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## DETERMINANTS OF CREDIT GROWTH IN COMMERCIAL BANKS IN INDONESIA

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#### Abstract:

Banks have a very vital task in maintaining the Indonesian economy. One of the main tasks of banks is to collect and distribute public funds. Banks channel public funds through loans that get rewards in the form of loan interest. This research focuses on studying what factors affect the amount of Credit in the long run. This study uses deposits, lending rates (SBK), nonperforming loans (NPL), GDP growth, and inflation as internal and external factors that affect commercial banks' lending amounts. The results showed that partial deposits had a negative and significant effect, NPL had a negative and significant effect, SBK had a negative but insignificant effect, GDP growth had a positive and significant effect, and inflation had a positive but insignificant effect on the amount of lending to commercial banks in Indonesia. Simultaneously, deposits, loan interest rates (SBK), nonperforming loans (NPL), GDP growth, and inflation significantly affect the amount of lending to commercial banks in Indonesia from 2012 to 2019.

**Keywords:** Deposits, Lending Rates, Nonperforming Loan, GDP Growth, Inflation, and Total Lending

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## INTRODUCTION

One of the financial institutions whose role is needed today is banking institutions. According to Ismail (2013: 2), all business sectors and individuals today and in the future will remain in the banking sector and even become necessary in carrying out financial activities supporting smooth business. As an intermediary institution, commercial banks have a role in collecting funds from the public in the form of savings and then distributing them in the form of loans or Credit. These savings and credits are an effort to increase the rotation of the economy for the better. The bank will provide a certain amount of interest for people willing to keep their money in the bank as a sign of reciprocity.

Meanwhile, people who need money can borrow money from the bank with interest. The interest rate on loans should be greater than the interest rate on deposits (savings). This aims to make a profit for the bank. The relationship between savings interest rates and bank loans can be studied based on the theory of monetary policy transmission through money circulation or interest rate setting (money interest rate channel) (Iqlima, 2010). People who need these funds are used to meet their daily needs or consumptive needs (personal needs) or also for productive needs used for business (companies to produce output or goods), as the increasing needs of the community will be encouraged to seek additional funds, namely by way of Credit at the bank.

When GDP increased in 2011, there was an increase in the economy, which affected credit growth quite significantly. According to Utari et al. (2012), a positive procyclical relationship exists between



economic growth and credit growth. One of the empirical research reviewed by Terrones and Medzona (2004) in Utari (2012) concluded that an increasing economy also encourages an increase in loans (Credit) with an elasticity of more than one in the long term. A higher increase in Credit than an increase in deposits encourages a high rate of return on Credit. The high credit growth in 2008 was financed by the disbursement of secondary reserves, as seen from the decline in excess liquidity by 30.18%. The global financial crisis towards the end of 2008 impacted Indonesia's banking industry. Liquidity difficulties led to a decline in the confidence of the corporate sector and the general public in economic conditions. Therefore, producers and consumers took anticipatory steps when making investments and consumption. Bank Indonesia data shows that in 2008, banks in Indonesia provided higher working capital loans than loans in other sectors (consumption and investment loans) (Fitriani, 2012). The bank's primary function is as a liaison institution in collecting and channeling money for specific purposes. However, in this case, banks have a role as a body that can finance a business through working capital loans. Weak supply and demand for Credit or caused by both can affect slow credit growth. This was stated by Agung (2001) in (Widyawati et al., 2016). Based on this background, the authors are interested in conducting research titled "Determinants of Credit Growth in General Banks Indonesia."

## METHODS

This research uses two variables: the Independent and the Dependent. The independent variables in this research are DPK (X1), Nonperforming Loans (X2), Credit Interest Rates (X3), GDP Growth (X4), and Inflation (X5). The dependent variable in this research is the amount of Credit (Y). The data used in this research is Quantitative Data. Quantitative data is data in numbers, such as the amount of Credit disbursed, NPL, SBK, DPK, inflation, and GDP growth in the form of numbers, both units and percentages. This research uses secondary data from time series data obtained from the Bank Indonesia website, the OJK (Financial et al.), and the Central Statistics Agency in monthly and quarterly data reports. Starting in 2012 to 2019. This research uses non-participant observation because the data used is secondary data and does not involve the researcher as a participant or group being studied. The scope of the data used covers all commercial banks in Indonesia from 2012 to 2019. This research uses the multiple linear regression data analysis method, which previously had to meet the following classical assumption tests:

**Classical Assumption Test.** Classical assumptions are a requirement that must be met in regression models that use the Ordinary Least Squares (OLS) estimation method. This classic assumption test aims to provide certainty that the regression equation obtained has unbiased and consistent accuracy in estimation. The Classical Assumption Test consists of:

**Normality Test.** The normality test aims to determine whether the independent, dependent, or both variables in a regression model have a normal distribution. A good regression model has a standard or near-normal data distribution. The data normality test can be done quantitatively using the Jerque-Bera (J.B.) test.

