conventional Rural Bank in Indonesia at significance level $\alpha = 1\%$. Partially, the results showed that the risk capital ratio (CAR) and liquidity ratio (LDR) have a positive and significant effect on profitability (ROA) on Conventional Rural Bank in Indonesia.

Keywords : capital risk, liquidity, profitability.

Introduction

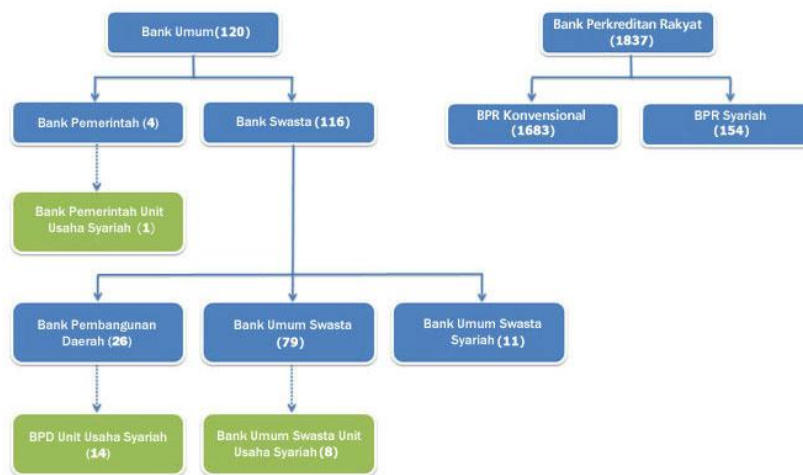
1.1. Background

The economic development of a country requires a regulatory system in the management of the resources available and utilized to improve the welfare of society. Financial institutions have a very large role in the economic development of a country's participation. Bank is a financial institution that serves as an intermediary institution that helps smooth the payment system, as well as the agency through which the implementation of government policies, namely monetary policy. Based on these functions, then the existence of healthy banks, both individually and as a whole, is a prerequisite for a healthy economy.

Starting in 1997 the people lose confidence in the banking institutions after the financial crisis that resulted in a lot of banking institutions in Indonesia mengalamai liquidation, so that Bank Indonesia issued a policy which seeks to regulate and supervise the banking institutions in Indonesia (Margaretha and Setiyaningrum 2011: 48).

Under the law, the structure of banking in Indonesia consisted of commercial banks and rural banks (Bank Perkreditan Rakyat, hereinto BPR). The main difference is the commercial and rural banks in terms of their operational activities. BPR cannot create demand deposits, and has a range and limited operations. Furthermore, in the normal course of business adopted a dual bank system, the commercial banks can carry out business activities, and conventional bank or based on Sharia principles. While the principles of BPR activities can be limited to only conventional banking activities or Sharia (Bank Indonesia, 2014).

Figure 1: Recapitulation of Banking Institutions in Indonesia in October 2011

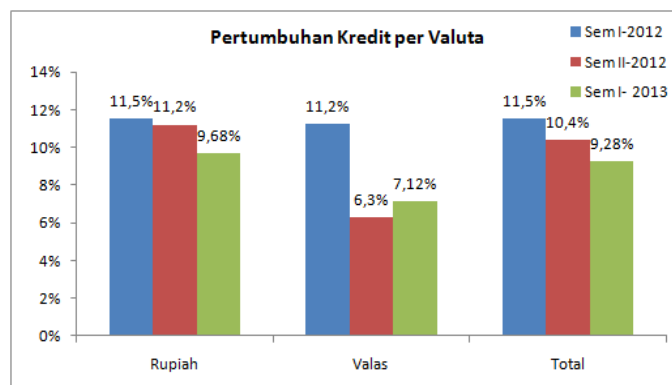


Source : Bank Indonesia, 2014

BPR is a business entity which collects funds from the public in the form of savings and channel them back to the community in the form of credit or other forms in order to improve the living standard of the people. BPR has an important role, namely to provide banking services to small businesses (micro) as well as the informal sector, especially in rural areas. Of activities that lend it indirectly helps small communities in encouraging employment, growth of new entrepreneurs, creating jobs, and reducing poverty. With the increasing number of employment then it showed more effective distribution of funds to the public.

