

# AN EXAMINATION OF THE MODERATION ROLE OF THIRD-PARTY FUNDS' GROWTH IN THE RELATIONSHIP BETWEEN CREDIT RISK, FINANCIAL PERFORMANCE, AND CAPITAL ADEQUACY

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## ABSTRACT

This study aims to determine the effect of capital adequacy and credit risk on financial performance in moderation of the growth of third party funds. The population in this study is the banking sector listed on the Indonesia Stock Exchange from 2016 to 2022 based on the purposive sampling technique, 16 companies were obtained. In this study using moderation regression analysis. The results of this study are that capital adequacy has no effect on financial performance, credit risk has a negative effect on financial performance, the growth of third party funds cannot moderate the effect of capital adequacy and credit risk on financial performance.

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## 1. INTRODUCTION

The presence of the Covid-19 pandemic at the beginning of 2020 had an extraordinary impact. The impact of the presence of the Covid-19 pandemic

This 19 is not only felt in the world of health, in the world of economy and humanity too feel the impact. The extraordinary spread of Covid-19 has created a high number of infected victims. The death rate caused by Covid-19 also has a fairly high number. Thus, the government is required to make policies

as well as various solutions to contain the occurrence of a wider spread. With the existence of a lockdown policy implemented by the government in various countries, there are limitations for people in their activities. Communities and various companies experience limitations in economic activities and other activities. Policies on trade activities between countries, which also experience limitations, have an impact on the level of public consumption.

Due to the Covid-19 pandemic, Indonesia's economic growth rate has also decreased. The limitations of the community in activities make the poverty rate increase and also have an impact on the consumption level of the community[1].

Besides phenomena that have been described, there are still inconsistencies in research results related to the research topic. Previously, in research on capital adequacy and credit risk on financial performance conducted by [2] the results showed that there was a positive effect of capital adequacy using CAR on financial performance. In research conducted by [3] it is also shown that the capital adequacy ratio has a positive effect on financial performance as measured by return on assets (ROA). However, in research conducted by Sanggel (2019) capital adequacy does not have an effect on financial performance. On credit risk variables, research conducted by [4] using the loan to deposit ratio (LDR) shows the results of a significant influence of credit risk on financial performance. Meanwhile, research conducted by [5] using credit risk measured by the ratio of non-performing loans (NPL) gives the result of the influence of credit risk on financial performance. According to Wolff, Murni, and Rate (2019) the research results show that credit risk has no effect on financial performance. Based on the problems above, the purpose of this research is to analyze whether capital adequacy, credit risk, growth of party funds affect financial performance.

## 2. METHODS

According to [6] population is an area consisting of objects/subjects that have certain quantities and characteristics set by researchers to study and draw conclusions. The population in this study uses banking sector companies listed on the Indonesia Stock Exchange (IDX) for the 2016 to 2020 period.

According to [7] the sample is part of the number and characteristics of the population. In determining the sample to be used, the researcher uses the sampling method or also called the sampling method. The sampling method is divided into two, namely, probability sampling and non-probability sampling. Probability sampling is a method used in sampling that provides equal opportunities for each element of the population to become a member of the sample, while non-probability sampling is a method used in sampling that does not provide equal opportunities for each element of the population to become a sample [8]. In this study using non-probability sampling method. The techniques used in sampling based on non-probability sampling method is a purposive sampling technique. According to [9] purposive sampling is a technique which use certain considerations in determining the sample.

This study used the moderated regression analysis (MRA) method. According to [10] MRA is a moderation regression analysis that uses an approach analytic that maintains integrity sample and provide a basis for controlling for the effect of moderating variables. As for the testing stages that were carried out before the MRA model was proposed, the classical assumption test was carried out first. Because the type of panel data used is panel data, a model feasibility test will be carried out with eviews software. After submitting the new MRA model, a hypothesis test was carried out to answer the research hypothesis.

### 3. RESULTS AND DISCUSSION

#### Hypothesis testing

The hypothesis for this study was carried out using the t-test approach. The t statistical test basically shows how far the influence of one independent variable has on the dependent variable. The regression coefficient is used to determine the effect of the independent variables, namely, capital adequacy and credit risk which is moderated by the growth of third party funds on financial performance by level probability significance of 5% or 0.05. If the probability value is  $< 0.05$ , then H1 is accepted, meaning that each independent variable affects the dependent variable, and vice versa. However, if H0 is accepted, it means that each independent variable has no effect on the dependent variable [11].

