The Influence of Credit Interest Rate and Credit Risk on Market Performance

Sely Megawati Wahyudi

Univ. Mercu Buana, Jakarta, Indonesia.

Author’s contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

Article Information

DOI: 10.9734/AJEBA/2020/v17i430269

Editor(s):

(1) Dr. Satinder Bhatia, Indian Institute of Foreign Trade, India.
(2) Dr. Fang Xiang, University of International and Business Economics, China.
(3) Dr. Maria Ciurea, University of Petroșani, Romania.

Reviewer(s):

(1) Stephen Muthii Wanjohi, Murang'a University of Technology, Kenya.
(2) Ikenna Elias Asogwa, Western Sydney University, Australia.

Complete Peer review History: http://www.sdiarticle4.com/review-history/60340

ABSTRACT

This study aims to analyze the effect of credit interest rates and credit risk on market performance. Non Performing Loans (NPL) reflect bank credit risk, where the higher the NPL level, the greater the credit risk borne by the financing party. Due to high NPLs, financing will be more careful (selective) in channeling credit. This is due to the potential for uncollectible credit. The high NPL will increase the risk premium, which will lead to higher loan interest rates. Credit interest rates that are too high will reduce public demand for credit. The high NPL also resulted in the emergence of larger reserves, so that in the end bank capital was also eroded. Thus, the amount of NPL is one of the obstacles to the channeling of financing credit. The research method used is quantitative research. The sampling technique used was purposive sampling. The study was conducted on finance companies with a research period of 2015-2018. The analytical method used is the multiple regression test using SPSS.22 analysis tools, namely with a descriptive test, a classic assumption test, a model suitability test, and a regression test. The results of credit interest rates have no significant effect on market performance, and credit risk has a significant effect on market performance. This shows the interest of inventors to invest in shares of companies whose non-performing loans are not high even though the interest rates on these companies increase.
Keywords: Credit interest rates; credit risk; market performance.

1. INTRODUCTION

The growth of the financing industry has been quite attractive to the public in recent years, both online and offline. The number of products produced by the market encourages people to participate in owning or enjoying the products needed. But on the other hand, people are still unable to buy the products they need in cash. Such a state of society is a phenomenon and an indisputable fact that in this globalization era the community's need for financing is increasing.

Non-bank financial institutions such as finance companies are the main goal of the community to meet their needs, both in the form of provision of funds and goods. Finance companies are deemed quite easy compared to conventional financial institutions (banks) to cope with the various needs of public funds.

Multifinance Company or Financing Company or Financing Institution is Usha in a group of Non-Bank Financial Services Institutions (LJK Non-Bank) established to carry out financing activities in the form of providing funds or capital goods as included in the legislation concerning financial institutions.

Loan interest rates between finance companies vary, all depending on the policies of each company which has also been adjusted or influenced by one important indicator in the economy in general in Indonesia, namely Bank Interest Rates Indonesia.

Non Performing Loans (NPL) reflect bank credit risk, where the higher the NPL level, the greater the credit risk borne by the financing party. Due to high NPLs, financing will be more careful (selective) in channeling credit. This is due to the potential for uncollectible credit. The high NPL will increase the risk premium, which will lead to higher loan interest rates. Credit interest rates that are too high will reduce public demand for credit. The high NPL also resulted in the emergence of larger reserves, so that in the end bank capital was also eroded. Thus, the amount of NPL is one of the obstacles to the channeling of financing credit.

In a study conducted entitled The Effect of NPL, ROA, and CAR on PBVV on State-Owned Banks, the results showed that NPLs had a significant negative effect on pbv on bank bumn [1]. The study was also conducted entitled Influence of Earning per Share, Debt to Equity Ratio, Interest Rates, and inflation to Price to Book Value in banks on the Indonesia Stock Exchange [2].

In a study conducted entitled The Effect of DER, PER, and ROA on PBV in the Banking Industry, the results obtained were DER and PER having a positive and significant effect on PBV while ROA had a positive and not significant effect on PBV [3]. In the study of entitled Analysis of Fundamental Factors on Stock Prices, the results obtained that Return on Assets, Current Ratio significantly influences Stock Prices, while Price Earnings Ratio and Price to Book Value have no significant effect on Stock Prices [4].

