THE EFFECTS OF NON PERFORMING LOAN, CAPITAL ADEQUACY RATIO, AND THIRD PARTY FUNDS ON THE CREDIT DISTRIBUTION OF COMMERCIAL BANKS LISTED IN THE INDONESIA

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ABSTRACT: This research aims to determine the effect of non-performing loans, capital adequacy ratios and third party funds on loan credit distribution. The objects of the research are non-performing loans, capital adequacy ratios, third party funds, and credit distribution. The subjects of the research are the financial Services sub-sector companies (banks) that are listed in the Indonesia Stock Exchange (BEI) in the periods of 2015-2017. The research uses secondary data with quantitative verification method. The samples of the research are 7 companies (111 observations). The hypothesis Tests are carried out by the method of multiple linear regression analysis. The results show that simultaneously and partially, non-performing loans, capital adequacy ratio, and third-party funds have effects on credit distribution. Banking companies can reduce non-performing loans, also maintain or increase capital they own so that the operational activities in credit distribution can be optimally carried out. Further research is recommended to use more populations as well as longer periods in order to provide better results.

KEYWORDS: non-forming loans, capital adequacy ratio, third party funds, credit distribution

INTRODUCTION

The main function of a bank is collecting funds from the community, distributing funds to the community and also providing banking services. The most common form of funds distribution to the public is known as credit. Credit is a bank loan made to the public, and the banks take benefit from the interest. Credit distribution by banks can be influenced by the number of non-performing loans. A high number of non-performing loans indicate that the bank collectability is low; this will have an impact on the loss that will reduce the bank's financial resources in distributing credit.

Bank financial resources can be obtained from various sources, one of which is third party funds. Third party funds are funds originating from the community and play an important role in supporting bank operations, including the process of credit distribution. The greater the funds obtained from third parties, the greater the chance that the bank will be distributing credit. On the other hand, in maintaining the continuity of its business, banks need to measure the capital adequacy ratio (CAR), so that the bank can find out how much capital can be
used for operational activities, also to measure whether the capital can cover the losses incurred, including losses caused in credit distribution. A higher capital adequacy ratio (CAR), indicates that the bank’s anticipation of the risks that occur is high, so that when CAR is high then the possibility of banks distributing credit will be higher, but this is contrary to what happened to Bank Agris in 2015-2016.

Table 1. Data of NPL, CAR and Credit Distribution of Bank Agris, TBK

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NPL</th>
<th>CAR</th>
<th>CREDIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1.47%</td>
<td>18.68%</td>
<td>2,745,252,000,000</td>
</tr>
<tr>
<td>2016</td>
<td>3.33%</td>
<td>17.32%</td>
<td>2,875,315,000,000</td>
</tr>
</tbody>
</table>

Source: Processed Data, 2019

The data above shows a phenomenon that is happening in the banking world today. The number of non-performing loans doubled, followed by an increase in credit distribution. This is contrary to the theory which states that if there is an increase in non-performing loans, credit distribution tends to decrease. Likewise with the capital adequacy ratio or CAR, it can be seen that the decrease in the capital adequacy ratio is followed by an increase in credit distribution, this is not in line with the theory which states that if the capital adequacy ratio increases, the credit distribution will increase. Based on the background described, the problem formulation of the research is as follows:

1. What is the effect of non-performing loans on Credit distribution?
2. What is the effect of capital adequacy ratio on credit distribution?
3. What is the effect of the third party funds on credit distribution?

Furthermore, the objectives in the research are described in the following points:

1. To find out the effects of non-performing loans on credit distribution.
2. To find out the effect of capital adequacy ratio on credit distribution.
3. To find out the effects of the third party funds on credit distribution.

LITERATURE REVIEW

Credit Distribution

Credit distribution is the process of providing money or bills based on a credit distribution and borrowing agreement between the bank and another party that requires the borrower to repay the debt within a certain period of time by giving interest in return (Ismail: 2014; Kasmir: 2016). Credit distribution is measured by summing credit in joint financing, credit in restructuring, and purchasing debtor securities.
Non-performing loans

A non-performing loan is a situation where the borrower is unable to repay the loan to the bank within 90 days or more (Ismail: 2014; Hariyani: 2010; Monokroussos: 2017; Bird: 2002; and Grotzinger: 2005). Chen (2014) measures NPL using the following formula:

\[ \text{NPL} = \frac{\text{NonPerforming(or Impaired)loans}}{\text{Gross Customer Loan}} \]

Capital Adequacy Ratio (CAR)

