ANALYSIS OF SOLVENCY VARIABLES IN MODERATING THE EFFECT OF MACROECONOMIC VARIABLES ON THIRD PARTY FUNDS ON BCA SYARIAH

Zumrotul Ainiah¹, Anton Bawono² UIN Salatiga zumrotulainiah25@gmail.com

Abstract

This research was conducted to analyze solvency ability in moderating the effect of macroeconomic factors on third party funds at BCA Syariah for the 2013-2022 period. This type of research is quantitative research using MRA or Moderated Regression Analysis as an analytical tool. The data used in this study is secondary data with s monthly period time series pattern obtained from financial reports issued by BCA Syariah. This software for data analysis used in this study is Eviews 10. The results obtained are that inflation has no effect on third party funds, the BI Rate has no effect on third party funds, the money supply has a positive and significant effect on third party funds, gross domestic product has no influence on third party funds, solvency can moderate the relationship of currency exchange rates to third party funds, and solvency can moderated the relationship of the joint stock price index to third party funds.

Key words: Macroeconomic, Solvency, Third Party Funds

Introduction

Funds are the most important thing in the operation of financial institutions. Funds that support the implementation of activities in banking do not only come from within the company or bank, but also from outside the bank which are third party funds. Third party funds can be in the form of demand deposits, savings, and time deposits deposited with banks, so that banks collect public funds and the public can collect them at any time. So that if the funds obtained are relatively low, it will hamper banking operations as an intermediary institution.

In this case, BCA Syariah third party funds experienced fluctuations that tended to increase, starting from February 2013 which showed an increase until December 2022 with a difference of 8,334,335 million. However, if you look at third party funds in September-October 2022, it has decreased to 643,820 million. In addition, third party funds in Islamic commercial bank and Islamic business units in Indonesia tend to increase and fluctuate. Fluctuations that occur in third party funds can be influenced by various factors, such as macroeconomic factors in Indonesia. There are several macroeconomic variables that are of concern to this research, namely inflation, BI Rate, currency

exchange rates, money supply, gross domestic product, and the composite stock price index. In addition, the axistence of good bank solvency will also have a positive impact on public trust so that it will increase third party funds at the bank.

Where currently the macro economy, such as inflation and the BI Rate, has fluctuated and tends to decline. Followed by relatively rising exchange rates for the rupiah, money supply, gross domestic product, and the composite stock price index. Then the state of solvency which is above the safe limit. The statement that macroeconomic affects third party funds (TPF) has been examined by:

NO	Researcher	Result
1.	Saragih & Esya (2016)	Inflation has a significant negative effect on TPF.
2.	Ramadhani & Abdullah	Inflation showed a negative and insignificant
	(2021)	effect on TPF.
3.	Firdayanti & Arinta (2021)	BI Rate has a negative and significant influence on TPF.
4.	Ferdiansyah et al. (2015)	BI Rate has no influence on TPF.
5.	Jatnika (2020)	Exchange rate has a significant positive effect on TPF.
6.	Anik & Prastiwi (2018)	Exchange rate has no significant effect on TPF.
7.	Anik & Prastiwi (2018)	Money supply has a significant positive effect on TPF.
8.	Hadiani (2018)	Money supply has no significant effect on TPF.
9.	Sugiharti et al. (2021)	Gross domestic product has a significant positive effect on TPF.
10.	Jayadi (2019)	Gross domestic product has no significant effect on TPF.
11.	Saekhu (2017)	Composite stock price index has a significant positive effect on TPF.
12.	Joeharin (2019)	Composite stock price index has no significant effect on TPF.

Table 1. Research Gap

According to Budisantoso & Triandaru (2006), if public trust is higher, the collection of third party funds will also be achieved efficiently. This trust can be created with good solvency. Thus, this study uses the solvency variable as a moderator between the influence of macroeconomic factors on BCA Syariah third party funds.

The author chose BCA Syariah is because this Islamic Commercial Bank is an Islamic banking which shows an increase in TPF in 2021 of 12.1% (BCA Syariah, 2022). Even won the first Bank Syariah savings in 2021 (BCA Syariah, 2021). Previous studies generally raised macroeconomic variables as independent research variables. This research tries to fill the gap that occurs in research on TPF which are influenced by several

Jurnal Al Iqtishad Volume 19 Nomor 1 Tahun 2023

macroeconomic factor. Accompanied by a new study with the solvency variables as a moderator. The solvency variable was chosen as a moderator base on signaling theory. Of course, the essence of the phenomenon to be solved is how much influence macroeconomic factors influence third party funds with solvency as a moderator so that such a large increase in TPF at BCA Syariah is achieved. With this research it is hoped that it can contribute to the field of education or lecture materials, as support for deepening knowledge about the economics field. Based on the description above, the researcher is interested in conducting research regarding several indicators that can have an impact on TPF and will be carried out at BCA Syariah, by focusing on the title: "Analysis of Solvency Variables in Moderating the Effect of Macroeconomic Variables on Third Party Funds (Case Study on BCA Syariah for the 2013-2022 Period)"

LITERATURE REVIEW

Theoretical Basic

1. Signaling theory

In this theory, every action taken by the company's management will provide clues to investors regarding their views on the management and prospects of the company (Bringham & Houston, 2014).

2. Macroeconomic theory

Theory issues analyzed in macroeconomics include various things such as economic growth, balance of payments, inflation, unemployment, instability of economic activity, balance and trade (Sukirno, 2017). Problems that occur in the economy and the role of government in dealing with them.

3. Third party funds (Y Variable)

Third party funds are funds that have been successfully collected or collected by the bank and these funds come from outside the bank or the public. These funds can be in the form of savings deposits, time deposits, and demand deposits. This source of funds is a very important source of funds because it plays a very important role in the success of the bank in financing its operations (Andrianto et al., 2019).

4. Inflation (X1 Variable)

Inflation is described when there is a continuous increase in prices (Boediono, 2001). In the monetary aspect, the banking industry in mobilizing funds from the

public will experience obstacles when the inflation rate tends to be high and cannot be controlled.

5. BI Rate (X2 Variable)

Bank Indonesia defines the BI Rate as a policy interest rate indicating a monetary policy stance determined by Bank Indonesia and announced to the public.

6. Currency exchange rates (X3 Variable)

Exchange rate is the price per unit of foreign currency if it is in the form of domestic or domestic currency. The currency exchange rate used in this study is the rupiah exchange rate against the US Dollar.