Therefore, researchers try to test whether the influence of credit interest rates and Credit Risk on Market Performance. This research replicates previous studies, but it is developed by expanding the observation and developing a proxy of the research variables. The development of research variables is carried out with Credit Interest Rates and Credit Risk as independent variables. Whereas the dependent variable is Credit Risk.

2. LITERATURE AND HYPOTHESIS DEVELOPMENT

2.1 Agency Theory

Agency theory is the basic theory underlying the company's business practices so far because this theory is rooted in the synergy of economic theory, decision theory, sociology, and organization. The main principles of agency theory are stated [5]:

“An agency relationship as a contract under which one or more persons (the principal[s]) engage another person (the agent) to perform some service on their behalf which involves delegating some decision authority to the agent”

It can be said that there is a working relationship between the party that gives authority (principal) with the recipient of the authority (agency). In agency theory, agency relationships arise when one person or more employs others to provide services and then delegate decision making authority to the agent.
According [6], agency theory is based on assumptions namely:

1. Assumptions about human nature
   Emphasizing that humans have self-interest, have bounded rationality, and risk aversion.
2. Assumptions about organization
   Conflicts between members of the organization with their respective interests, efficiency as a productivity criterion, and the existence of information asymmetry between the principal and agent.
3. Assumptions about information
   That information is seen as commodity goods that can be traded.

Information asymmetry occurs because of differences in the mastery of information and risk estimation between the two parties which can lead to agency problems. Agency theory discusses the agency relationship between the principal and agent. An agency relationship is a contract in which one or more principals hire another person (agent) to perform some services for their benefit, namely giving an order to the agent. Agency relationship with the finance company in addition to the relationship between the agent and the owner, there is also the relationship between the agent and the debtor, and the agent with the regulator. Management has a tendency to obtain maximum profits.

2.2 Loan Interest Rates

According to interest rates are the price of loans. Interest rates are expressed as a percentage of the principal per unit time. In other words, the interest given will always change [7]. This is caused by people's demand for money and also the presence or absence of money supply. The more people demand money, the higher the interest rate charged to borrowers, and vice versa. Interest can also be said as a measure of the price of resources used by debtors to be paid to creditors.

High or low-interest rates are the price of the use of money for a certain tenor or period or are the price of the use of money lent and later will be returned according to the agreement. The existence of interest rate competition in Indonesia is actually not a strange thing because each finance company is given the freedom to provide different interest rates. This is actually one of the marketing strategies because people will tend to choose companies that dare to provide low credit or loan interest rates.

According [8], based on its nature interest rates are divided into two types, namely:

a. Savings interest: Is a certain price level paid by the bank to customers for deposits made? This savings interest is provided by the bank to provide stimulation to depositors to place their funds in the bank. Some banks provide additional interest to customers who place their funds in the form of certain deposits. This is done by banks so that customers will always increase their fund savings.

b. Loan interest or loan interest: Is a certain price that must be paid by the customer to the bank or finance company for the loan obtained? For companies, the loan interest is the selling price charged to customers who need funds. To make a profit, the company will sell at a higher price than the purchase price. That is, the loan interest is higher than deposit interest.

Loan interest rates among finance companies vary, all depending on the policies of each company which has also been adjusted or influenced by movements in market interest rates, whereas far as possible the composition has been adjusted to the company profile in setting interest rates [8].

Determination of the debtor's lending rate or referred to as the prime rate is based on the structure of the facilities provided, among others based on the type of credit, maximum credit, a term of credit, type of business of the debtor, credit risk, and credit guarantees. The determination of loan interest rates will be influenced by cost factors/components plus certain spreads [9].

2.3 Credit Risk

Credit risk is defined as the risk of loss related to the possibility of the debtor's failure to meet his obligations or the risk that the debtor does not repay his debt, both the principal debt and interest or both. Giving too much interest can risk not returning or late repayment of loans provided by the company. States that credit risk is a form of risk that is a form of the inability of a company, institution, institution, or individual to settle its obligations in a timely manner both at maturity and after maturity and it is all in accordance with applicable rules and agreements [10].

