

Analysis of the Effect of Macroeconomic Variables on Third Party Funds of Sharia Banking in Indonesia 2009-2020

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ABSTRACT

This study aims to analyze the effect of the gross domestic product (GDP), inflation, interest rates, BI rate, and the exchange rate on third party funds of Islamic banking in Indonesia in period 2009-2020. This study uses regression analysis. The data type used in this study is time series data, with the characteristics of quarterly data during the time span of the collection from 2009 to 2020. Based on the research, it is found that the GDP and inflation, partially get the significant positive impact on nominal of third party funds in Islamic banking in Indonesia. The interest rate variable partially has a significant negative effect on the position of third party funds. BI rate and exchange rate variables do not partially affect the position of third-party funds in Indonesia' Islamic banking.

Keywords: Islamic banking, third party funds, GDP, inflation, interest rates, BI Rate, exchange rate.

1. INTRODUCTION

At this time the growth of the islamic banking business is growing rapidly in the world, in muslim and non-muslim-majority communities. The development of sharia banking business in Indonesia began in 1991 with the development of Bank Muamalat Indonesia. At present the sharia banking business is becoming increasingly in demand, supported by government policies such as on February 1, 2021, the existence of a policy to merge several Islamic commercial bank in Bank Syariah Indonesia, which is a combination of 3 (three) banks, namely Bank Syariah Mandiri, BRI Syariah and BNI Syariah.

Islamic banks are intermediary institutions whose function is to collect funds from those with surplus and distribute them to those with insufficient funds. The important difference between islamic and traditional banks is that traditional banks use system with interest, otherwise banks with islamic system use a profit sharing, leasing and buying and selling system which puts forward a fair agreement system, far from speculation (maysir), hoax (gharar), which is not just profitable but also halal and safe (Saragih, 2016).

Sources of funds that are owned and controlled by the bank can come from several parties, fund deposit

from bank owner, it also comes from deposits and participation of funds from the public which at a certain time will be withdrawn either gradually or all at once. Meanwhile, according to Danupranata (2013), banking has 3 (three) sources of funds, namely first party funds, second party funds, and third party funds. First party funds represent the bank's capital, reserves and retained earnings. Second party funds are loans from other financial institutions, from non-bank financial institutions, and loans from the central bank of Indonesia (Bank Indonesia). Meanwhile, third party funds are funds originating from public who place their funds in the bank, which can consist in form of placements in demand deposits, time deposits and savings. The ability of a bank to raise funds will illustrate the effective and efficient performance of a bank to facilitate community real economic activities.

Raising the third party funds is the main businesses of Islamic banking. With insufficient funds owned by a sharia bank, the bank does not function at all and cannot carry out its business processes to distribute financing to the public (Danupranata, 2013). Sharia banking has third party funds that are cash originating from public deposits in Islamic banks, which can be in deposits in savings, current accounts, or time deposits. This public savings fund can come from individuals or business

entities that are obtained by the Bank by using savings products owned by a bank.

In terms of fundraising, Islamic banking is required to maintain a certain amount of liquidity that is placed in current account of bank at Bank Indonesia, which is called the Legal Reserve Requirement or minimum statutory reserves or GWM. GWM is the minimum required funds or savings in Bank Indonesia that should be maintained by a bank. GWM is restricted by the central bank based on the percentage of third party funds that collected by banks.

The development of sharia banking third party funds during the period 2010 - 2020 can be described as follows:

Table 1 Development of Third Party Funds Sharia Banking in Indonesia 2010-2020

No	Period	Third Party Funds (Billion Rp)	Growth (%)
1	2010	76,036	45.46
2	2011	115,415	51.79
3	2012	147,512	27.81
4	2013	183,534	24.42
5	2014	217,858	18.70
6	2015	231,175	6.11
7	2016	279,335	20.83
8	2017	334,888	19.89
9	2018	371,828	11.03
10	2019	416,558	12.03
11	2020	465,977	11.86

Source: (The Financial Services Authority, 2020)

Based on table 1, it can be show that the third party funds of sharia banking in Indonesia for the last 10 (ten) years have indeed shown an increasing trend, from 76.036 trillion in 2010 Q4 to 465.977 trillion in December 2020 Q4.