**Multicollinearity Test.** The multicollinearity test fulfills one of the classical assumption test requirements in a regression model. A good regression model is free from multicollinearity symptoms. According to Jonathan and Hendra (2016: 118), multicollinearity is when there is a correlation between independent variables in multiple linear regression with a very high or meager value. According to Setyo (2016: 141), the presence of multicollinearity in a model is tested by checking the presence of the coefficient of determination (R<sup>2</sup>) and looking at the variance inflation factor (VIF) value. When viewed



from the EvIEWS results with the provisions that if the VIF value  $\leq 10$ , then the regression model does not occur multicollinearity, while if the VIF value  $> 10$ , then the regression model occurs multicollinearity.

**Heteroscedasticity Test.** The Heteroscedasticity test aims to see if there is an inequality of variance from the residuals of one observation to another in the regression model. A good regression model will produce homoscedasticity; the variance from one observation to another is fixed. According to Jonathan and Hendra (2016: 99), to determine whether heteroscedasticity occurs, the test can be seen from the significance value; if the sig value is  $\leq 0.05$ , heteroscedasticity occurs in the model. Meanwhile, if the sig value  $> 0.05$ , then homoscedasticity occurs. The test used to detect heteroscedasticity in this study is the Glejser test.

**Autocorrelation Test.** The Autocorrelation test aims to determine whether there is a correlation between the confounding error in period  $t$  and the previous period  $t-1$  in a multiple linear regression model. If there is a correlation, it is called an autocorrelation problem. According to Setyo (2016), Autocorrelation often occurs in time series data, meaning that the current condition (period  $t$ ) is influenced by the past time ( $t-n$ ). Alternatively, a condition where the residual properties of regression are interrelated between one observation ( $i$ -th) and another ( $j$ -th). To detect Autocorrelation, the Breusch-Godfrey LM Test is used with the following conditions:

- 1) Prob. Chi-Square  $> \alpha$ , then there are symptoms of Autocorrelation.
- 2) Prob. Chi-Square  $> \alpha$  (0.05), then there are no symptoms of Autocorrelation.

**Multiple Linear Regression Analysis.** The data analysis used in this study is multiple regression analysis. Multiple linear regression analysis involves more than two variables, namely the dependent variable  $Y$ , with independent variables ( $X_1$ ), ( $X_2$ ), ( $X_3$ ), ..., ( $X_n$ ) (Nata Wirawan, 2017, p. 267). The following is the regression equation in this study:  $Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + e$   
Description:

$Y$  = Total Lending  
 $a$  = Constant  
 $b_1, b_2, b_3, b_4, b_5$  = Regression Coefficient  
 $X_1$  = Deposit  
 $X_2$  = Nonperforming Loan (NPL)  
 $X_3$  = Lending Interest Rate (SBK)  
 $X_4$  = GDP Growth  
 $X_5$  = Inflation  
 $e$  = Error

**The t-test.** The t-test is the individual/partial test, which tests the influence of each independent variable on the dependent variable. This test can be done by comparing the  $t$  count with the  $t$  table, looking at the significance column in each  $t$  count, or looking at the significant value of  $t$  with a confidence degree of 95% ( $\alpha = 0.05$ ) and 90% ( $\alpha = 0.10$ ). The steps of hypothesis testing are as follows:

1. Determining the Hypothesis Formulation
  - a.  $H_0: \beta_1 = 0$ ; Deposits have no significant effect on the amount of lending to commercial banks.  $H_1: \beta_1 \neq 0$ ; Deposits significantly affect the amount of lending to commercial banks.
  - b.  $H_0: \beta_2 = 0$ ; NPL has no significant effect on the amount of lending to commercial banks.  $H_1: \beta_2 \neq 0$ ; NPL has a significant effect on the amount of lending to commercial banks



- c.  $H_0: \beta_3 = 0$ ; SBK has no significant effect on the amount of lending to commercial banks.  $H_1: \beta_3 \neq 0$ ; SBK significantly affects lending to commercial banks.
  - d.  $H_0: \beta_3 = 0$ ; GDP growth has no significant effect on the amount of lending to commercial banks.  $H_1: \beta_3 \neq 0$ ; GDP growth significantly affects the lending to commercial banks.
  - e.  $H_0: \beta_3 = 0$ ; Inflation has no significant effect on the amount of lending to commercial banks.  $H_1: \beta_3 \neq 0$ ; Inflation significantly affects the amount of lending to commercial banks.
2. Significant level,  $\alpha = 0.05$  and  $\alpha = 0.10$
  3. Test Statistics: If  $p\text{-value} > \alpha$ , then  $H_0$  is accepted, and  $H_a$  is rejected. If the  $p\text{-value} \leq \alpha$ ,  $H_0$  is rejected, and  $H_a$  is accepted.