For finance companies whose main activity is providing loans, this is a risk that cannot be
controlled for the company. This can affect the performance and financial effectiveness of the company itself. In this study credit risk is calculated by Net Performing Loans (NPLs), because NPLs can reflect credit risk, a condition where the debtor cannot pay obligations to credit as agreed in the initial agreement, namely when the credit agreement. NPL is a ratio used to measure a company's ability to manage non-performing loans provided by the company itself for repayment of loans by debtors. The smaller the NPL the smaller the credit risk borne by the company.

NPL or bad credit can be interpreted as a loan that overcomes the difficulty of payment due to various factors such as deliberate or because external factors exceed the ability to control debtors. If there is an NPL, the company must reserve funds to reserve credit risk, so that it can reduce the company's revenue. The maximum allowable NPL ratio of Bank Indonesia is 5% if it exceeds 5% will affect the soundness rating of the company. If the company can reduce the NPL ratio below 5%, the potential profit will be even greater, because the company will save more funds to form a reserve for loss of problem loans.

In accordance with Bank Indonesia regulations, credit quality is differentiated or classified into five categories, as follows:

a. Current (sound / current) or called collectibility 1
b. In Special Mention (special mention) or called collectibility 2
c. Substandard or referred to as collectability 3
d. Doubtful (doubtful) or called collectability 4
e. Loss (loss) or called collectability

2.4 Market Performance

A company is said to have good value if the company's performance is also good. The value of a company can be reflected in the price of its shares. The value of a company that produces a Figure close to 100% ratio means it has a high value of the company where the company is considered to have good performance and prospects that can increase investor confidence. This is because investors believe that the higher the stock price of a company, the higher the rate of return that investors will receive. In other words, companies with high stock prices have good value because they are considered capable of prospering their shareholders.

Hypothesis

**Hypothesis:**

H1: There is an effect of Loan Interest Rates on Market Performance
H2: There is an effect of Credit Risk on Market Performance

3. RESEARCH METHODS

3.1 Research Design

This type of research is causal research, which is research that aims to test the hypothesis about the effect of one or several variables on other variables [11]. The population of this research is the company is a finance company listed on the Indonesia Stock Exchange in the period 2015-2018. The sampling technique used in this study is the purposive sampling method, where the sample is selected based on the suitability of the characteristics with the criteria (consideration) of the sample determined to obtain a representative sample. The sample of this research is 13 companies multiplied by the number of years of observation, so the total sample is 52 data.

3.2 Analysis Method

This study uses SPSS 22 analytical tools. The analytical test conducted is a descriptive test, Classic Assumption Test, Model Conformity Test, and Multiple Regression Test [12].

\[ Y = a + \beta_1 x_1 + \beta_2 x_2 + \epsilon \]
Description:

\[ Y = a + \beta_1 x_1 + \beta_2 x_2 + \varepsilon \]

\( Y \): Market Performance
\( a \): Constant
\( x_1 \): Loan Interest Rates
\( x_2 \): Credit Risk
\( \beta_1, \beta_2 \): Regression coefficient for each variable
\( \varepsilon \): error

4. RESULTS AND DISCUSSION

4.1 Results

In the above output SPSS results, it looks descriptive statistics of Credit Interest Rates, Credit Risk and Market Performance Number of samples (N) of 52 minimum values for Credit Interest Rates (12.24), Credit Risk (0.0759), and Credit Risk (0.1091). The maximum value is maximum for Credit Interest Rates (44.09), Credit Risk (56.2106), and Credit Risk (22.65087), the mean for Credit Interest Rates (23.2759), Credit Risk (8.0255), and Credit Risk (1.513). Standard Deviations for Credit Interest Rates (8,438), Credit Risk (14,554), and Credit Risk (3,246).

4.2 Classic Assumption Test

From the results above we see on Asymp. Sig. (2-tailed) and it can be seen that the unstandardized residual value is 0.200. Because the value is greater than 5% or 0.05, it can be concluded that the data are normally distributed. Based on Table 4 all independent variables do not have a significant relationship because they are above \( \alpha > 0.05 \), so it can be concluded that all the independent variables have no heteroscedasticity problems.