The highest growth of third party fund occurred in Q4 2011 (yoy) at 51.79%, which currently Indonesia Islamic banking is in the 4th position in the world after Iran, Malaysia and Saudi Arabia. The high growth in deposits in 2011 was in line with Indonesia's economic growth, which was at its highest level in the 2010-2019 period (The Financial Services Authority, 2016).

The lowest third party funds growth position occurred in 2015 Q4 (yoy). This condition is in line with the slow movement in economic growth of Indonesia. In 2015, this was Indonesia's lowest economic growth in the 2010-2019 period, namely 4.88%, so that the growth of the national banking industry also tends to slow down.

Based on data on growth in Islamic banking, the slowdown in growth in third party funds is in line with instability in economic conditions. Several macroeconomic conditions that can affect third party funds in Islamic Banking are economic growth, which is reflected in the Gross Domestic Product (GDP), inflation, and interest rates, BI Rate and Exchange rate of Rupiah (Muttaqiena, 2013).

Based on Table 2, Indonesian macroeconomic variable data for 2010- 2020 shows that an increase in Gross Domestic Product (GDP) is in line with the growth in Islamic banking deposits. This fact accordance with research conducted by Rudiansyah (2014) and Saragih, et al (2016).

Based on data in Table 2, Indonesia's macroeconomic conditions in 2010-2020, shows that there was a significant decrease in inflation from 2010 of 6.96% to 3.79% in 2011 (yoy), and third party funds experienced the highest growth during the last 10 years that is 51.79%. This condition shows that inflation has a tendency to have a negative effect on the increase in third party funds of Sharia banking. This is in accordance with the theory presented above. However, in 2012 to 2013 saw an increase in inflation from 4.30% to 8.38% (yoy) but it was seen that there was still growth in third party funds of 24.42% (yoy), this is contradictory with the existing theory.

Inflation has a effect that negative on Islamic banking third party funds. People are reluctant and not enthusiastic about placing funds in Islamic banks when inflation is high, this is due to the decreasing value of money so that people prefer to withdraw their deposits in banks. According to research by Nursofiza et al. (2008), it was found that the inflation had a significant negative effect on public savings funds.

Based on the data in Table 2 shows that the decline in conventional bank interest rates from 2010 to 2011 shows that third party funds experienced a significant growth of 51.79%, which is in line with research conducted by Haron (2000). In 2013 there was an increase in conventional bank interest rates from 7.92% and in 2014 to 8.38%. At a time when conventional bank interest rates were lowered, third party funds collection continued to show an upward trend with a growth of 18.70%. This condition contradicts the existing theory.

Table 2. Macroeconomic Variable Data in 2009 - 2020

No	Period	GDP (Rp billion)	GDP (YoY)	Inflation (%)	Interest Rate (%)	BI Rate (%)	Exchange Rate (Rp)
1	2009	2,178,851	4.50	2.78	6.87	6.50	8,553
2	2010	6,864,133	6.38	6.96	6.83	6.50	9,036
3	2011	7,287,635	6.17	3.79	6.35	6.00	9,113
4	2012	7,727,083	6.03	4.30	5.58	5.75	9,718
5	2013	8,156,497	5,56	8.38	7.92	7.50	12,250
6	2014	8,564,867	5.01	8.36	8.58	7.75	12,502
7	2015	8,982,517	4.88	3.35	7.60	7.50	13,864
8	2016	9,434,613	5.03	3.02	6.46	4.75	13,503
9	2017	9,912,928	5.07	3.61	5.81	4.25	13,616
10	2018	10,425,851	5.17	3.13	6.92	6.00	14,553
11	2019	10,949,038	5.02	2.72	6.05	5.00	13,970
12	2020	10,722,443	-2.07	1.68	4.25	3.75	14,175

Source: The Financial Services Authority, Bank Indonesia, Central Bureau of Statistic processed

Another macroeconomic factor that also affects Sharia Banking third party funds is the commercial bank interest rates. The interest rate is the value that must be given by the bank to the customer as result from their invests in current customer deposits which the bank will return at a later date. According to Keynes's theory, the supply and demand for money is determine the money market. With the higher deposit rates in conventional commercial banks, the higher the public's interest in placing funds in deposits with these banks. The high deposit rate of conventional banks as competitors to Islamic banks is considered to reduce third party funds in Islamic banks.