**F-test.** The F test is known as the simultaneous test or Simultan Test, a test to see the influence of all independent variables on the dependent variable with a significant level of 0.05. Alternatively, to test whether the regression model we made is excellent/significant or not significant. The hypothesis testing steps are as follows:

1. Hypothesis Formulation  $H_0: \beta_1 = \beta_2 = \beta_3 = 0$ ; Simultaneously, the variables of deposits, NPL, SBK, GDP growth, and inflation do not significantly affect the lending amount to commercial banks.  $H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq 0$ ; Simultaneously, the variables of Deposits, NPL, SBK, GDP Growth, and Inflation do not significantly affect the amount of lending to commercial banks.
2. Significant Level,  $\alpha = 0.05$
3. Test statistics: If  $p\text{-value} > \alpha$ ,  $H_0$  is accepted, and  $H_a$  is rejected. If the  $p\text{-value} \leq \alpha$ ,  $H_0$  is rejected, and  $H_a$  is accepted.

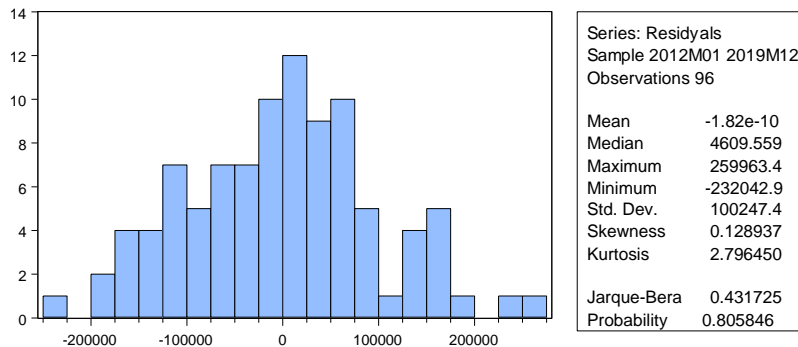
**Coefficient of Determination ( $R^2$  / R Square).** The coefficient of determination ( $R^2$ ) is used to measure how far the model's ability to explain variations in independent variables. The determination test is a significant measure in regression because it can provide information on whether or not the estimated regression model is good. In this study, the coefficient of determination is used to measure how much the ability of the dependent variable, namely lending, is explained by the Deposit variable ( $X_1$ ), Nonperforming Loan ( $X_2$ ), Lending Interest Rate ( $X_3$ ), GDP Growth ( $X_4$ ) and Inflation ( $X_5$ ) which are independent variables.

## RESULT AND DISCUSSION

**Data Analysis.** The collected data must be processed and fulfill the classical assumption test in the multiple linear regression process. This is needed to obtain the best linear unbiased estimator (BLUE). According to the Gauss-Markov theory, a BLUE estimator is an unbiased estimator that can show the correct results of our regression. There are several tests carried out, including:

**Classical Assumption. Normality Test.** The normality test is used to assess the distribution of data, whether the data is normally distributed or not. The test used in this study is the Jerque-Bera test (test). This test measures the difference in Skewness and Kurtosis.  $H_0$  in this test is that the data is usually distributed, while  $H_a$  is that the data is not normally distributed. The JB-test uses a degree of freedom of 2. So when the JB-test value is less than 2, the data is considered customarily distributed; otherwise, it is not generally distributed if it is above 2. This study uses a significance level of 5%, so when  $\text{Probability} \leq \alpha$ ,  $H_0$  is rejected or the data is not normally distributed, while when  $\text{Probability} > \alpha$ ,  $H_0$  is accepted or the data is usually distributed.





**Figure 1. JB-Test**  
Determining Normality

From the picture above, the Jarque-Bera (JB-Test) value of 0.431725 is smaller than 2, so  $H_0$  accepts that the data is usually distributed. The Probability in the JB-test above is  $0.805856 > 0.05$  (the significance level used is 5%).  $H_0$  is rejected, the data is usually distributed, and  $H_a$  is accepted.

**Heteroscedasticity Test.** A heteroscedasticity test is used to assess the residual variance of data. Residual variance that is constant / does not change due to changes in one or more independent variables is called homoscedasticity, while its opposite is called heteroscedasticity. The test used to detect heteroscedasticity in this study is the Glejser test. In this test,  $H_0$  shows no symptoms of heteroscedasticity in the data, while  $H_a$  shows that the data is heteroscedastic. The Glejser test in this study uses a significance level of 5%, so when  $\text{Prob. Chi-Square} \leq \alpha$  (0.05), then  $H_0$  accepts, or there are symptoms of heteroscedasticity, and when  $\text{Prob. Chi-Square} > \alpha$  (0.05), then  $H_0$  rejects, or there are no symptoms of heteroscedasticity.