7. Money supply (X4 Variable)

In a limited sense, the money supply is defined as all cash or can be called currency owned by the public as well as demand deposits kept at commercial banks. In addition, the more complex understanding of the money supply is all the money in circulation in a narrow or limited manner accompanied by quasi-money, which in this case can be in the form of savings or time deposits (Manurung & Rahardja, 2004).

8. Gross domestic product (X5 Variable)

GDP is a value of goods or services in a country, whose production activities use production factors belonging to citizens and foreign or foreign countries (Sukirno, 2013).

9. Composite stock price index (X6 Variable)

The composite stock price index is a combined index of all stocks listed on the stock exchange, with this the composite stock price index will show price movements of various stocks.

10. Solvability (Z Variable)

The solvency ratio is a ratio that is used to measure the ability of a company's assets to be funded by debt (Kasmir, 2013). In this study, the solvency ratio is measured using the Debt to Assets Ratio.

Previous Research

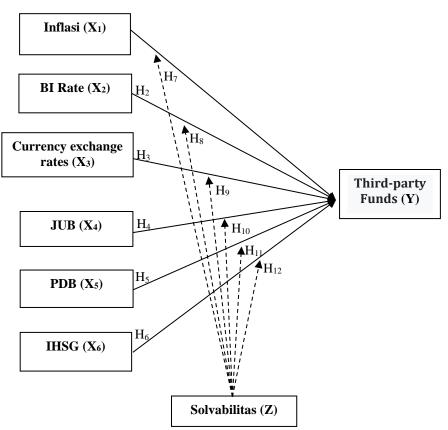
The following is a summary table of previous research related to this research:

NO	Researcher	Result	
1.	Saragih & Esya (2016)	Inflation has a significant negative effect on TPF.	
2.	Ramadhani & Abdullah	Inflation showed a negative and insignificant	
	(2021)	effect on TPF.	
3.	Firdayanti & Arinta (2021)	BI Rate has a negative and significant influence on TPF.	
4.	Ferdiansyah et al. (2015)	BI Rate has no influence on TPF.	
5.	Jatnika (2020)	Exchange rate has a significant positive effect TPF.	
6.	Anik & Prastiwi (2018)	Exchange rate has no significant effect on TPF.	
7.	Anik & Prastiwi (2018)	Money supply has a significant positive effect or TPF.	
8.	Hadiani (2018)	Money supply has no significant effect on TPF.	
9.	Sugiharti et al. (2021)	Gross domestic product has a significant positive effect on TPF.	
10.	Jayadi (2019)	Gross domestic product has no significant effec on TPF.	
11.	Saekhu (2017)	Composite stock price index has a significan positive effect on TPF.	
12.	Joeharin (2019)	Composite stock price index has no significan effect on TPF.	

Table 2. Previous Research

Hypothesis





The hypothesis in the study is:

H ₁ :	Inflation has a significant negative effect on third party funds
H ₂ :	BI Rate has a significant negative effect on third party funds
H ₃ :	Currency Exchange Rate has a significant positive effect on third party funds
H4:	The Money Supply has a significant positive effect on third party funds
H ₅ :	Gross Domestic Product has a significant positive effect on third party funds
H ₆ :	The Composite Stock Price Index has a significant positive effect on third party
	funds
H ₇ :	Solvency is able to moderate the effect of inflation on third party funds
H ₈ :	Solvency is able to moderate the effect of BI Rate on third party funds
H9:	Solvency is able to moderate the effect of currency exchange rates on third party
	funds
H ₁₀ :	Solvency is able to moderate the effect of the money supply on third party funds
H ₁₁ :	Solvency is able to moderate the effect of gross domestic product on third party
	funds
H ₁₂ :	Solvency is able to moderate the effect of Composite Stock Price Index on third
	party funds

RESEARCH METHODS

Type of Research

In this study, the type of research approach is by means of a quantitative approach, one of the objectives of which is to determine the relationship or correlation that occurs between variables. This study uses secondary data types, with a monthly period time series pattern.

Population and Sample

The population in this study is all data regarding inflation, currency exchange rate (Rupiah against the USD), BI Rate, money supply, gross domestic product, composite stock price index, solvency, and third party funds at BCA Syariah. This study will use some of the data to be used as a sample using the judgment sampling method. The samples used were inflation data, currency exchange rates BI Rate, money supply, gross domestic

product, composite stock price index, solvency, and Third Party funds during 2013-2022 with monthly periods and 120 samples were obtained (January 2013 to December 2022)

Data Collection Techniques

- 1. Library research = This data collection was carried out by means of library research
- 2. Field research = Researcher use secondary data in the form of time series data
- 3. Internet research = With the aim of obtaining data whose development is in line with the progress of science

Operational Variable

Variables	Indicator
Inflation (X ₁)	$INF_t = \frac{IHK_t - IHK_{t-1}}{IHK_{t-1}} \times 100\%$
BI Rate (X ₂)	BI Rate
Exchange Rate (X ₃)	$Q = S \frac{P}{P *}$
Money Supply (X ₄)	$M_2 = M_1 + TD$
	$M_2 = (C + D) + TD$
Gross Domestic Product	GDP = C + I + G + (X-I)
(X_5)	
Composite Stock Price	$CSPI = \frac{\sum Market Value}{\sum Basic Value} \times 100\%$
Index (X_6)	$\Sigma Basic Value$
Third Party Funds (Y)	TPF = Current Account + Savings + Deposits
Solvency (Z)	$DR = \frac{Total \ Debt}{Total \ Assets} \times 100\%$

Table 3. Operational Variable

Data Analysis Technique

The regression equation of this study is:

$$\begin{split} Y &= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_1 * Z + \beta_8 X_2 * Z \\ &+ \beta_9 X_3 * Z + \beta_{10} X_4 * Z + \beta_{11} X_5 * Z + \beta_{12} X_6 * Z + e \end{split}$$

1. Descriptive Statistics Test

A descriptive statistics test is a test that is used to determine maximum value, the mean value, minimum value, median value, and the standard deviation of all variables to be studied.

2. Stationarity Test

Jurnal Al Iqtishad Volume 19 Nomor 1 Tahun 2023

Testing the data through the stationarity test is using the Unit Root test with the Augmented - Dickey-Fuller test. The decision taken in this test is if the probability value is less than 0.05, it can be said that the data is stationary.