The development of BPR cannot be separated from its success in lending funds to a micro and small businesses that will be used as capital. The presence of BPR is expected to spearhead the small and medium businesses (hereinto UKM) financing sector and to reach all groups of society. Seeing the importance of BPR in the support of the people's economy, the presence of BPR should receive better attention. Attention to BPR cannot be separated from its ability in the profit (Pratama and Putri, 2013: 437). Profitability is defined as the ability of companies seeking to make a profit in a particular year or profitability of a company that can be calculated by the profit generated, divided by total assets and total capital of the company (Munawir, 2001). Profitability can analyze the level of efficiency of BPR in profit over a specified period of capital employed. The higher the capital adequacy ratio, banks will be stronger to bear any credit risk and are able to finance the operations of the bank, thus contributing significantly to the profitability (Suhardjono and Kuncoro, 2002: 573). Liquidity is the ability to provide sufficient funds to meet its obligations and commitments (Suhardjono and Kuncoro, 2002: 279). The number of non-performing loans will lead to reduced bank capital that can be seen from its capital adequacy ratio. The decline in the capital adequacy ratio, can lower bank lending. In the face of global economic pressures that occur at this time, the banking sector is still in a stable condition in its function as an intermediary, it can be seen from the increase in the number of credit (lending) and funding (funding). Although to date slowdown in credit growth compared with previous years. Slowing credit growth is associated with the uncertainty of the completion of the global crisis has lowered the global demand for exports (Bank Indonesia, 2013). Credit growth is shown by the following chart 1:

Graphic 1 Growth Credit per Exchange



Source : Monthly Report of General Banks, Bank Indonesia, 2013

The company's performance can be viewed through a variety of variables or indicators. Variables or indicators that are used as the basis of assessment is the financial report of the company concerned. If the performance of a public company increases, the value will have a higher effort. Performance is an important thing to be achieved by any company anywhere, because the performance is a reflection of the company's ability to manage and allocate its resources. Assessment of the performance of a

bank can basically be done by analyzing the financial statements of the bank concerned. Of those statements may be obtained information about the existence of a financial position, cash flow, and other information relating to the performance of the bank concerned. Based on the report will be calculated a number of financial ratios are commonly used as the basis of assessment of the level of bank performance. Information about the condition of a bank can be used by the parties involved, both from the bank itself, outside the bank (such as creditors, investors, and customers), and Bank Indonesia as the bank supervisory authority, to evaluate the performance of banks in implementing banking principles caution, compliance with the applicable provisions of the current (Puspitasari, 2009: 4). As a company or economic entity, the bank gave the financial report for the show information and financial position is presented to interested parties.

1.2. Problem Formulation

1. How does the influence of Capital Risk To Profitability on Conventional Rural Bank (BPR) in Indonesia?
2. How does the influence of Liquidity To Profitability on Conventional Rural Bank (BPR) in Indonesia?

LITERATURE REVIEW

2.1. Signalling Theory

Signaling theory explain the reason companies to provide information on external financial statements related to the existence of information asymmetry between the management company with outside parties in which the management company has more information and to know the prospects of the company in the future. Signaling theory explain the reason companies provide information to the public (Wolk et al, 2001: 308). Signaling theory suggests about how should a company providing signals to users of financial statements. This signal contains information about what has been done by the management to realize the desire of the owner.

2.2. Banking Financial Performance

Performance is an important thing to be achieved by any company anywhere, because the performance is a reflection of the company's ability to manage and allocate resources (Febryani and Zulfadin, 2003). Banking performance assessment is specifically regulated by Bank Indonesia through the Decree No. 23/81 / KEP / DIR and SE No. 23/21 / BPPP dated February 28th, 1991, which revised by Decree No. 26/2 / KEP / DIR and SE No. 26/5 / BPPP May 29th, 1993 Assessment of performance in this rule are based on the aspects that influence the development of a bank, Capital, Quality Assets, Management, Earnings and Liquidity or often called CAMEL (Rahmawati and Ravelia, 2009). In addition, financial statement analysis can help businesses, government and other financial statement users in assessing the financial condition of a company is no exception banking company (Srihastuti, 2013).

Bank health can be defined as a bank's ability to conduct normal banking operations and is able to meet all its obligations well in a manner that is in accordance with the applicable banking regulations (Prasnanugraha, 2007). Rules about the health of banks that applied by Indonesia covering various aspects of the bank's activities, ranging from fund raising to the use and distribution of funds (Budisantoso and Triandaru, 2006).

2.3. Financial Statements of BPR

The financial statements of BPR aims to provide information regarding the financial position, performance and changes in financial position. In addition, the financial statements BPR also aims to assist decision-making. A financial report will be useful when the information presented is understandable, relevant, reliable and comparable. However, it should be realized that the financial statements do not provide all the information that may be required interested parties because of the general financial statement only illustrates the financial effects of past events and are not required to provide non-financial information. However, in some instances BPR need to provide non-financial information that has an influence on the future finance (Bank Indonesia, 2010: 1).