**Table 1. Glejser Test**  
Determining Heteroscedasticity

Heteroskedasticity Test: Glejser				
F-statistic	1.102535	Prob. F(5,89)	0.3648	
Obs*R-squared	5.541099	Prob. Chi-Square(5)	0.3535	
Scaled explained SS	6.180184	Prob. Chi-Square(5)	0.2891	
Test Equation:				
Dependent Variable: ARESID				
Method: Least Squares				
Date: 01/04/21 Time: 08:42				
Sample: 2012M02 2019M12				
Included observations: 95				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	25235.10	3013.909	8.372878	0.0000
D(DEPOSITO)	0.257899	0.144100	1.789716	0.0769
D(NPL)	-0.454029	0.881451	-0.515093	0.6078
D(SBK)	31470.66	24343.60	1.292769	0.1994
D(PERTUMBUHANPDB)	24719.69	59457.75	0.415752	0.6786
D(INFLASI)	-1758.789	4051.902	-0.434065	0.6653

R-squared	0.058327	Mean dependent var	27033.26
Adjusted R-squared	0.005424	S.D. dependent var	23730.51
S.E. of regression	23666.06	Akaike info criterion	23.04255
Sum squared resid	4.98E+10	Schwarz criterion	23.20384
Log-likelihood	-1088.521	Hannan-Quinn criteria.	23.10772
F-statistic	1.102535	Durbin-Watson stat	2.139587
Prob(F-statistic)	0.364815		27033.26

From the picture above, we can see the Prob. A chi-square value of  $0.3535 > 0.05$  (the significance level used is 5%) means that  $H_0$  is rejected or there are no symptoms of heteroscedasticity, and  $H_a$  is accepted.

**Multicollinearity Test.** Multicollinearity is a condition in which there is linear non-freedom in an equation. What is meant by linear freedom is when an independent variable is a linear combination of other independent variables. The occurrence of multicollinearity causes the variance of the estimated parameters to be greater than it should be so that the precision level of the estimate decreases. This study uses variance inflation factors as a multicollinearity detection test tool. There is no multicollinearity when the Centered  $VIF \leq 10$  value, while when the Centered  $VIF > 10$ , there is multicollinearity.

**Variance Inflation Factors Test.** Determining Multicollinearity. The picture above shows the Centered VIF value of the Deposit variable, amounting to  $1.258601 \leq 10$ ; this means there is no multicollinearity in the deposit variable. In the NPL variable, the Centered VIF value is  $1.005549 \leq 10$ ; this means that there is no multicollinearity in the NPL variable. In the SBK variable, the Centered VIF value of  $1.005549 \leq 10$  means no multicollinearity. In the GDP Growth variable, the Centered VIF value is  $1.083086 \leq 10$ ; this means that there is no multicollinearity in the GDP Growth variable. In the Inflation variable, the Centered VIF value of  $1.003637 \leq 10$  means that there is no multicollinearity in the Inflation variable. None of the variables in this study are indicated as multicollinear.

**Autocolleration Test.** Autocorrelation is the nature of regression residuals with a relationship, or not accessible, between observations in the data. This often occurs in time series data because time series data has the nature of Inertia. Inertia is an adjustment that occurs due to a shock to macroeconomic variables that is gradual and takes place over time. In this study, using the Breusch-Godfrey LM Test where, when  $\text{Prob. Chi-Square} > \alpha$ , then  $H_0$  accepts, or Autocorrelation symptoms occur, and when  $\text{Prob. Chi-Square} > \alpha$  (0.05), then  $H_0$  reject or no Autocorrelation symptoms occur.

**Tabel 2.** Breusch-Godfrey LM Test  
Determining Autocorrelation

Breusch-Godfrey Serial Correlation LM Test			
F-statistic	10.04790	Prob. F(2,88)	0.0001
Obs*R-squared	17.84710	Prob. Chi-Square(2)	0.0001
Test Equation:			
Dependent Variable: ARESID			
Method: Least Squares			
Date: 01/04/21 Time: 23:30			
Sample: 2012M01 2019M12			

Included observations: 96  
Presample missing value  
lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-261713.1	861015.7	-0.303959	0.7619
DEPOSITS	0.093774	0.194391	0.482400	0.6307
NPL	-1.051944	2.018101	-0.521254	0.6035
SBK	5773.248	24757.05	0.233196	0.8162
PERTUMBUHANPDB	19168.28	66029.15	0.290300	0.7723
D(INFLASI)	46.03984	8704.907	0.005289	0.9958
Resid (-1)	0.490850	0.116668	4.207242	0.0001
Resid (-2)	-0.068122	0.118580	-0.574481	0.5671
R-squared	0.185907	Mean dependent var		-1.97E-09
Adjusted R-squared	0.121150	S.D. dependent var		87488.87
S.E. of regression	82018.20	Akaike info criterion		25.54693
Sum squared resid	5.92E+11	Schwarz criterion		25.76062
Log-likelihood	-1218.252	Hannan-Quinn criteria.		25.63330
F-statistic	2.870827	Durbin-Watson stat		1.788722
Prob(F-statistic)	0.009533			

From the picture above, we can see the Prob. A chi-square value of  $0.0001 \leq 0.05$  (the significance level used is 5%) means  $H_0$  accepts or there are symptoms of Autocorrelation, and  $H_a$  is accepted. Autocorrelated data must be cured immediately so that the model can be used. To eliminate this autocorrelation problem, the first-level differentiation method is used; this method changes the equation model to first-level differentiation.