3. Moderated Regression Analysis Test

The Moderated Regression Analysis (MRA) test is a linear multiple regression with a special application to the regression equation because there is an element that interacts with the aim of obtaining information about the moderating variable which can strengthen or even weaken the influence between the independent and dependent variables.

- 4. Classic Assumption Test
 - a. Multicollinearity Test

The multicollinearity test is a test of one independent variable and other independent variables in a linearly correlated model, usually approaching perfection in the correlation. In this study, multicollinearity testing uses an auxiliary

b. Normality Test

The normality test is a test used to find out whether the residuals are normally distributed or not. This study uses the Jarque-Bera test.

c. Heteroscedasticity Test

In the heteroscedasticity test, the regression model can be known to be related to the presence of heteroscedasticity if there is variance from one observation to another that is not the same. This study uses Breusch-Pagan-Godfrey to test heteroscedasticity.

d. Autocorrelation Test

In the autocorrelation test, it means that there is an autocorrelation between observational data based on time sequence, so that a datum appears that is influenced by the previous datum. This study uses the Durbin Watson technique.

- 5. Statistic Test
 - a. Coefficient of Determination (R2)

This coefficient of determination test was carried out to determine the level of accuracy of the regression line that occurs in representing observational data.

b. F test

The F test has the objective of testing whether all the variables in the regression model simultaneously have an influence on the dependent variable. This test is carried out using F statistics with the following decision-making criteria:

- 1) If the probability is significant > 0.05, then H1 is rejected.
- 2) If the probability is significant <0.05, then H1 is accepted.
- c. t test

The t test has the objective of examining the effect of the independent variables individually in explaining the variation of the dependent variable. This test is carried out using the following decision-making criteria:

- 1) If the probability is significant > 0.05, then H1 is rejected.
- 2) If the probability is significant <0.05, then H1 is accepted.

RESULT AND DISCUSSION

Descriptive Statistics Test

	X1	X2	X3	X4	X5	X6	Ζ	Y
Mean	0.041136	0.054604	13491.76	5.46E+15	3.51E+15	5604.946	0.770806	4.47E+12
Median	0.034800	0.052500	13817.50	5.35E+15	3.51E+15	5590.265	0.774130	4.54E+12
Max.	0.087900	0.077500	16367.00	8.53E+15	5.11E+15	7228.910	0.856685	9.48E+12
Min.	0.013200	0.035000	9667.000	3.27E+15	2.24E+15	4195.090	0.698443	1.15E+12
Std. Dev.	0.020194	0.014577	1368.765	1.40E+15	7.52E+14	800.1838	0.043038	2.11E+12
Skewness	0.690303	0.197473	-1.086208	0.334586	0.260702	0.158144	0.020603	0.113363
Kurtosis	2.525174	1.654768	4.060149	2.121250	2.329103	2.033957	1.727884	1.971681
Jarque-Bera	10.65765	9.828160	29.21653	6.099966	3.609820	5.166387	8.099884	5.544220
Prob.	0.004850	0.007342	0.000000	0.047360	0.164489	0.075532	0.017423	0.062530
Sum Sum Sq.	4.936300	6.552500	1619011.	6.56E+17	4.21E+17	672593.5	92.49676	5.37E+14
Dev.	0.048529	0.025287	2.23E+08	2.32E+32	6.72E+31	76195004	0.220416	5.31E+26
Obs.	120	120	120	120	120	120	120	120

169

Based on the results of the statistical descriptive test in table 4, the information obtained is that the number of observations reaches 120 (n). The following is an explanation of the results of the statistical descriptive test that has been carried out:

- 1. The inflation variable (X1) shows an average value of 0.041136 and a median value of 0.034800. Meanwhile, the maximum value is 0.087900, the minimum value is 0.013200, and the standard deviation is 0.020194.
- 2. Furthermore, the BI Rate variable (X2) has an average value of 0.054604 and a median value of 0.052500. Furthermore, the maximum value is 0.077500, the minimum value is 0.035000, and the standard deviation is 0.014577.
- 3. Then the currency exchange rate variable (X3) has an average value of 13491.76 and a median value of 13817.50. Meanwhile, the maximum value is 16367, the minimum value is 9667, and the standard deviation is 1368,765.
- 4. There is also a money supply variable (X4) which has an average value of 5.46E+15 and a median value of 5.35E+15. Meanwhile, the maximum value is 8.53E+15, the minimum value is 3.27E+15, and the standard deviation is 1.40E+15.
- 5. The gross domestic product variable (X5) shows an average value of 3.51E+15 and a median value of 3.51E+15. GDP also has a maximum value of 5.11E+15, a minimum value of 2.24E+15, and a standard deviation of 7.52E+14.
- 6. Furthermore, the variable stock price index (X6) has an average value of 5604,946 and a median value of 5,590,265. And for the maximum value of 7228,910, the minimum value is 4195,090, and the standard deviation is 800,1838.
- 7. Then the solvency variable (Z) has an average value of 0.770806 and a median value of 0.774130. Meanwhile, the maximum value is 0.856685, the minimum value is 0.698443, and the standard deviation is 0.043038.
- 8. As for the variable third party funds (Y) shows an average value of 4.47E+12 and a median value of 4.54E+12. Meanwhile, the maximum value is 9.48E+12, the minimum value is 1.15E+12, and the standard deviation is 2.11E+12.

Stationarity Test

No	Variable	Probability	Information	
1.	X1	0.3100		
2.	X2	0.4892		
3.	X3	0.1502		
4.	X4	1.000	and stations and	
5.	X5	0.9785	not stationary	
6.	X6	0.6002		
7.	Z	0.1423		
8.	Y	0.9984		

Table 5. Stationarity Test Results

Sources: Author's Processed Data, 2023

Based on the test results in table 5, it can be concluded that the variable data is not stationary at the level because there are research variables that have a probability value of more than 0.05. It is necessary to re-test at the 1st difference level. The following are the results of the stationarity test at the 1st difference level:

No	Variable	Probability	Information
1.	X1	0.0000	
2.	X2	0.0000	
3.	X3	0.0000	Stationary
4.	X4	0.0000	
5.	X5	0.0000	
6.	X6	0.0000	
7.	Z	0.0000	
8.	Y	0.0000	

Table 6. Stationarity Test Results After Curing

Sources: Author's Processed Data, 2023

Based on retesting to the 1st difference level as shown in table 6, it can be concluded that all research variable data are stationary because the probability value shows a number less than 0.05. So that it is said to be feasible because it meets the stationarity test conditions and can be continued to carry out the next stage of the test.