Based on the data which is the results of the t test based on the output of the moderate regression analysis (MRA) regression model, it can be concluded as follows:

- 1) The capital adequacy variable is known to have a t value count as big 0.204751 and a probability value of 0.8383 and a t value table of 1,879 obtained from df
- 2)  $= 90 - 4 = 86$ . That is, the value of t count is smaller than the t table value, namely,  $0.204751 < 1.879$  and the probability value is greater than 0.05, namely  $0.8383 > 0.05$ . Thus, it can be concluded that capital adequacy has no effect on financial performance.
- 3) The credit risk variable is known to have a t value count absolute size 2.516978 and a probability value of 0.0137 and a t value table as big 1.879 obtained from  $df = 90 - 4 = 86$ . That is, the value of t count absolute greater than the value of t table that is,  $2.516978 > 1.879$  and the probability value is less than 0.05, namely  $0.0137 < 0.05$ . Thus, it can be concluded that credit risk has an effect on financial performance with a negative regression coefficient direction [12]
- 4) Variable the relationship between capital adequacy and the growth of third party funds is known to have a value of t count of 0.820838 and the value of t table of 1,879 ones obtained from  $df = 90 - 4 = 86$ . That is, the value of t count smaller than t value table that is,  $0.820838 < 1.879$  and the probability value is more greater than 0.05, namely  $0.4141 > 0.05$ . Thus, it can be concluded that PDPK is not significant and KM.PDPK is also not significant, so the growth of third party funds is a potential moderator (homologiser moderator). This variable has the potential to be a moderating variable but in this study it did not moderate the effect capital adequacy on financial performance. With a moderating variable that is not significantly related, it means that the coefficients  $\beta_2$  and  $\beta_3$  are not significant, so that the third party funds growth variable only has the potential to become a moderating variable.
- 5) The variable related to credit risk with the growth of third party funds is known to have a value of t count of 0.730951 and the value of t table of 1,879 obtained from  $df = 90 - 4 = 86$ . That is, the value of t count smaller than t value table that is,  $0.730951 < 1.879$  and the probability value is greater than 0.05, namely  $0.4668 > 0.05$ . So, it can be concluded that PDPK is not significant and RK.PDPK is also not significant, so the growth of third party funds is a potential moderator (homologiser moderator). This variable has the potential to be a moderating variable but in this study it does not moderate the effect of credit risk on financial performance. With the moderating variable that is not significantly related, it means the coefficient  $\beta_2$  and  $\beta_3$  no significant, so that the growth variable of third party funds only has the potential to become a moderating variable.

### **Coefficient Determination (R<sup>2</sup>)**

The coefficient of determination (R<sup>2</sup>) is a concise measure that provides information on how well a sample regression line fits the data. Where the value of the coefficient of determination is between zero and one. A value close to one means that the independent variables provide almost all the information needed to predict the dependent variable. As seen in Table 4.9, it is known that the coefficient of determination (R<sup>2</sup>) is 0.133955 or 13.3955%. That is, value is less than 50%. So it is concluded that the independent variable is less able to provide the information needed to predict the dependent variable.

In this test of the coefficient of determination test, the statistical value of Adjusted R<sup>2</sup> is also used. Based on the results of the moderated regression analysis (MRA) test, it is known that the Adjusted R<sup>2</sup> value is 0.082405, meaning that the independent variables in this study explain 8.24% of the dependent variable. Then, the remaining 91.76% is explained by other variables not included in this study. Based on the results of the statistical tests that have been carried out, the following is an interpretation of the test results.

### **Adequacy Capital Not Influence on Financial Performance**

From the results of statistical testing of the capital adequacy variable as measured by the capital adequacy ratio (CAR) it shows a probability result of 0.8383 in the 2016-2022 period, where  $0.8383 > 0.05$  and the value of the regression coefficient is 0.057263 with a positive coefficient direction. So it can be concluded that capital adequacy has no effect on financial performance, meaning that the hypothesis is rejected. With the existence of a Bank Indonesia regulation stating that the minimum CAR criteria is 8%, it is suspected that this will result in banks setting up reserve funds to meet these criteria and also to anticipate risks arising from credit. In Table 4.2 the results of the descriptive test show the average value of capital adequacy as measured by CAR, it is known that the average value is 0.2367 or 23.67%, based on Bank Indonesia regulation No. 15

/12/PBI/2013 banking sector in this research has a very good predicate. However, it is suspected that the available funds are not used optimally by the Bank in carrying out its activities, so that it does not have an impact on financial performance. According to Wenno and Laili (2019, p. 525) a CAR that is too high is not necessarily good. That is, if a bank has high capital but does not make distributions, the bank is less efficient in utilizing existing capital. In addition, if the bank does not utilize the existing capital, it will cause the capital to be idle and the bank will also not receive its returns. So the possibility of a bank getting profit is also low so that it has an impact on the bank's financial performance. So that an increase in CAR does not always provide an increase in financial performance. The results of this study are also consistent with research conducted by [13], Silaban (2017, p. 67), Nguyen (2017, p. 7), [14], [15], [16] which states that CAR has no effect on financial performance.