CAR shows an indicator of a bank's ability to cover a decrease in its assets as a result of bank losses. Based on the Bank for International Settlement (BIS) standard, the current CAR is set at a minimum of 8%. The formula that can be used to measure CAR is as follows (Leon, 2007):

\[ \text{CAR} = \frac{\text{Total Bank's Capital}}{\text{Risk Weighted Assets}} \]

Third Party Funds (TPF)

Third party funds are a source of funds collected from the community for bank operations, so that the bank has the obligation to return the funds (Hardino: 2008; Leon: 2007). Third Party funds are measured by counting the components consisting of demand deposits, time deposits (deposits and certificates of deposit), savings and other liabilities consisting of immediate liabilities that can be paid, securities issued, loans received, guarantee deposits and others (Hadinoto, 2008).

RESULTS AND DISCUSSIONS

Based on the results of data processing, multiple linear regression analysis presented in table 1.
Tabel 1. Results of Multiple linear Regression analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-.181</td>
</tr>
<tr>
<td>NPL</td>
<td>-.098</td>
</tr>
<tr>
<td>CAR</td>
<td>-.628</td>
</tr>
<tr>
<td>DPK</td>
<td>1.016</td>
</tr>
</tbody>
</table>

Source: SPSS Processing Results

Based on the data in table 1, Multiple Linear Regression Equation is:

\[
P_{KREDIT} = -0.181 - 0.098 \text{NPL} - 0.628 \text{CAR} + 1.016 \text{DPK} + e
\]

- \( P_{KREDIT} \): Credit Distribution
- \( \text{NPL} \): Non Performing Loan
- \( \text{CAR} \): Capital Adequacy Ratio
- \( \text{DPK} \): Third party Funds
- \( e \): error

From the regression equation, the following conclusions can be drawn:

1. The regression equation states that if there is no increase in the value of the NPL, CAR, and TPF variables, the value of the \( P_{KREDIT} \) variable is -0.181.
2. The coefficient of -0.098 states that each reduction in one variable value of NPL will give an increase in credit distribution in the amount of 0.098. Beta values indicate the size of the effect of NPL variable on \( P_{KREDIT} \), which Beta value is -0.022.
3. The coefficient of -0.628 means that every increase in one value of the CAR variable will decrease credit distribution by 0.628. Beta values indicate the size of the effect of the CAR variable on \( P_{KREDIT} \), which Beta value is -0.023.
4. The coefficient of 1.016 states that every addition to one value of DPK variable will provide an increase in credit distribution of 1.016. Beta values indicate the score of the effect of DPK variable on \( P_{KREDIT} \), which Beta value is 0.992.

The result of F Statistic Test which shows the effect of all independent variables simultaneously on the dependent variable is provided as follows:

Table 2. F-test Results
ANOVA<br>

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>3</td>
<td>178.73</td>
<td>4.5</td>
<td>.000&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>107</td>
<td>.039</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>540.377</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(<a>\text{Predictors: (Constant), DPK, CAR, NPL}\)
\(<b>\text{Dependent Variable: P_KREDIT}\)

Source: SPSS Processing Results

Based on the output results from the ANOVA table shows the Sig. equal to 0.000 when compared with \( \alpha = 0.05 \), the value of Sig. smaller than the value of \( \alpha \), which is \( 0.000 \leq 0.05 \), thus indicating that the independent variables in the study, namely NPL, CAR, and TPF have a simultaneous effect on the dependent variable, namely Credit Distribution.

The following are the results of the t Statistic Test which show the influence of the independent variables partially on the dependent variable.

Tabel 3. T -test result

<table>
<thead>
<tr>
<th>Model</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-1.966</td>
<td>.052</td>
</tr>
<tr>
<td>NPL</td>
<td>-2.658</td>
<td>.009</td>
</tr>
<tr>
<td>CAR</td>
<td>-2.848</td>
<td>.005</td>
</tr>
<tr>
<td>DPK</td>
<td>128.736</td>
<td>.000</td>
</tr>
</tbody>
</table>

\(<a>\text{Dependent Variable: P_KREDIT}\)

Source: SPSS processing Result Sumber
The conclusions of t test result are:

**The Effects of Non-Performing Loans on Credit Distribution**

Based on table 3, NPL has a significant level of 0.009. This shows that there is a significant negative effect of NPL towards Credit Distribution to banking companies listed on the Indonesia Stock Exchange (IDX) during 2015-2017. These results are in accordance with the theory which states that if the level of NPL falls, the credit distribution increases.