Classic Assumption Test

1. Multicollinearity Test

 Table 7. Multicollinearity Test Results

Variable	R -Square	Main R-Square	Information	
X1	0.998001	0.631544	Multi callin conitae	
X2	0.994652	0.631544	Multicollinearity	

X3	0.996866	0.631544	
X4	0.993436	0.631544	
X5	0.995931	0.631544	
X6	0.996447	0.631544	
X1Z	0.998258	0.631544	
X2Z	0.996951	0.631544	
X3Z	0.998225	0.631544	
X4Z	0.998206	0.631544	
X5Z	0.998099	0.631544	
X6Z	0.997329	0.631544	

Sources: Author's Processed Data, 2023

Analysis of the results of the multicollinearity test listed in table 7 is that the research data shows symptoms of multicollinearity. In dealing with this problem, it must be retested by removing or eliminating several variables.

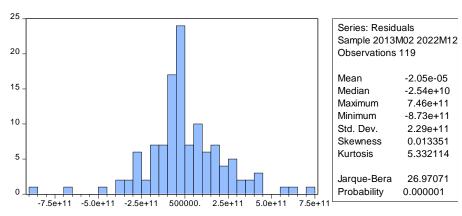
Variabel	R -Square	R-Square Utama	Keterangan
X1	0.089887	0.234175	
X2	0.052367	0.234175	
X4	0.159928	0.234175	Not symptomatic of
X5	0.027322	0.234175	multicollinearity
X3Z	0.204592	0.234175	
X6Z	0.007801	0.234175	

Sources: Author's Processed Data, 2023

Based on the test results as shown in table 8, the problem has been solved by eliminating the variables X3, X6, X1Z, X2Z, X4Z, and X5Z. So that the observational data in this study were free and cured of multicollinearity symptoms.

2. Normality Test

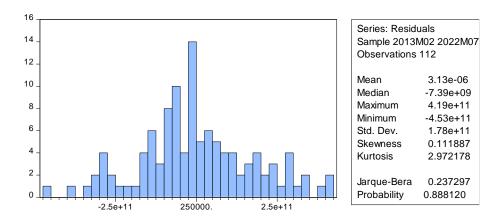
Picture 2. Normality Test Results



Sources: Author's Processed Data, 2023

Jurnal Al Iqtishad Volume 19 Nomor 1 Tahun 2023

Based on the test results as shown in picture 2, with a Jarque-Bera value of 26.97071 and a probability value of 0.000001, it can be concluded that the research data was not channeled normally as evidenced by a probability value of less than 0.05. To overcome this problem, it is necessary to remove outliers



Picture 3. Normality Test Results After Curing

Sources: Author's Processed Data, 2023

Based on the test results as shown in picture 3, with a Jarque-Bera value of 0.237297 and a probability value of 0.888120, it can be concluded that this research data has been distributed normally.

3. Heteroscedasticity Test

Table 9. Heteroskedasticity Test Results

Obs*R-squared 8.71	6106 Prob. F(6,105)2212 Prob. Chi-Squar0696 Prob. Chi-Squar					

Heteroskedasticity Test: Breusch-Pagan-Godfrey

Sources: Author's Processed Data, 2023

Based on table 9, it can be said that the research data did not experience symptoms of heteroscedasticity as evidenced by the Probability F value which shows the number 0.1935 so that it exceeds 0.05.

4. Autocorrelation Test

R-squared	0.291408	Mean dependent var	5.97E+10
Adjusted R-squared	0.250917	S.D. dependent var	2.11E+11
S.E. of regression	1.83E+11	Akaike info criterion	54.76270
Sum squared resid	3.51E+24	Schwarz criterion	54.93261
Log likelihood	-3059.711	Hannan-Quinn criter.	54.83164
F-statistic	7.196852	Durbin-Watson stat	2.439428
Prob(F-statistic)	0.000002		

Table 10. Autocorrelation Test Results

Sources: Author's Processed Data, 2023

Table 11.	Durbin	Watson	Comparison
I UDIC III	Durom	i i acour	Comparison

Nilai Dl	Nilai dU	Nilai 4-dU	Nilai 4-dL	Nilai DW
1.5616	1.8263	2.1737	2.4384	2.4394

Sources: Author's Processed Data, 2023

Based on table 11, the DW value is in the area of more than the 4-dL value so that a negative autocorrelation occurs. To overcome this, the AR (1) formula is added to the regression model. Then the results of the autocorrelation test after being cured are as follows:

R-squared	0.326957	Mean dependent var	5.97E+10
Adjusted R-squared	0.274682	S.D. dependent var	2.11E+11
S.E. of regression	1.80E+11	Akaike info criterion	54.74788
Sum squared resid	3.34E+24	Schwarz criterion	54.96633
Log likelihood	-3056.881	Hannan-Quinn criter.	54.83651
F-statistic	6.254548	Durbin-Watson stat	2.063898
Prob(F-statistic)	0.000001		

Table 12. Autocorrelation Test Results After Curing

Sources: Author's Processed Data, 2023

Table 13. Durbin Watson Comparison After Curing

Nilai dL	Nilai dU	Nilai DW	Nilai 4-dU	Nilai 4-dL
1.5616	1.8263	2.0638	2.1737	2.4384

Sources: Author's Processed Data, 2023

Based on table 12, the DW value is between the dU value and the 4-dU value, so that in this study there were no signs of autocorrelation either positive or negative.

Statistic Test

Table 14. MRA Test Results

Dependent Variable: D(Y_DPK) Method: ARMA Maximum Likelihood (OPG - BHHH) Date: 04/12/23 Time: 09:41 Sample: 2013M02 2022M07 Included observations: 112 Convergence achieved after 10 iterations Coefficient covariance computed using outer product of gradients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	2.81E+10	1.86E+10	1.512610	0.1334
D(X1_INFLASI)	-1.24E+12	4.17E+12	-0.297629	0.7666
D(X2_BIRATE)	6.09E+12	1.09E+13	0.560560	0.5763
D(X4_JUB)	0.000810	0.000240	3.381938	0.0010
D(X5_PDB)	-0.000433	0.000308	-1.407478	0.1623
D(X3Z)	1.26E+08	45077774	2.798861	0.0061
D(X6Z)	3.64E+08	66980511	5.435633	0.0000
AR (1)	-0.226051	0.086198	-2.622469	0.0101
SIGMASQ	2.98E+22	4.02E+21	7.404863	0.0000
R-squared	0.326957	Mean dependent var		5.97E+10
Adjusted R-squared	0.274682	S.D. dependent var		2.11E+11
S.E. of regression	1.80E+11	Akaike info criterion		54.74788
Sum squared resid	3.34E+24	Schwarz criterion		54.96633
Log likelihood	-3056.881	Hannan-Quinn criter.		54.83651
F-statistic	6.254548	Durbin-Watson stat		2.063898
Prob(F-statistic)	0.000001			
Inverted AR Roots	23			