2.4. Financial Ratios

Return on Assets is an indicator of the ability of banks to obtain a return on assets owned by Bank.

$$\text{ROA} = (\text{Profit After Tax} / \text{Total Assets}) \times 100\%$$

Loan to Deposit Ratio is an indicator of the ability of banks to pay all the people and capital fund themselves through credit that is distributed to the public.

$$\text{LDR} = (\text{Total Loans} / (\text{Deposit} + \text{Equity})) \times 100\%$$

Capital Adequacy Ratio (CAR) is a ratio that shows how much of the total assets of banks that contain risks (credit, investments, securities, bills of other banks) financed from own capital, in addition to funds from sources outside the bank.

$$\text{CAR} = (\text{Bank Capital} / \text{Total Risk-Weighted Assets}) \times 100\%$$

METHODOLOGY

This research is descriptive quantitative research that uses existing numbers of indicators of risk capital and liquidity for later interpreted to have a strong meaning in an attempt to answer the research problem and described according to the quality of the findings.

Secondary data used in this study are the financial statements of the BPR in 2013 acquired the Bank Indonesia website.

DATA ANALYSIS

2.3.1. Normality test

Normality Test (using the Kolmogorov-Smirnov statistic);

2.3.2. Classical Test Assumptions

According Ghozali (2011: 103), the classic assumption test is carried out as follows: *Multicollinearity Test* (can be seen from the value of the variance inflation factor (VIF)); *autocorrelation test* (Durbin-Watson method is used (DW Test)); *Heteroskidastity test* (test used Glejser).

This study used a multiple linear regression analysis. Statistical equations used are as follows:

$$\text{ROAt} = \alpha + \beta_1 + \beta_2 \text{LDRt Cart} + \varepsilon$$

GDP = gross domestic product in year t

α = constant

β_1, β_2 = regression coefficient =

Cart = Capital Adequacy Ratio in year t;

LDRt = Loan to Deposit Ratio in year t;

ε = Error

2.3.3. Coefficient of Determination

This study uses Adjusted R2 (can go up or down when the independent variable is added to the model (Ghozali 2011: 97)).

2.3.4. Simultaneous Significance Test (F Test Statistic)

If $P_{\text{value}} < 0.05$, it can be said that all independent variables simultaneously and significantly affect the dependent variable.

2.3.5. Significant Parameter Test Individual (Test Statistic t)

If $P_{\text{value}} < 0.05$ then the independent variables affect the dependent variable individually.

FINDINGS

3.1. Descriptive Statistics

Descriptive statistics that are presented in this study is to provide information about the characteristics of the study variables to be included in the research model as presented in Table 1 below:

Table 1
Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|----|---------|----------|-----------|----------------|
| CAR | 33 | ,3711 | 61,5300 | 25,123064 | 11,9651583 |
| LDR | 33 | 58,0800 | 183,2500 | 83,296364 | 19,5853989 |
| ROA | 33 | 1,2300 | 10,3200 | 4,186364 | 1,9406149 |
| Valid N (listwise) | 33 | | | | |

3.2. Normality Test

Test statistic used to test the normality is the One-Sample Kolmogorov - Smirnov (KS) test. The criteria used are H0 is accepted when Sig. K-S > 0.05. On the contrary, if the Sig. K-S < 0.05 then H0 is rejected.

Table 2: One-Sample Kolmogorov-Smirnov Test

| | | Unstandardized Residual |
|----------------------------------|----------------|-------------------------|
| N | | 33 |
| Normal Parameters ^{a,b} | Mean | ,0000000 |
| | Std. Deviation | 1,75903291 |
| Most Extreme Differences | Absolute | ,139 |
| | Positive | ,139 |
| | Negative | -,081 |
| Kolmogorov-Smirnov Z | | ,801 |
| Asymp. Sig. (2-tailed) | | ,542 |

- a. Test distribution is Normal.
- b. Calculated from data.

The test obtained Sig. K-S = 0.542. Therefore, the value of KS > 0.05 then H0 is accepted as such. This means that the data is processed to have normally distributed residuals.

3.3. Classical Assumption Testing

3.3.1. Heteroskedasticity Test

To detect the presence or absence of heteroscedasticity using Glejser test (Test Glejser) to regress the absolute value of the residuals against the independent variables. If the partial no significant effect of each independent variable on the dependent variable (Sig. > 0.05) then stated there is no problem of heteroscedasticity. Glejser test results show that no significant effect of the independent variables as shown in Table 3.