Based on table 2, it shows that in 2010 to 2020 the movement of the BI rate was quite volatile, the highest position in 2014 reached 7.75% and decreased a lot in 2020 to 3.75%, while the trend of third party fund in Islamic banking tends to increase with a growth of 18.70% in Q1 2014 and 11.86% in Q4 2020. This fluctuation in the BI rate continues every year, while the trend of Islamic banking third party funds tends to increase every year.

The BI Rate has significant positive effect on Islamic banking third party funds. Third party funds are a reference in monetary policy operations in maintaining the stability of the rupiah value and in countering fluctuating inflationary movements. Therefore, the increase and decrease in the BI Rate will generally cause fluctuation in the real value of profit sharing received by the public whose placing their funds in deposits. Thereby affecting the amount of third party funds in sharia banking. When the BI rate increases, the profit sharing from deposits in Islamic banking will also increase. So then this high profit sharing increases public interest in placing funds in Islamic banking.

Based on table 2, it shows that the movement of rupiah exchange rate fluctuated and continued to weaken during the last 10 years, from a position of RP. 9,036 in 2010 Q4 to RP. 14,175 in 2020 Q4 while

on the other hand the trend of third party funds of islamic banking tends to increase than before.

Macroeconomic variables in the form of exchangerate of rupiah have a negative effect on Islamic banking third party fund collection. Sharia banking is vulnerable to changes in the Rupiah exchange rate because investors tend to withdraw the funds they invest in Islamic banking when the rupiah exchange rate in low level. So that this causes a decrease in the nominal of third party funds.

The growth of Islamic banking third party funds needs to be a concern in improving the performance of Islamic banking. Because the fluctuation of third party funds will greatly affect the amount of realization of Islamic banking financing and assets. As an intermediary institution whose main business is collecting funds from the public and then distribute it, Islamic banking is very concerned about collecting third party funds.

Based on the background description above, the authors need to further examine how the influence of macroeconomic variables, especially gross domestic product, inflation, BI rate, commercial bank interest rates, and exchange rate on third party fund collection in Islamic banking.

2. RESEARCH METHODOLOGY

The research method used quantitative approach with explanatory research. The types of data used in this research is time series data, with characteristics of quarterly data during the time span of collection from 2009 to 2020. Sources of research data were carried out through literature studies of data published by the Indonesian Central Bureau of Statistics, Bank Indonesia, and data from the Service Authority Finance. Multiple linear regression analysis is used in order to describe how much the independent variable has influenced on the dependent variable. The general equation for multiple linear regression is as follows:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + e$$

Where:

- Y = Islamic banking third party funds.
- X1 = GDP
- X2 = inflation
- X3 = interest rate
- X4 = BI Rate
- X5 = rupiah exchange rate
- β0 = intercept (constant)
- β1, β2, β3, β4, β5 = regression line coefficient
- e = error term (disturbance)

3. RESULT AND DISCUSSION

The regression analysis aims to determine effect of each variable from independent to the dependent variable. Analysis of the Influence of variables gross domestic product, inflation, BI rate, commercial bank interest rates, and exchange rate on third party fund collection in Islamic banking are as follows:

Table 3 Estimation Calculation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-42.58835	3.718422	-11.45334	0.0000
LOG(X1)	3.388335	0.449809	7.532824	0.0000
X2	0.041596	0.014111	2.947679	0.0052
X3	-0.089429	0.033482	-2.671000	0.0107
X4	0.020937	0.037283	0.561577	0.5774
LOG(X5)	0.591856	0.341929	1.730933	0.0908

In the classical assumption test, there is one assumption that is not fulfilled, namely the multicollinearity test, so it is necessary to remove one variable, namely the exchange rate variable. So that the results of the estimation calculations are as follows:

Table 4 Estimation Calculation Results 1st Revised

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-48.09001	1.974103	-24.36044	0.0000
LOG(X1)	4.134509	0.131387	31.46822	0.0000
X2	0.042221	0.014430	2.925822	0.0055
X3	-0.070534	0.032378	-2.178426	0.0349
X4	0.025836	0.038029	0.679381	0.5005

In the second classical assumption test, there is one assumption that is not fulfilled, namely the autocorrelation test, so it is necessary to fix by newey-method. So that the results of the estimation calculations are as follows:

Table 5 Estimation Calculation Results 2nd Revised

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-48.09001	2.649726	-18.14905	0.0000
LOG(X1)	4.134509	0.177017	23.35660	0.0000
X2	0.042221	0.011163	3.782382	0.0005
X3	-0.070534	0.034311	-2.055730	0.0459
X4	0.025836	0.030945	0.834908	0.4084

So that the equation becomes:

$$\text{Log } Y = -48,09001 + 4,134509 \text{ Log}X_1 + 0,042221X_2 - 0,070534X_3 + 0,025836X_4 + e$$

Simultaneous testing of the model with the F test is used to testing the effect of independent variable simultaneously on dependent variable. The calculation results in the Fixed Effect model, obtained probability F of 0.000000 less than α 5% (0.05), it can be stated that variables of GDP, inflation, interest rate, and BI rate collectively have significant effect on Islamic banking third party funds.

The t test is a test conducted to understand if partially the independent variable has a significant effect to dependent variable.

Table 6 t Test Results

Variable	Coefficient	t-Statistic	Prob.	Note
C	-48.09001	-18.14905	0	Significant
LOG(X1)	4.134509	23.3566	0	Significant
X2	0.042221	3.782382	0.0005	Significant
X3	-0.070534	-2.05573	0.0459	Significant
X4	0.025836	0.834908	0.4084	Not Significant

The results of the analysis show that the effect of GDP partially on third party funds is a significant effect, with the coefficient value of the GDP variable of 4,134509 and a probability of 0.0000 < α 5% (0.05). This means, if the increase in GDP will have a significant effect on the increase in third party funds in Islamic banking in Indonesia, assuming ceteris paribus.

Research shows that the GDP variable positively has an effect on the position of third party funds. This condition shows that the development third party funds in Islamic Banking Indonesia is significantly influenced by GDP. Public interest in placing funds in Islamic banking is affected by the economic conditions in Indonesia.

In the income theory, people who experience a higher level in income will then also increase the amount of public savings in Islamic banks. This is due to excess consumption or income that is set aside for future needs. These research also in line with the results of research conducted by Wan Nursofiza, Sudin Haron, Wan Azmi (2008), namely that GDP has a positively effect on Islamic bank deposits.

Based on the research results, the inflation variable has positive effect on the third party funds. This condition shows that the development of the position of Islamic banking third party funds in Indonesia is significantly affected by inflation.

Research shows that the conventional bank deposit interest rate variable has negative effect on the position of third party funds. This condition shows that public

interest in placing funds in Islamic banking is affected by the condition of conventional bank interest rates as competitors or substitutes.

According to results of estimation above, it shows that variable of BI rate and exchange rate has no effect on the amount of third party funds in Islamic banking in Indonesia.

4. CONCLUSION

Based on research, it can be seen that the effect of each variable is different. In this study, the test results show that the variables of GDP, inflation, conventional bank of interest rates, and BI rate simultaneously bring affect to the position of third party funds of Islamic banking in Indonesia.

Partially, GDP and inflation variables positively have effect on the amount of third party funds. The variables of conventional bank deposit interest rate have asignificants negative effect on the position of third party funds. The BI rate and exchange rates do not partially affect the position of third party funds in Islamic banking in Indonesia.

Increasing the position of Islamic banking third party funds can be made to increase GDP and increase Indonesia's economic growth. Regulators need to implement policies to manage inflation rate as an effort to increase the position of third party funds. Further research is needed to determine the effect of other variables not discussed in this study on third party fundraising in Islamic banking.

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