Sources: Author's Processed Data, 2023

1. Coefficient of Determination (R-Square)

The results of the regression test, it can be seen that the coefficient of determination is 0.274682, so it can be concluded that 27.47% of BCA Syariah third party funds in 2013-2022 can be explained by variations, namely inflation, BI Rate, money supply, GDP, value currency exchange moderated by solvency, and composite stock price index moderated by solvency. Meanwhile, 72.53% can be explained by other independent variations that are not present in this study.

2. F test

The results of the regression test as shown in table 14, it can be seen that the F statistic value is 0.000001, it can be concluded that the variables inflation, BI Rate, money supply, GDP, currency exchange rates are moderated by solvency, and

CSPI is moderated by solvency. Simultaneously, it has an impact on BCA Syariah TPF for 2013-2022.

- 3. T-test
 - a. Inflation

Inflation shows a negative and insignificant relationship to third party funds.

b. BI Rate

The BI Rate shows a positive and insignificant relationship to third party funds.

c. Money Supply

The money supply shows a positive and significant relationship to third party funds

d. Gross Domestic Product

Gross domestic product shows a negative and insignificant relationship to third party funds.

e. Currency Exchange Rates are moderated by Solvability

Solvency can moderate and strengthen the influence between currency exchange rates on third party funds.

f. Composite Stock Price Index are moderated by Solvability Solvency is able to moderate and strengthen the influence of the CSPI on third party funds.

DISCUSSION OF RESEARCH RESULTS

Analysis Of the Equations in the Model

1. Effect of Inflation on Third Party Funds

In accordance with the tests that have been carried out, as shown in table 14, the results obtained are that the inflation variable has a coefficient value of - 1.24E+12 which means negative, while the probability value is 0.7666 which means it exceeds 0.05 so it is not significant. So it can be concluded that inflation shows a negative and insignificant relationship to third party funds. Thus, the first hypothesis in this study was rejected. When connected with macroeconomic theory, if this inflation occurs, it can be seen that there is an increase in prices in the economy. Increased prices in the market can be caused by increased demand. In

addition, inflation that occurs can also cause a decrease in the value of the currency itself. This can result in a lack of public interest in putting their money in the bank. However, the absence of inflation on third party funds illustrates that the high and low levels of inflation in Indonesia do not have a significant effect on BCA Syariah third party funds. In addition, in response to inflation, the Central Bank will increase interest rates. Due to the existence of interest rate instruments in conventional banks, conventional banking will show a more significant effect of inflation that occurs with changes in third party funds. Meanwhile, Islamic banks do not have a significant impact.

This is the same as previous research conducted by Ramadhani & Abdullah (2021), which stated that inflation shows a negative relationship and does not have a significant effect on third-party funds for Islamic commercial banks.

2. Effect of the BI Rate on Third Party Funds

From the test results as shown in table 14, the information obtained is that the BI Rate variable has a coefficient value of 6.09E+12 which means positive, while the probability value is 0.5763 which exceeds 0.05 so it has no significant effect. So it can be concluded that the BI Rate shows a positive and insignificant relationship to third party funds. Thus, the second hypothesis in this study was rejected. Based on macroeconomic theory, this institution is usually used by conventional banks in determining interest rates. However, clear sharia principles prohibit this so that Islamic banks do not use this interest instrument. So that the central bank's policy regarding the BI Rate has no effect on Islamic banks, especially BCA Syariah. The absence of interest on Islamic banks does not mean that the increase in DPK is without reason. This can also be because customers have certain priorities such as investment opportunities without usury and high profits obtained based on profit sharing ratios.

This is the same as previous research conducted by Ferdiansyah et al. (2015), who gave a statement that the BI Rate did not have a significant effect on Islamic banking third party funds.

Jurnal Al Iqtishad Volume 19 Nomor 1 Tahun 2023

3. Effect of the Amount of Money in Supply on Third Party Funds

The tests that have been carried out give the results as listed in table 14. The money supply variable has a positive coefficient value of 0.000810, while the probability value obtained is 0.0010 and this has a significant meaning because it is less than 0.05. So it can be concluded that the money supply shows a positive and significant relationship to third party funds. So, the fourth hypothesis in this study is accepted. Any increase that occurs in the amount of money circulating in society will be followed by inflation that occurs in the economy. This is because it can encourage an increase in market prices, resulting in the value of the currency going down and resulting in a decrease in people's purchasing power. In addition, if it continues continuously it will result in an economic growth that will be disrupted. So that people tend to prefer to save their money in banks as a precautionary motive if the economy experiences disruptions in the future. This is evidenced by an increase in BCA Syariah third party funds. In the 2013-2022 timeframe, the highest amount of money in circulation occurred at the end of 2022, namely IDR 8528 trillion, and the highest BCA Syariah third party funds also occurred at the end of 2022, namely IDR 9481 billion.

This is the same as previous research conducted by Anik & Prastiwi (2018), which stated that the money supply shows a positive relationship and has a significant effect on Islamic banking third party funds.

4. Effect of Gross Domestic Product on Third Party Funds

Based on the results of the regression test in table 14, it can be seen that the gross domestic product variable has a coefficient value of -0.000433, while the probability value is 0.1623 so that it exceeds 0.05 which means it is not significant. So, every change that occurs in gross domestic product does not have an impact on BCA Syariah third party funds. So it can be concluded that the gross domestic product shows a negative and insignificant relationship to third party funds. With this, the fifth hypothesis in this study was rejected. Based on macroeconomic theory, high income will affect purchasing power or consumption as well as increasing public interest in saving. However, this increased revenue will not necessarily have an impact on increasing third party funds. And this also applies

vice versa, if there is a decrease in GDP it is not certain that BCA Syariah third party funds will increase. This can also be caused by the distribution of each income not only for saving activities, it can be allocated for other things such as consumption to fulfill primary, secondary and tertiary needs, and can also be for investment outside of bank financial institutions.