**Tabel 3.** Breusch-Godfrey LM Test  
Determining Autocorrelation

Breusch-Godfrey Serial Correlation LM Test				
F-statistic	0.388683	Prob. F(2,87)	0.6791	
Obs*R-squared	0.841330	Prob. Chi-Square(2)	0.6566	
Test Equation:				
Dependent Variable: ARESID				
Method: Least Squares				
Date: 01/04/21 Time: 23:30				
Sample: 2012M01 2019M12				
Included observations: 96				
Presample missing value				
lagged residuals set to zero.				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	316.5580	4770.359	0.066359	0.9472
DEPOSITO	-0.035719	0.233145	-0.153203	0.8786
NPL	0.360638	1.473897	0.244684	0.8073
SBK	680.8251	38439.95	0.017711	0.9859







Based on the results of the table analysis above, it can be concluded that the relationship between the dependent and independent variables is as follows:

$$\alpha = 49910,50 \text{ b1}$$

$$= -0,559558 \text{ b2}$$

$$= -7,199682 \text{ b3}$$

$$= -394,5521 \text{ b4}$$

$$= 161464,2 \text{ b5}$$

$$= 5241,105$$

Based on the results of the analysis, the multiple linear regression equation is obtained as follows:  $Y = 49910.50 - 0.559558 X_1 - 7.199682 X_2 - 394.5521 X_3 + 161464.2 X_4 + 5241.105 X_5 + e$ . The interpretation of the equation is as follows:

- The value of  $\alpha = 49910.50$  means that when the Deposit ( $X_1$ ), Nonperforming Loan ( $X_2$ ), Lending Interest Rate ( $X_3$ ), GDP Growth ( $X_4$ ), and Inflation ( $X_5$ ) variables are 0, the amount of Credit ( $Y$ ) is 49910.50.
- $B_1 = -0.559558$ , meaning that with the assumption that the variable Nonperforming Loan ( $X_2$ ), Lending Interest Rate ( $X_3$ ), GDP Growth ( $X_4$ ), and Inflation ( $X_5$ ) remains fixed, each increase in the Deposit variable ( $X_1$ ) by 1 billion rupiahs will reduce the amount of Credit ( $Y$ ) by 0.559558 billion rupiahs.
- $b_2 = -7.199682$  means that with the assumption that the Deposit variable ( $X_1$ ), Lending Interest Rate ( $X_3$ ), GDP Growth ( $X_4$ ), and Inflation ( $X_5$ ) remain fixed, each increase in the Nonperforming Loan variable ( $X_2$ ) by 1 billion rupiahs will reduce the amount of Credit ( $Y$ ) by 7.199682 billion rupiahs.
- $B_3 = -394.5521$  means that with the assumption that the Deposit ( $X_1$ ), Nonperforming Loan ( $X_2$ ), GDP Growth ( $X_4$ ), and Inflation ( $X_5$ ) variables remain fixed, each increase in the Lending Interest Rate ( $X_3$ ) variable by 1 percent will reduce the amount of Credit ( $Y$ ) by 394.5521 billion rupiah.
- $B_4 = 161464.2$  means that with the assumption that the Deposit ( $X_1$ ), Nonperforming Loan ( $X_2$ ), Lending Interest Rate ( $X_3$ ), and Inflation ( $X_5$ ) variables remain fixed, each increase in the GDP Growth variable ( $X_4$ ) by 1 percent will increase the amount of Credit ( $Y$ ) by 161464.2 billion rupiah.
- $B_5 = 5241.105$  means that with the assumption that the Deposit variable ( $X_1$ ), Nonperforming Loan ( $X_2$ ), Lending Interest Rate ( $X_3$ ), and GDP Growth ( $X_4$ ) remain fixed, any increase in the Inflation variable ( $X_5$ ) by 1 percent will increase the amount of Credit ( $Y$ ) by 161464.2 billion rupiah.

**T-test.** This test is used to see the effect of the independent variable individually on the dependent variable. The t-test output on Eviews processed data images of multiple linear regression results can be seen in t-statistic and Prob. In this study, the degrees of error used were 5% (0.05) and 10% (0.10).

#### 1) Effect of Deposits on Total Loans

##### a. Hypothesis

$H_0: \beta_1 = 0$ ; Deposits have no significant effect on the lending amount in commercial banks.

$H_a: \beta_1 \neq 0$ ; Deposits significantly affect the lending amount in commercial banks.

##### b. The degree of error used $\alpha$ is 5% (0.05)

##### c. Test statistics

If  $p\text{-value} > \alpha$ , then  $H_0$  is accepted, and  $H_a$  is rejected.



If the  $p\text{-value} \leq \alpha$ ,  $H_0$  is rejected, and  $H_a$  is accepted.

d. Conclusion

Prob. Value  $0.0151 \leq 0.05$  with a confidence degree value of 5% (0.05), then  $H_0$  is rejected, and  $H_a$  is accepted. This means that the third-party deposit variable negatively and significantly affects the amount of Credit at commercial banks.