Table 1. Operational variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
<th>Skala</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Performance</td>
<td>PBV = Stock Split / Book Value Per Share</td>
<td>Ratio</td>
</tr>
<tr>
<td>Loan Interest Rates</td>
<td>Interest rate</td>
<td>Ratio</td>
</tr>
<tr>
<td></td>
<td>The credit is indicated in the notes to the inter-company financial statements</td>
<td></td>
</tr>
<tr>
<td>Credit Risk</td>
<td>NPL = Total Bad Credit / Total Credit</td>
<td>Ratio</td>
</tr>
</tbody>
</table>

Table 2. Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBK</td>
<td>52</td>
<td>12,25000</td>
<td>44,09000</td>
<td>23,27599989</td>
<td>8,43846797</td>
</tr>
<tr>
<td>NPL</td>
<td>52</td>
<td>.07590</td>
<td>56,21060</td>
<td>8,02550555</td>
<td>14,55450924</td>
</tr>
<tr>
<td>PBV</td>
<td>52</td>
<td>1,09100</td>
<td>22,65087</td>
<td>1,5133650</td>
<td>3,24600366</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>52</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: data processing results, SPSS. 22

Table 3. Normality test results

One-Sample Kolmogorov-Smirnov Test

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>52</td>
</tr>
<tr>
<td>Normal Parameters(^{a,b,c,d})</td>
<td>Mean (0.000000)</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute (0.099)</td>
</tr>
<tr>
<td>Test Statistic</td>
<td>(0.099)</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>(0.200^{\text{a}})</td>
</tr>
</tbody>
</table>

a. Test distribution is Normal
b. Calculated from data
c. Lilliefors Significance Correction
d. This is a lower bound of the true significance
Table 4. Heteroskedacity test results

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-4,508</td>
<td>3,524</td>
<td>-1,279</td>
<td>.207</td>
</tr>
<tr>
<td>Ln NPL</td>
<td>.114</td>
<td>.368</td>
<td>.049</td>
<td>.310</td>
</tr>
<tr>
<td>Ln SBK</td>
<td>.422</td>
<td>1,146</td>
<td>.058</td>
<td>.368</td>
</tr>
</tbody>
</table>

Dependent Variable: Ln ei2

Table 5. Multicollinearity test results

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Collinearity statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td></td>
<td>.917</td>
<td>1.091</td>
</tr>
<tr>
<td>SBK</td>
<td></td>
<td>.917</td>
<td>1.091</td>
</tr>
<tr>
<td>NPL</td>
<td></td>
<td>.917</td>
<td>1.091</td>
</tr>
</tbody>
</table>

Dependent Variable: PBV

Based on data from Table 5 above shows that the results of the calculation of the tolerance value of the independent variable are greater than 0.10 and the results of the calculation of the value of the Variance Inflation Factor (VIF) are less than 10, it can be concluded that there is no multicollinearity between the independent variables in the regression model.

Table 6. Autocorrelation test

<table>
<thead>
<tr>
<th>Model summary</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>2.063</td>
</tr>
</tbody>
</table>

Predictors: (Constant), NPL, SBK
Dependent Variable: PBV

Based on Table 6, it can be seen that the value of Durbin Watson is 0.851. DW value is between -2 to 2, meaning that the DW value is greater than -2 and smaller than 2 (-2 < 1,253 < 2), it can be concluded that there is no autocorrelation. So the regression model is said to be good because regression is free from autocorrelation.

4.3 Model Conformity Test

Based on the table above, the R Square figure of 0.116 or (11.6%) is obtained. This shows that the percentage contribution of the influence of the independent variable (Credit Interest Rate and Credit Risk) to the dependent variable (Market Performance) is 11.6%. Or the variation of the independent variables used in the model (Credit Interest Rates and Credit Risk) can explain 11.6% of the variation of the dependent variable (market performance). While the remaining 88.4% is influenced or explained by other variables not included in this research model.

Based on the table, an F count of 3.230 was obtained, using a 95% confidence level, α = 5%, obtained for an F Table of 3.18. Value F Calculate > F Table (3.230 > 3.18), then Ho is rejected. This means that there is a significant influence between lending rates and market risk together on market performance. So it can be concluded that credit interest rates and market risk together affect Market Performance.