This is the same as previous research conducted by Jayadi (2019), which stated that the gross domestic product shows a negative and insignificant relationship to third party funds of Islamic banks.

5. Effect of Currency Exchange Rates on Third Party Funds moderated by Solvability

In accordance with the results of the regression test contained in table 14, the explanation obtained shows that the currency exchange rate variable which is moderated by solvency has a positive coefficient value of 1.25E+08, with a probability value of less than 0.05 which is equal to 0.0061, thus indicating a relationship significant. Then the conclusion obtained is that the multiplication variable of currency exchange rates with solvency shows a positive and significant effect on third party funds. Or it can also mean, Solvability is able to moderate and strengthen the effect of currency exchange rates on third party funds. With this, the ninth hypothesis in this study is accepted. An increase or decrease in a country's currency exchange rate will have an impact on the economy, and the government will try to stabilize the currency exchange rate by paying attention to its policies. If the foreign currency exchange rate is relatively low, it will have a positive impact on the domestic economy, this is because the prices of goods are relatively stable, and it also has a good impact on increasing public deposits or Third Party funds in Islamic banks. In addition, with the company's internal factors such as secure solvency, it will further strengthen the collection of Third Party funds because there is public trust in the existence of funds in financial institutions that are performing well, such as in terms of solvency. So it can be concluded that solvency ability is able to moderate the effect of currency exchange rates on TPF.

This is the same as previous research conducted by Saekhu (2017), which stated that currency exchange rates show a positive and significant relationship to Islamic banking third party funds. 6. Effect of the Jakarta Composite Index on Third Party Funds moderated by Solvency

Based on the results of the regression test listed in table 14, the information obtained is that the combined stock price index variable which is moderated by solvency has a positive coefficient value of 3.64E+08, while the probability value is 0.0000 which indicates significant. So it can be concluded that the multiplication variable of the composite stock price index and solvency shows a positive and significant relationship to third party funds. Or in other words, solvency is able to moderate the effect of the composite stock price index on third party funds and is reinforcing. With this, the twelfth hypothesis in this study is accepted. The condition of the composite stock price index which also experienced an increase, indirectly the performance of the capital market also experienced an increase. So that the development of economic conditions will also increase with an increase in the JCI. An improving economy can be described by increasing people's income, and this can also be obtained from stock returns. Putri & Purbawangsa (2017) said in research that a high IHSG will be followed by high stock returns as well. So that third party funds in banks will experience growth in order to store excess funds in the community due to increased interest in saving. With good solvency at BCA Syariah, based on signal theory, this is a signal to outsiders regarding good bank management so that it can strengthen or strengthen the relationship between the JCI and DPK. And the increase in DPK will be achieved.

This is the same as previous research conducted by Saekhu (2017), which stated that the composite stock price index shows a positive and significant relationship to Islamic banking third party funds.

Analysis Of the Equations Removed from The Model

 The Effect of Currency Exchange Rates and the Composite Stock Price Index on Third Party Funds

The results of the multicollinearity test that has been carried out, the currency exchange rate variable (X3) and the composite stock price index (X6) show symptoms of multicollinearity, so it needs to be eliminated from the regression model in order to cure multicollinearity symptoms. Both of these variables

experience symptoms of multicollinearity with the multiplication of currency exchange rates and solvency (X3Z) as well as the IHSG multiplication and solvency (X6Z). So that X3 and X6 are excluded from the model by retaining the X3Z and X6Z variables because these variables have a relationship to third party funds and as variables that have interactions with moderating variables. Thus, X3 and X6 were not included in the next test. So, it can be concluded that the third hypothesis (H3) and sixth (H6) are not accepted.

2. Effect of Inflation on Third Party Funds moderated by Solvency

In accordance with the classical assumption test on the multicollinearity test that has been carried out, the multiplication variable of inflation and solvency (X1Z) shows symptoms of multicollinearity. So it needs to be removed from the regression model as an effort to cure the symptoms of multicollinearity. In addition, the consideration for removing this variable is that its multicollinearity symptoms attack three other variables, namely inflation (X1), multiplication of currency exchange rates and solvency (X3Z), and multiplication of the JCI and solvency (X3Z). When compared with other variables, there are still better variables regarding the significant relationship to third party funds such as X3Z and X6Z. So with the condition that there is a multicollinearity relationship between the moderating interaction variables, the researchers excluded the variable X1Z. Thus, XIZ was not included in the next test. So, it can be concluded that the seventh hypothesis (H7) is not accepted.

3. The influence of the BI Rate on Third Party Funds moderated by Solvency

On the results of the multicollinearity test, the multiplication variable of the BI Rate and solvency (X2Z) shows symptoms of multicollinearity. So it needs to be removed from the regression model to cure multicollinearity symptoms. The variable X2Z experiences multicollinearity with other independent variables, namely the BI Rate (X2), multiplication of currency exchange rates and solvency (X3Z), and multiplication of the JCI and solvency (X3Z). So with the consideration that if you keep the X2Z variable, you have to remove the X2, X3Z, and X6Z variables, which in the end result is that X3Z and X6Z show a significant influence on third party funds. So the author prefers to exclude the X2Z variable. Thus, the

X2Z was not included in the next test. So, it can be concluded that the eighth hypothesis (H8) is not accepted.

4. The Effect of the Money Supply on Third Party Funds moderated by Solvency

Through the multicollinearity test that has been carried out, the multiplication variable of the money supply and solvency (X4Z) shows symptoms of multicollinearity. Thus, it needs to be removed from the regression model in an effort to cure multicollinearity symptoms. The variable multiplied by the money supply and solvency shows symptoms of multicollinearity with the variable money supply (X4), multiplied by currency exchange rates and solvency (X3Z), and multiplied by the JCI and solvency (X3Z). When compared with other variables, removing the X4 variable is much better than having to exclude 3 other variables that have a multicollinearity relationship. Thus, the X4Z was not included in the next test. So, it can be concluded that the tenth hypothesis (H10) is not accepted.

5. Effect of Gross Domestic Product on Third Party Funds moderated by Solvency

By obtaining the results of the multicollinearity test, the multiplication variable of gross domestic product and solvency (X5Z) shows symptoms of multicollinearity. Then it must be removed from the regression model in an attempt to cure the symptoms of multicollinearity. This variable shows symptoms of multicollinearity with the variables gross domestic product (X5), multiplication of currency exchange rates and solvency (X3Z), and multiplication of the JCI and solvency (X3Z). So that with the considerations made by the author, it is the variables that show a significant influence that are maintained by the writer to get better research results. In addition, if you maintain the X5Z variable by removing 3 other influence that explains DPK as the dependent variable. Thus, the X5Z was not included in the next test. So, the conclusion of the eleventh hypothesis (H11) is not accepted.