2) The effect of NPL on the number of loans

a. Hypothesis  $H_0: \beta_1 = 0$ ; NPL has no significant effect on commercial bank lending. Hypothesis  $H_a: \beta_1 \neq 0$ ; NPL significantly affects commercial bank lending.

b. The degree of error used  $\alpha$  is 5% (0.05)

c. Test Statistic

If  $p\text{-value} > \alpha$ , then  $H_0$  is accepted, and  $H_a$  is rejected.

If the  $p\text{-value} \leq \alpha$ ,  $H_0$  is rejected, and  $H_a$  is accepted.

d. Conclusion Prob value.  $0.0000 \leq 0.05$  with a confidence degree value of 5% (0.05), then  $H_0$  is rejected, and  $H_a$  is accepted. This means that the NPL variable negatively and significantly affects the amount of Credit at commercial banks.

3) The effect of SBK on the number of loans

a. Hypothesis

$H_0: \beta_1 = 0$ ; SBK has no significant effect on commercial banks' lending.

$H_a: \beta_1 \neq 0$ ; SBK significantly affects the lending amount in commercial banks.

b. The degree of error used  $\alpha$  is 5% (0.05)

c. Test Statistics

If  $p\text{-value} > \alpha$ , then  $H_0$  is accepted, and  $H_a$  is rejected.

If the  $p\text{-value} \leq \alpha$ ,  $H_0$  is rejected, and  $H_a$  is accepted.

d. Conclusion

Prob. Value  $0.9918 > 0.05$  with a confidence degree value of 5% (0.05), then  $H_0$  accepts and  $H_a$  is rejected. This means that the SBK variable has a negative but insignificant effect on the amount of Credit in commercial banks.

4) Effect of GDP growth on loan amount

a. Hypothesis  $H_0: \beta_1 = 0$ ; GDP growth has no significant effect on the amount of lending to commercial banks.  $H_a: \beta_1 \neq 0$ ; GDP growth significantly affects the amount of lending to commercial banks.

b. The degree of error used  $\alpha$  is 10% (0.10)

c. Test Statistic

If  $p\text{-value} > \alpha$ , then  $H_0$  is accepted, and  $H_a$  is rejected.

If the  $p\text{-value} \leq \alpha$ ,  $H_0$  is rejected, and  $H_a$  is accepted.

d. Conclusion Prob. Value  $0.0865 \leq 0.10$  with a confidence degree value of 10% (0.10), then  $H_0$  is rejected, and  $H_a$  is accepted. This means that the GDP growth variable positively and significantly affects the amount of Credit at commercial banks.

5) Effect of Inflation on the Amount of Credit

a. Hypothesis  $H_0: \beta_1 = 0$ ; Inflation has no significant effect on commercial banks' lending.

Hypothesis  $H_a: \beta_1 \neq 0$ ; Inflation significantly affects commercial banks' lending.

b. The degree of error used  $\alpha$  is 5% (0.05)

c. Test Statistics



If  $p\text{-value} > \alpha$ , then  $H_0$  is accepted, and  $H_a$  is rejected.

If the  $p\text{-value} \leq \alpha$ ,  $H_0$  is rejected, and  $H_a$  is accepted.

- d. Conclusion Prob. Value  $0.4112 \leq 0.05$  with a confidence degree value of 5% (0.05), then  $H_0$  accepts and  $H_a$  is rejected. This means that the Inflation variable has a positive but insignificant effect on the amount of Credit in commercial banks.

**F-test.** This test is used to see the effect of the independent variables simultaneously on the dependent variable. The t-test output on the Eviews processed data image of multiple linear regression results can be seen in the F-statistic and Prob (F-statistic). In this study, the degree of error used for the F-test is 5% (0.05).

#### 1. Hypothesis Formulation

$H_0: \beta_1 = \beta_2 = \beta_3 = 0$ ; Simultaneously, the variables of Deposits, NPL, SBK, GDP Growth, and Inflation have no significant effect on the lending amount in commercial banks.

$H_a: \beta_1 \neq \beta_2 \neq \beta_3 \neq 0$ ; Simultaneously, the variables of deposits, NPL, SBK, GDP growth, and inflation significantly affect the lending amount to commercial banks.

#### 2. The degree of error used $\alpha$ is 5% (0.05)

#### 3. Test Statistics

-If  $p\text{-value} > \alpha$ , then  $H_0$  is accepted, and  $H_a$  is rejected.

-If the  $p\text{-value} \leq \alpha$ , then  $H_0$  is rejected, and  $H_a$  is accepted.

#### 4. Conclusion

Prob value.  $0.000000 \leq 0.05$  with a confidence degree value of 5% (0.05), then  $H_0$  is rejected, and  $H_a$  is accepted. This means that the variables of Deposits, NPL, SBK, GDP Growth, and Inflation significantly affect the amount of Credit at commercial banks.

**Coefficient of Determination ( $R^2$ ).** The coefficient of determination can show how much the equation model and independent variables can explain the number of dependent variables. In connection with this study, the regression equation model did not experience the addition and reduction of independent variables due to multicollinearity, so the R-squared ( $R^2$ ) test was used instead of the Adjusted R-squared. Based on Eviews processed data, the image of the extensive multiple linear regression results R-squared ( $R^2$ ) is 0.394033, which means that the independent variable can explain the dependent variable by 0.394033%.