### **Credit Risk Affects Financial performance**

From the results of statistical testing of the credit risk variable as measured by non-performing loans (NPL) it shows a probability result of 0.0137 in the 2016-2022 period, where  $0.0137 < 0.05$  and the value of the regression coefficient is -1.921348 with a negative coefficient direction. So it can be concluded that credit risk has an effect on financial performance with a negative coefficient direction (hypothesis accepted). In carrying out its function, the bank distributes credit to society with predetermined interest provisions. However, in carrying out its functions, the bank also bears risks contained in the credit granted. According to [17], p. 9) the level of bank loan activity can be used to measure the high level of risk of credit failure borne by banks. The existence of all forms of credit failure risks have an impact on banks in obtaining profits. In addition, in minimizing credit risk, bank management conducts analysis before deciding to extend credit to customers (Wenno and Laili, 2019, p. 526). The banking sector also needs to know how big the potential customers are in carrying out their obligations in a timely manner in accordance with the agreement that has been set. Then the possibility of fluctuations in the level of credit risk has an influence on financial performance in obtaining profits. p.s. 2178), [18] which state that credit risk as measured by NPL has a negative effect on financial performance.

### **The Growth of Third Party Funds Does Not Moderate the Effect of Capital Adequacy on Financial Performance**

From the results of statistical testing of the variable growth of third party funds which are interacted with capital adequacy, it shows a probability result of 0.4141 in the 2016-2022 period, where  $0.4141 > 0.05$  and the regression coefficient value is -1.170168 with a negative coefficient direction. So it can be concluded that the growth of third party funds does not moderate the effect of capital adequacy on financial

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performance, meaning that the hypothesis is rejected. Previously, the test results the effect of capital adequacy on financial performance shows that the results of capital adequacy have no effect on financial performance. In addition, the results of descriptive statistics Table 4.2. The results of the descriptive test show that the average value of capital adequacy as measured by CAR is known to have an average value of 0.2367 or 23.67%, based on Bank Indonesia rule no. 15/12/PBI/2013 the banking sector in this study has a very good rating, because the minimum capital adequacy regulation set by Bank Indonesia is 8%. Capital adequacy has no effect on financial performance presumably because banks do not channel their capital efficiently, it is also possible that banks have prepared funds to anticipate credit risk. With a high level of capital adequacy does not contribute to financial performance. So that the growth of third party funds will also not have an impact on financial performance if they are not allocated or functioned optimally. Additional capital obtained from the growth of third party funds will not affect financial performance as long as this capital is not channeled back to the public in the form of lending and other investment activities.[19]

#### **The Growth of Third Party Funds Does Not Moderate the Effect of Credit Risk on Financial Performance**

From the results of statistical testing of the variable growth of third party funds that are interacted with credit risk, it shows a probability result of 0.4668 in the 2016-2022 period, where  $0.4668 > 0.05$  and the regression coefficient value - 4.734104 with a negative coefficient direction. So it is concluded that the growth of third party funds does not moderate the effect of credit risk on financial performance, meaning that the hypothesis is rejected. Banks in distributing their funds will be faced with risks. Moreover, the results of testing the effect of credit risk on financial performance show a negative coefficient direction, meaning that fluctuations in the level of credit risk have a negative effect on financial performance. So it can be concluded that there is a link between credit risk and financial performance[20], [21]. However, in this study, the results obtained from the growth of third party funds were not able to moderate the effect of credit risk on financial performance. It is possible that this is suspected because the bank's largest source of funds, namely third party funds, is not being utilized as well as possible. Based on the results of descriptive statistics, the average credit risk as measured by NPL was 1.83% lower than the maximum limit set by Bank Indonesia regulations, namely 5%. Based on Bank Indonesia Regulation No. 17/11/PBI/2015 states that the credit ratio is said to be problematic if the total credit is more than 5%, which means that the average observation in this study is in very good condition because it is less than 5%. However, the growth in third party funds obtained is suspected to have only been piled up to anticipate the risks of non-performing loans which are already in very good condition. not for other productive activities that the bank hopes to obtain income from the returns earned in order to improve financial performance[22], [23]. So that the growth of third party funds is not able to moderate the effect of credit risk on financial performance. So concluded the moderating variable is not significantly related, meaning that the coefficients  $\beta_2$  and  $\beta_3$  are not significant, so the third party funds growth variable only has the potential to be a moderating variable. The results of this study are in accordance with research conducted by [24] which states that third party funds do not moderate the effect of credit risk on financial performance.

#### **4. CONCLUSION**

This research was conducted with the aim of knowing the effect of capital adequacy and credit risk on financial performance in moderating the growth of third party funds in the banking sector listed on the Indonesia Stock Exchange (IDX) for the 2016-2020 period. Based on the results of research data analysis that has been carried out and also discussion given, it can be concluded as follows: Capital adequacy does not affect financial performance in the banking sector listed on the IDX for the 2016-2022 period; Credit risk has a negative effect on financial performance in the banking sector listed on the IDX for the 2016-2022 period; Growth in third party funds does not moderate the effect of capital adequacy on financial performance in the banking sector listed on the IDX for the 2016-2022 period;

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