CONCLUSION

From the research that has been carried out regarding the influence of macroeconomic factors on BCA Syariah third party funds with the solvency variable as a moderator, the following results are obtained:

- 1. The inflation variable shows no effect on third party funds.
- 2. The BI Rate variable has no effect on third party funds.
- 3. The money supply variable has a positive and significant effect on third party funds.
- 4. The gross domestic product variable has no effect on third party funds.
- 5. The solvency variable can moderate the relationship between currency exchange rates and third party funds.
- 6. The solvency variable can moderate the relationship of the composite stock price index to third party funds.
- 7. Variables of currency exchange rate, composite stock price index, multiplication of inflation with solvency, BI Rate with solvency, money supply with solvency, and gross domestic product with solvency are excluded from the regression model to cure multicollinearity symptoms. So there is no research conclusion about the effect of these variables on third party funds. This is because the variable cannot be continued to the next testing stage.

In order to realize better further research, suggestions that can be given are as follows:

1. For financial institutions

With the research results obtained, it is hoped that it can contribute and play a role in making decisions for companies in the context of increasing third party fundraising.

2. For further research

The limitations that exist in this study are expected to be refined in subsequent studies. So that it becomes an evaluation material to achieve the accuracy of the research results. Then for future research, you can also add other macroeconomic variables or other moderating variables from both internal and external financial institutions that have a stronger influence on third party funds.

BIBLIOGRAPHY

- Amaliawiati, L., Hendayana, Y., & Sarumpaet, T. L. (2019). The impact of macroeconomics towards Islamic banking third party funds in Indonesia. *International Journal of Innovation, Creativity and Change*, 6(6), 291–303.
- Anik, & Prastiwi, I. E. (2018). The Influence of Macroeconomic Conditions on the Growth of Islamic Commercial Banks in Indonesia. *Proceeding Seminar Nasional* & Call for Papers, 111–123.
- Anoraga, & Pakarti. (2001). Introduction to Capital Markets (Edisi Revi). Jakarta: PT Rineka Cipta.
- Apriyani, M. D. (2021). Analysis of the Effect of Changes in Inflation, SBI Interest Rates, and the JCI on Community Third Party Funds in Indonesian Banking. Journal of Business Managements, 10(2), 193–204.
- Astyaningrum, E. (2019). Determinants of Third Party Fund Collection at Islamic Commercial Banks for the Period of February 2015-December 2017.Muhammadiyah Surakarta university.
 - Central Bureau of Statistics. (n.d.). *BI Rate*. Retrieved March 24, 2023, from https://www.bps.go.id/linkTableDinamis/view/id/1061
 - Central Bureau of Statistics. (n.d.). *Uang Beredar*. Retrieved March 24, 2023, from https://www.bps.go.id/indicator/13/123/6/uang-beredar.html
 - Central bureau of Statistics. (n.d.). *PDB Quarterly Based on Current Price According to Expenditures*. Retrieved March 24, 2023, from https://www.bps.go.id/indicator/169/1955/1/-seri-2010-1-pdb-triwulanan-atasdasar-harga-berlaku-menurut-pengeluaran.html
 - Bank Indonesia. (n.d.). *Inflation Data*. Retrieved March 24, 2023, from https://www.bi.go.id/id/statistik/indikator/data-inflasi.aspx
 - Bank Indonesia. (2013). Sinyal BI Rate. In *Gerai Info Bank Indonesia* (Edisi 14, pp. 1–16).
 - Bawono, A., & Shina, A. F. I. (2018). Applied Econometrics for Islamic Economics and Business Application by Eviews. Institute for Research and Community Service IAIN Salatiga.

- BCA Syariah. (n.d.). *Financial Report of PT Bank BCA Syariah*. Retrieved March 24, 2023, from https://www.bcasyariah.co.id/laporan-keuangan-bulanan
- BCA Syariah. (2021). *Award*. Www.Bcasyariah.Co.Id. https://www. bcasyariah.co.id/penghargaan?page=5
- BCA Syariah. (2022). Performance BCA Syariah 2021. Maintain Sustainable Growth through Synergy. Www.Bcasyariah.Co.Id. https://www.bcasyariah.co.id/kinerjabca-syariah-2021
- Boediono. (2001). *Macro Ekonomic (Sinopsis series: Introduction to Economics No.2)*. Yogyakarta: BPFE UGM.
- Budisantoso, T., & Triandaru, S. (2006). *Bank and Other Financial Institutions*. Yogyakarta: Salemba Empat.
- Bringham, & Houston. (2014). Essentials of Financial Management. Fundamental of Financial Management. Translation by Ali Akbar Yuianto. Buku 2. Edisi 11. Jakarta: Salemba Empat.
- Darwis. (2019). Asset and Liability Management. Yogyakarta: TrustMedia Publishing.
- Fathurrahman, A., & Setiawansi, Y. (2021). Determinant Analysis of Third Party Funds if Islamic Commercial Banks in Indonesia. Scientific Journal of Islamic Economic, 7(1), 154–163. https://doi.org/10.46367/jps.v2i2.389
- Ferdiansyah, Nurazlina, & Hariyani, E. (2015). Effect of Profit Sharing Rate and BI Rate on Islamic Banking Third Party Funds (Study on Islamic People's Financing Banks Registered at Bank Indonesia) Online Journal of Student of the Faculty of Economics University of Riau, 2(1), 1–12.
- Firdayanti, S., & Arinta, Y. N. (2021). Analysis of Macroeconomic Influence on Third Party Funds (DPK) with Equivalent Rate (ER) as an Intervening Variable. *J-EBIS* (Journal of Islamic Economics and Business), 6(2), 100–123. https://doi.org/10.32505/j-ebis.v6i2.3356
- Hadiani, F. (2018). Analysis of Macroeconomic Factors Affecting Third Party Funds in Islamic Commercial Banks and Islamic Business Units 2011-2015. Sigma-Mu, 10(2), 49–61.
- Hery. (2019). Banking management. Publisher PT Grasindo.