## CONCLUSION

Based on the results of the analysis that has been stated in Chapter V regarding the effect of Deposits, Nonperforming Loan, Lending Interest Rates, GDP Growth, and Inflation on the amount of lending to Commercial Banks, it can be concluded as follows:

Based on partial testing, it is known that Deposits ( $X_1$ ) had a negative and significant effect on the amount of Credit channeled to commercial banks from 2012 to 2019.

1. Nonperforming Loan ( $X_2$ ) negatively and significantly affects the amount of Credit disbursed to commercial banks in 2012-2019.
2. Lending Interest Rates ( $X_3$ ) had a negative but insignificant effect on the amount of lending to commercial banks from 2012 to 2019.



3. The effect of GDP growth (X4) positively and significantly affected lending to commercial banks in 2012-2019.
4. Inflation (X5) had a positive but insignificant effect on commercial bank lending from 2012 to 2019.
5. Based on simultaneous testing, namely with the F test, it can be concluded that Deposits, NPL, SBK, GDP Growth, and Inflation together significantly affect the amount of lending to commercial banks in Indonesia in the long term for 2012-2019.

## REFERENCES

- Agus W. (2009), *Ekonometrika Pengantar dan Aplikasinya*, Edisi Ketiga, Cetakan Pertama, Penerbit Ekonisia, Yogyakarta.
- Aris F. (2013), *Analisis Faktor Internal dan Eksternal Bank yang Mempengaruhi Profitabilitas Bank Umum di Indonesia*. Artikel Ilmiah Management and Business Review. Vol. 10 No. 1 Januari 2013. Hal: 63 – 77. <https://doi.org/10.34149/jmbr.v10i1.70>
- Aulia R. (2013), *Pengaruh Capital Adequacy Ratio (CAR), Return on Asset (ROA), Biaya Operasional Terhadap Pendapatan Operasional (BOPO), Inflasi dan Kurs Terhadap Loan to Deposit Ratio (LDR) Pada Bank Umum*. Skripsi Program Sarjana Jurusan Manajemen Fakultas Ekonomi dan Bisnis Universitas Islam Negeri Syarif Hidayatullah, Jakarta.
- Ayu Y. S. (2013), *Analisis Pengaruh Inflasi, Suku Bunga BI dan Produk Domestik Bruto Terhadap Return on Asset (ROA) Bank Syariah di Indonesia*. Artikel Ilmiah Jurusan Manajemen Fakultas Ekonomi Universitas Negeri Surabaya, Surabaya.
- Badan Pusat Statistik, 2020, Indeks Harga Konsumen dan Inflasi Bulanan Indonesia, <https://www.bps.go.id/subject/3/inflasi.html#subjekViewTab3>, Di unduh pada tanggal 29 Nopember 2020.
- Badan Pusat Statistik, 2020, Laju Pertumbuhan PDB, <https://www.bps.go.id/indicator/169/108/1/-seri-2010-laju-pertumbuhan-pdb-menurutpengeluaran.html>, Di unduh pada tanggal 29 Nopember 2020.
- Bank Indonesia, 2020, Tentang BI Profil organisasi, <https://www.bi.go.id/id/tentangbi/profil/organisasi/Default.aspx#floating-1>, Di unduh pada tanggal 01 Desember 2020.
- Bank Indonesia, 2020, Data Inflasi, <https://www.bi.go.id/id/statistik/indikator/data-inflasi.aspx>, Di unduh pada tanggal 05 Desember 2020.
- Bank Indonesia, 2020, Suku Bunga Pinjaman Rupiah yang Diberikan, <https://www.bi.go.id/id/statistik/ekonomi-keuangan/seki/Default.aspx>, Di unduh pada tanggal 05 Desember 2020.
- Cahyani, Y. T. Pengaruh Dana Pihak Ketiga, Non Performing Loan Dan Loan To Deposit Ratio Terhadap Penyaluran Kredit Pada Bank Umum Terdaftar Di Bursa Efek Indonesia Periode 2012-2017.
- Dewi, M. R., Yadnya, I. P., & Sudiartha, G. M. (2017). *Pengaruh Dana Pihak Ketiga, Loan To Deposit Ratio Dan Rentabilitas Terhadap Kredit LPD Kabupaten Badung* (Doctoral dissertation, Udayana University).