The increasing number of problem loans indicates that banks have a low level of credit collectability. This will have an impact on the existence of losses in the form of declining income levels which will reduce the amount of profits earned by the banks. If the amount of profits obtained by the bank decreases, the resources that the bank will use in credit distribution are low. The results of this study support the results of research conducted by Handayani (2018) which shows that non-performing loans have a significant negative effect on credit distribution, and the results of research from Murdianto (2012) which states that non-performing loans have negative and significant effect on credit distribution. However, the results of this study are not in line with the research conducted by Mokodompit (2018) that non-performing loans have a positive and insignificant effect on credit distribution.

**The Effects of Capital Adequacy Ratio on Credit Distribution**

Based on table 3, CAR has a significant level of 0.005. This shows that there is a significant negative effect of CAR towards Credit Distribution to banking companies listed on the Indonesia Stock Exchange (BEI) during 2015-2017.

This is not in line with the theory which states that if the CAR rises, the number of credit distribution by banks will increase. In this research, the average CAR value is 20.32%, the figure is far above the minimum limit set by the Bank for International Settlements (BIS), which is 8%. Therefore, high capital adequacy ratio indicates that the bank has enough capital to cover losses from various risk-bearing assets. The risks that arise are market risk, operational risk, including credit risk from credit distribution, the greater the capital adequacy ratio owned by the bank, the greater the possibility of banks distributing their funds in the form of loans. This happens because banks are able to cover losses if there is a loss due to the distribution of assets including credit.

A high CAR also indicates the existence of idle and stable resources (capital). The recovery of economics and banking situation has gradually helped to optimize the use of resources (capital) by distributing credit and enabling an increase in credit distribution in line with the decline in CAR (Pratama: 2010).

The results of this research are in line with the results of a research from Murdianto (2012) which states that partially the independent variable, CAR, has a significantly negative effect on the dependent variable of credit. The results of this research is contrast
with the research conducted by Triwuriandari (2017) which argued that capital adequacy ratio (CAR) has proven and significant effects on credit distribution.

The Effects of Third Party Funds on Credit Distribution

Based on table 3, the value of DPK is 128.736, while the significant level is 0.000. This shows that there is a significant and positive effect of DPK on credit distribution in the banking companies listed on the Indonesia Stock Exchange (IDX) during 2015-2017. These results are in accordance with the theory which states that the more third party funds obtained by the bank, the greater the possibilities that banks will distribute the credit. The amount of funds obtained from third parties reflects a high level of public trust. Management of fund sources from the third party funds (communities) can be used by banks to fulfill bank operational activities including credit distribution. The activity of distributing funds and channeling funds in the form of credit must be in order to optimize the funds collection to have benefits for the bank. The results of the research are in line with the research conducted by Mokodompit (2018) and Triwuriandari (2017) which stated that the variable of third party funds influence the variable of credit distribution.

Table 4. Results of Coefficient of Determination Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.997a</td>
<td>.994</td>
<td>.994</td>
<td>.14716</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), DPK, NPL, CAR

b. Dependent Variable:
P_KREDIT

Source: SPSS Processing Results

Based on the results of the calculation, the value of R is 0.997, indicating a strong relationship between independent variables simultaneously and the dependent variable. The coefficient of determination (R²) of 0.994 indicates that the NPL, CAR, and DPK simultaneously affect 99.4% of credit distribution of banking companies listed on the Indonesia Stock Exchange (BEI). The residual value of 0.6% is influenced by other factors that are not examined by the researcher.

CONCLUSIONS

Based on the discussion, the researcher concluded several results of the research as follows:
1. The results of the analysis that have been conducted show that Non Performing Loans (NPL) have an effect on credit distribution because by decreasing NPL, banks can maximize their resources so that credit distribution increased.

2. The results of the analysis that have been conducted show that Capital Adequacy Ratio (CAR) has an effect on credit distribution because with a high capital adequacy ratio, banks have sufficient capital to bear losses due to the risky assets including credit risk.

3. The results of the analysis that have been carried out shows that Third Party Funds (DPK) have an effect on credit distribution because the funds from third parties can help banks to optimize the funds raised for the process of credit distribution in the form of credit in order to obtain profits.

Recommendations

Recommendations for Future Research

In conducting research, it is expected that future researchers can carry out testing with a greater number of companies and longer research periods.

Practical Recommendations

The practitioners in the banking sector are expected to reduce the level of non-performing loans (NPL), as well as maintain or increase the capital owned so that the bank's operational activities in distributing funds in the form of loans can be optimally carried out.

References