- Indriantoro, N., & Supomo, B. (2002). Business Research Methodology for Accounting and Management. Yogyakarta: BPFE UGM.
- Jatnika, M. D. (2020). The Effect of Macroeconomic Variables on Third Party Funds of Islamic Commercial Banks in Indonesia. Muara Journal of Economics and Business 4(1), 164–173. https://doi.org/10.24912/jmieb.v4i1.7299
- Jayadi, S. P. (2019). The Influence of Economic Growth, Money Supply, BI Rate, and Profit Sharing on BCA Syariah Bank Third Party Funds Collection in Indonesia in 2011-2018. Institut Agama Islam Negeri Tulungagung.
- Joeharin, I. (2019). Analysis of the Effect of Macroeconomic Variables on Third Party Funds in Islamic Banking. Universitas Andalas.

Karim, A. (2010). Islamic Macroeconomics (Third). Jakarta: Rajawali Pers.

Kasmir. (2013). Financial Statement Analysis (Fourth). Jakarta: Raja GrafindoPersada.

- Ministry of Trade of the Republic of Indonesia. (n.d.). Foreign Currency Exchange Rate Against Rupiah. Retrieved March 24, 2023, from https://satudata.kemendag.go.id/data-informasi/perdagangan-dalam-negeri/nilaitukar
- Kemu, S. Z., & Ika, S. (2016). BI Rate Transmission as an Instrument to Achieve Monetary Policy Targets. Economic & Financial Studies, 20(3), 264–264. http://fiskal.kemenkeu.go.id/ejournal
- Kusumaningrum, K. D., & Purwantini, A. H. (2021). The Influence of Inflation, Gross Domestic Product, BI Rate, Profit Sharing Ratio, and Gold Prices on the Growth of Third Party Funds in Islamic Commercial Banks in Indonesia. *Borobudur Accounting Review*, 1(2), 223–240.
- Lisa, O. (2017). Analysis Macroeconomic On Islamicity Performance Index Through Fund Third Parties The Islamic Cooperation. *International Journal of Social Science and Business*, 1(1), 38–46. https://doi.org/10.23887/ijssb.v1i1.10161

Mankiw, N. G. (2018). Introduction to Macroeconomics. Jakarta: Salemba Empat.

Manurung, M., & Rahardja, P. (2004). Money, Banking, and the Monetary Economy (Indonesian Contextual Study). Jakarta: Faculty of Economics and Business, University of Indonesia.

Jurnal Al Iqtishad Volume 19 Nomor 1 Tahun 2023

- Financial Services Authority. (n.d.). *Sharia Banking Statistics*. https://www.ojk.id/id/kanal/syariah/data-dan-statistik/statistik-perbankan-syariah/default.aspx
- Financial Services Authority. (n.d.). Capital Market Statistics.https://www.ojk.go.id/ id/kanal/pasar-modal/data-dan-statistik/statistik-pasar-modal/default.aspx
- Financial Services Authority (2019). *Book 2* Banking Higher Education Financial iteracy Series. Jakarta: Financial Services Authority.
- Pratama, A. A. N., & Cahyono, E. (2021). Business Research Methodology With Quantitative Approach. Yogyakarta: LaksBang PRESSindo.
- Putri, P. A. N. K., & Purbawangsa, I. B. A. (2017). The Effect of Capital Market Conditions and Financial Ratios on Stock Returns on the Indonesian Stock Exchange. *E-Jurnal Manajemen Unud*, 6(8), 4269–4297.
- Ramadhani, F. M., & Abdullah, M. F. (2021). Effect of Profit Sharing, Inflation and BI Rate on Deposits of Third Party Funds in Islamic Commercial Banks. Journal *of* Financial Economics and Investment, *1*(2), 102–112.

Riyanto, B. (2001). Corporate Spending Fundamentals. Yogyakarta: BPFE Yogyakarta.

- Riyanto, B. (1998). Corporate Spending Fundamentals. Yogyakarta: BPFE Yogyakarta.
- Saekhu. (2017). Impact of Macroeconomic Indicators on Islamic Banking Third Party Funds. *Economica:* Journal of Islamic Economic, 8(1), 103–130.
- Saragih, A. Y., & Esya, L. (2016). The Influence of Macroeconomic Performance on Bank Syariah Indonesia's Third Party Funds. Economic Media, 24(2), 151. https://doi.org/10.25105/me.v24i2.3801

Sinungan, M. (1992). Bank Fund Management. Jakarta: PT Bumi Aksara.

- Sobana, D. H., Hamzah, R., & Habibah, S. (2021). Determinants of Third Party Funds of Islamic Commercial Banks in Indonesia. Journal of Islamic Banking, 2(2), 226–236.
- Sugiharti, E. S., Wulandari, N. S., & Adawiyah, R. A. Al. (2021). Analysis of the Influence of Inflation, Gross Domestic Product and Profit Sharing on Third Party Funds of Islamic Commercial Banks in Indonesia2014-2019. Journal of Islamic Economics, 6(2), 78–93.

- Sukirno, S. (2013). Macroeconomic Theory Introduction. Jakarta: PT Raja Grafindo Persada.
- Sukirno, S. (2017). Macroeconomic Theory Introduction (Edisi Ketiga). Jakarta: Rajawali Press.
- Sumartik, & Hariasih, M. (2018). Textbook of Banking Management. Sidoarjo: UMSIDA Press.
- Tripuspitorini, F. A., & Setiawan. (2020). The Influence of Macroeconomic Factors on the Growth of Third Party Funds in Islamic Commercial Banks in Indonesia. Journal of Accounting and Finance Research, 8(1), 121–132.
- Utari, G. A. D., Cristina, R., & Pambudi, S. (2016). *Inflation in Indonesia*: Characteristics and Control (Issue 23). Jakarta: BI Institute.
- Veritia, Lubis, I., Priatna, I. A., & Susanto. (2019). Macroeconomic Theory. Banten: UNPAM Press.
- Yukanidah, S., & Sari, C. M. (2022). The Influence of Monetary Policy and Macro Variables on the Resilience of DPK in Islamic Banking in Indonesia. *An-Nisbah:* Journal of Islamic Banking, 3(2), 118–138.
- Zakki, N. F., & Permatasari, D. (2020). The Influence of the BI Rate, Equivalent Rate and Number of Offices on Third Party Fund Collection (DPK) in Islamic Commercial Banks (Studies on Islamic Commercial Banks in Indonesia Period 2014-2018). Journal of Economics and Accounting Research , 5(2), 147–167. https://doi.org/10.30736/.v5i2.330