Table 7. Determinant test

<table>
<thead>
<tr>
<th>Model summary</th>
<th>R</th>
<th>R square</th>
<th>Adjusted R square</th>
<th>Std. error of the estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>.341</td>
<td>.116</td>
<td>.080</td>
<td>3.11273426</td>
<td>2.063</td>
</tr>
</tbody>
</table>

Predictors: (Constant), NPL, SBK
Dependent Variable: PBV

Table 8. Test results F

<table>
<thead>
<tr>
<th>ANOVA</th>
<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></td>
<td>1 Regression</td>
<td>62,597</td>
<td>2</td>
<td>31,298</td>
<td>3,230</td>
<td>.048</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>474,767</td>
<td>49</td>
<td>9,689</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>537,364</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: PBV
Predictors: (Constant), NPL, SBK
Table 9. Test result t

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant) 2,423</td>
<td>1,389</td>
<td>1,744</td>
<td>.088</td>
</tr>
<tr>
<td></td>
<td>SBK -0.054</td>
<td>0.054</td>
<td>-1,008</td>
<td>.318</td>
</tr>
<tr>
<td></td>
<td>NPL 0.530</td>
<td>0.273</td>
<td>1,942</td>
<td>.058</td>
</tr>
</tbody>
</table>

Dependent Variable: PBV

From Table 9, it can be seen that t count is -1,008 for SBK and 1,942 for NPL. Then also obtained t table 1.67591 (two-tailed test). And it can be concluded:

1. For SBK variable, namely T Calculate < T Table (1.008 < 1.67591) means that partially the effect is not significant between SBK and PBV. So from this case, it can be concluded that partially the loan interest rate does not significantly influence the market performance of multi finance companies listed on the IDX.

2. For NPL variables namely T Calculate > T Table (1.942 > 1.67591) means that there is a partially significant influence between NPL and PBV. So from this case, it can be concluded that partially Credit Risk has a significant effect on the market performance of financing manufacturing companies listed on the IDX.

This model is used to test the effect of SBK and NPL on PBV. The regression model is systematically formulated as follows:

\[ Y = a + \beta_1 x_1 + \beta_2 x_2 + \epsilon \]

\[ Y = 2,423 - 0.054 x_1 + 0.530 x_2 + \epsilon \]

4.4 Description

a. \( a = 2.423 \); meaning that if the Credit Interest Rate and Credit Risk are worth 0, then the Market Performance is worth 2.423.

b. \( \beta_1 = -0.054 \); meaning that if the Credit Interest Rate increases by 1, then Market Performance will decrease by 0.054.

c. \( \beta_2 = 0.530 \); meaning that if Credit Risk increases by 1, then Market Performance also rises by 0.530.

4.5 Discussion

4.5.1 The influence of credit interest rate to market performance

From the above analysis, it can be concluded that Sig> 0.05 is seen which means there is no significant effect between SBK rates and PBV. This shows that the magnitude of loan interest rates in finance companies does not have a significant effect on market performance. The results are different from the study of [2]. Interest rates have a positive and significant effect on PBV

4.5.2 The influence of credit risk to market performance

From the above analysis, it can be concluded that Sig < 0.05 is seen which means the significant influence between NPL and PBV. This shows that the magnitude of credit risk in finance companies has a significant effect on market performance. The results are the same as research with the title effect of NPL, ROA, and CAR on PBV in bumn banks which states that NPL has a significant effect on PBV [1].

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

1. Credit Interest rates have no significant effect on Market Performance with the direction of the negative regression coefficient in other words cannot improve Market Performance. Thus simultaneously, lending rates cannot improve market performance.

2. Credit risk has a significant effect on Market Performance with a positive regression coefficient. Thus simultaneously, Credit Risk can improve Market Performance

5.2 Recommendations

Some suggestions that can be put forward in the results of this study are due to imperfections of research conducted by the author, the authors provide suggestions that are expected to gain knowledge from this research, as follows:
1. Need further research to be able to find out more things to influence Market Performance in addition to Credit Interest Rates and Market Performance.
2. Research time should be made long so that it can provide a better picture. Because the results are likely to be different when using different periods.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES


© 2020 Wahyudi; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
http://www.sdiarticle4.com/review-history/60340