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- Ghalih F. H. (2014), *Pengaruh Dana Pihak Ketiga, Non Performing Loan Dan Return On Assets Terhadap Penyaluran Kredit Pada Bank Umum Yang Terdaftar Di Bursa Efek Indonesia Periode 2009-2012*. Skripsi Program Sarjana Jurusan Manajemen Universitas Diponegoro, Semarang.
- Granita., Jen K. (2011), *Analisis Pengaruh DPK, CAR, ROA, NPL, NIM, BOPO, Suku Bunga, Inflasi, dan Kurs terhadap LDR (Studi pada Bank Umum Swasta Nasional Devisa periode 2002- 2009)*. Skripsi Universitas Diponegoro. <http://eprints.undip.ac.id/> Diakses tanggal 06 Nopember 2020.
- Haryanto., Satrio B., E. T. (2017), *Analisis Pengaruh NIM, NPL, BOPO, BI Rate dan CAR Terhadap Penyaluran Kredit Bank Umum Go Public Periode Tahun 2012-2016*. Jurnal Manajemen 06 (04), Diponegoro.
- Kasmir. (2014), *Bank Dan Lembaga Keuangan Lainnya*, Edisi Revisi, Cetakan Ketujuh belas, Penerbit PT. RajaGrafindo Persada, Jakarta.
- Kurniasari & Sartika D. (2012). "Analisis Pengaruh Faktor Industri Keuangan, Makro Ekonomi Dan Karakteristik Bank Terhadap Profitabilitas Bank Syariah Di Indonesia (Studi Kasus Bank Syariah Di Indonesia Periode 2006-2010)" *Skripsi*. Fakultas Ekonomi Universitas Sebelas Maret Surakarta.
- Mochamad D. A. (2012), *Ekonometrika Esensi dan Aplikasi Dengan Menggunakan EViews*, Edisi Pertama, Cetakan Pertama, Penerbit Erlangga, Jakarta.
- Otoritas Jasa Keuangan, (2012), Laporan Keuangan Perbankan 2012, <https://ojk.go.id/id/kanal/perbankan/data-dan-statistik/laporan-keuangan-perbankan/Default.aspx>, Di unduh pada tanggal 6 Nopember 2020.
- Otoritas Jasa Keuangan, (2013), Laporan Keuangan Perbankan 2013, <https://ojk.go.id/id/kanal/perbankan/data-dan-statistik/laporan-keuangan-perbankan/Default.aspx>, Di unduh pada tanggal 6 Nopember 2020.
- Otoritas Jasa Keuangan, (2014), Laporan Keuangan Perbankan 2014, <https://ojk.go.id/id/kanal/perbankan/data-dan-statistik/laporan-keuangan-perbankan/Default.aspx>, Di unduh pada tanggal 6 Nopember 2020.
- Otoritas Jasa Keuangan, (2015), Laporan Keuangan Perbankan 2015, <https://ojk.go.id/id/kanal/perbankan/data-dan-statistik/laporan-keuangan-perbankan/Default.aspx>, Di unduh pada tanggal 6 Nopember 2020.
- Otoritas Jasa Keuangan, (2016), Laporan Keuangan Perbankan 2016, <https://ojk.go.id/id/kanal/perbankan/data-dan-statistik/laporan-keuangan-perbankan/Default.aspx>, Di unduh pada tanggal 6 Nopember 2020.
- Otoritas Jasa Keuangan, (2017), Laporan Keuangan Perbankan 2017, <https://ojk.go.id/id/kanal/perbankan/data-dan-statistik/laporan-keuangan-perbankan/Default.aspx>, Di unduh pada tanggal 6 Nopember 2020.
- Otoritas Jasa Keuangan, (2018), Laporan Keuangan Perbankan 2018, <https://ojk.go.id/id/kanal/perbankan/data-dan-statistik/laporan-keuangan-perbankan/Default.aspx>, Di unduh pada tanggal 6 Nopember 2020.
- Otoritas Jasa Keuangan, (2019), Laporan Keuangan Perbankan 2019, <https://ojk.go.id/id/kanal/perbankan/data-dan-statistik/laporan-keuangan-perbankan/Default.aspx>, Di unduh pada tanggal 6 Nopember 2020.
- Putra, I. G. O. P., & Rustariyuni, S. D. (2015). Pengaruh DPK, BI Rate dan NPL Terhadap Penyaluran Kredit Modal Kerja Pada BPR di Provinsi Bali Tahun 2009-2014. *E-jurnal Ekonomi Pembangunan Universitas Udayana*, 4(5), 451-464.

- Suryawati, N. M. A. N., Cipta, W., Susila, G. P. A. J., & SE, M. (2014). Analisis Pengaruh Dana Pihak Ketiga (DPK), Capital Adequacy Ratio (CAR), Non Performing Loan (NPL), dan Loan to Deposit Ratio (LDR) Terhadap Jumlah Penyaluran Kredit Pada LPD Desa Pemaron Tahun 2010-2013. *Jurnal Manajemen Indonesia*, 2(1).
- Suci Mulyani, (2017), *Pengaruh Dana Pihak Ketiga, Non Performing Loan, Dan Loan To Deposit Ratio Terhadap Penyaluran Kredit Pada PT. Bank Perkreditan Rakyat Di Kabupaten Bima Periode 2013-2016*. Skripsi Program Sarjana Jurusan Manajemen Universitas Islam Negeri Alauddin, Makasar.
- Winarno, W. W. (2017). Analisis ekonometrika dan statistika dengan eviws.