Table 3: Heteroskedasticity Test

| Independent Variable | Effects |
|----------------------|---------|
| (Constants) | 0,990 |
| CAR | 0,075 |
| LDR | 0,064 |

3.3.2. Autocorrelation Test

To detect the presence or absence of autocorrelation will be tested Durbin-Watson (DW.test). When the figure to be around DU $DW < DW < 4 - DU$, means no autocorrelation (Ghozali 2011: 110). Test results obtained by the DW value = 1.728 while the value of DU = 1.577 (N = 33, k = 2). Based on these criteria, the $1,577 < 1,728 < 4 - 1,577$ so it can be concluded that there is no autocorrelation. DW calculation results are presented in Table 4:

Table 4: Autocorrelation Test

| | Nilai D_w | Nilai D_u | Kesimpulan |
|--------------------|-------------|-------------|--------------------|
| Regretion Equation | 1,728 | 1,577 | No autocorrelation |

3.3.3. Multicollinearity Test

The results of the calculation of the value of tolerance showed no independent variables that have a tolerance value of less than 0.10. VIF value calculation results also show the same thing none of the independent variables have VIF values over 10 It can be concluded that the regression model does not occur multikolonierity symptoms among independent variables. The test results shown in Table 5 below:

Table 5: Results of Multicollinearity Test

| Free Variable | Tolerance | VIF | Information |
|---------------|-----------|-------|----------------------|
| CAR | 0,964 | 1,038 | Non Multikolinearity |
| LDR | 0,964 | 1,038 | Non Multikolinearity |

3.3.4. Testing Goodness of Fit Model

1) The coefficient of determination (R²)

The coefficient of determination reflects how much of the variation of the dependent variable can be explained by variations in the independent variable. From Table 6 obtained coefficient of determination (adjusted R²) of 0.124 This means that 12% ROA variation can be explained by the variation of the variable CAR and LDR. While the remaining 88% is explained by other factors or variables outside the model regression. The results of coefficients of determination are shown in Table 6:

Table 6: Value of coefficient of determination (R²)

| Model | R | R Square | Adjusted R Square |
|-------|-------|----------|-------------------|
| 1 | 0,422 | 0,178 | 0,124 |

2) The test statistics F

Based on the test results of F obtained F value of 3.257 with a probability value of 0.052 which is significant at $\alpha = 0.1$, it can be concluded that the independent variables jointly affect the dependent variable (ROA). F test results are shown in Table 7:

Table 7: Result of F Test

| ANOVA ^b | | | | | | |
|--------------------|------------|----------------|----|-------------|-------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 21,497 | 2 | 10,749 | 3,257 | ,052 ^a |
| | Residual | 99,014 | 30 | 3,300 | | |
| | Total | 120,512 | 32 | | | |

a. Predictors: (Constant), LDR, CAR

b. Dependent Variable: ROA

2) The test statistics T

T Statistical tests (T test) and the results of the regression effect of independent variables on GDP are presented in Table 8:

Table 8: Results of T test statistics (T test) and Regression Analysis

| Regression | Variable | t | B | Sig |
|---|-----------|-------|-------|-------|
| Equation $ROA_t = \alpha + \beta_1 CAR_t + \beta_2 LDR_t + \epsilon$ | Constants | 0,013 | 0,022 | 0,012 |
| | CAR | 1,845 | 0,311 | 0,027 |
| | LDR | 2,083 | 0,351 | 0,046 |

From the results of multiple linear regression as shown in Table 8, the equation CAR and LDR on ROA is:

$$ROA_t = 0,022 + 0,311CAR_t + 0,351LDR_t + \varepsilon$$

Based on Table 8, the results of hypothesis testing is partially described as follows:

- 1) CAR positive and significant impact on ROA in independent Indonesia. Variabel Conventional BPR in CAR has a positive regression coefficient of 0.311 and t-test result of 1.845 with a significance level of 0.027. It shows that the CAR variable is statistically significant at $\alpha = 0.05$.
- 2) LDR positive effect on ROA on Conventional BPR in Indonesia. LDR independent variables, has a positive regression coefficient of 0.351 and t-test result of 2.083 with a significance level of 0.046. It indicates that the variable was not statistically significant LDR at $\alpha = 0.05$.

IV. CLOSING

4.1 Conclusion

1. CAR has a positive and significant impact on ROA on Conventional BPR in Indonesia. The test results concluded that any increase in its capital adequacy ratio by 1 unit will increase the probability of (return on assets) amounted to 0,311. The higher the capital adequacy ratio, banks will be stronger to bear any credit risk and are able to finance the operations of the bank, thus contributing significantly to profitability.

2. LDR has a positive effect on ROA on Conventional BPR in Indonesia. The test results concluded that any increase in the loan to deposit ratio of 1 unit will increase the probability of (return on assets) amounted to 0.351. Liquidity is the ability to provide sufficient funds to meet obligations and commitments. The number of non-performing loans will lead to reduced bank capital that can be seen from its capital adequacy ratio. The decline in the capital adequacy ratio, can lower bank lending.

4.2 Suggestions

This study, in the analysis did not include other factors that can also affect profitability such as NPL, ROA, NIM, SBI interest rate and other financial ratios. Based on these limitations, it is recommended for further research, in order to incorporate these factors and a more complete discussion. In addition, further research can add to the period of the study so the results may represent existing conditions.

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