
ANALYSIS OF THE IMPACT OF SELECTED MACROECONOMIC INDICATORS ON ISLAMIC BANKS' PROFITABILITIN INDONESIA

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Abstract

This study aims to analyze the impact of selected macroeconomics variables on Islamicbanks' profitability in Indonesia which is proxied by Return on Assets (ROA). The selected variables of macroeconomic include inflation, Bank Indonesia's(BI) rate (central bank's rate), money supply, and exchange rate. This research used secondary monthly data from 2012-2015, and analyzed using multiple regression model. The research findings indicate that among four independent variables, there are three variables that significantly influence the performance of Islamic banks, namely BI's rate, exchange rate, and money supply. BI's rate and money supply have negative relationship with the performance of Islamic banks, while exchange rate show positive relationship with the performance of Islamic banking, Unfortunately, inflation does not significantly affect the performance of Islamic bank.

Keywords: Islamic Banks, Return on Asset, Exchange Rate, Money Supply, Inflation, BI's Rate, Indonesia

BACKGROUND

Banking stability is a very important issue in the current economic times, due to the 1997 economic crisis and the global crisis in 2008, the crisis serves as proof of the economic stability of a country that is affected by the stability of the financial system (Simorangkir, 2004).Banking is one part of the financial system. One of the functions of banks is as an intermediary institution, According to Law 10 of 2008 on banking, Bank is a business entity that collects funds from the public in the form of deposits and distribute to the public in the form of savings and the distribution of funds to the public in the form of credit or other forms to improve people's lives. where banks as inter-party financial institutions that have excess funds with the parties who need funds.(Mishkin, 2001).

One of the characteristics of a good financial system, including the banking system, is that the financial system is in a condition where it can absorb shock from financial disturbances and real economic disturbances. This serves to provide supplies and a sense of security and increase confidence in the product as a whole, A good financial system will encourage the creation of financial system stability.

The stability of the banking system and the macroeconomic variables are two interrelated and determining aspects of each other. The stability of the banking system, in general, is reflected in the sound banking condition and the intermediary function of the banking system, whether the banking performance (in this case the sharia bank) influenced by the internal conditions of bank management and external economics such as macro conditions

According to (Basurto & P.Padilla, 2007) a strong and good financial system is a major factor for macroeconomic stability, in terms of supporting savings and the efficiency of resource allocation in investment opportunities. According to Bank Indonesia, the stability of the financial system can be defined through several approaches: (I) A stable financial system able to allocate resources and be able to absorb the Shock that occurs (II) A stable financial system is a financial system capable of performing the intermediary function, Implementing payments and distributing risks properly if there is economic disturbance and (III) Financial system stability is the conditions under which price fixing, allocation of funds, and risk processing function well and support economic growth

Indonesia adheres to the dual Banking system (Islamic Banking and Conventional Banking). According to Bank Indonesia Law No.10/1998, Islamic Banks or Islamic Banks are banks conducting business based on sharia principles, namely the rules of an agreement under Islamic law between the Bank and other parties to deposit funds or financing business activities.

Islamic banks as one intermediary institutions have a strategic function of collecting funds from units of the economy that have *surplus units* with other units that suffer from lack of funds *deficit units*. The activities of banks to raise funds called the finding activity. While the activities of channeling funds to the community by the bank called the activities of financing or lending(Sударsono, 2003)

In Islamic banks, the services provided to customers adapted to Islamic principles in accordance with Islamic law. Sharia principles as applied by Islamic banks is financing based on the principle of profit sharing (*Mudharabah*), financing based on principle of capital participation (*Musharakah*), principle of selling goods to obtain profit (*Murabahah*), or financing of capital goods based on principle of the lease without option (*Ijarah*), or with the option of transfer the ownership of the leased goods from the bank by another party (*Ijarah wa Iqtina*).

According to Antonio (2001), Islamic banks are not tailored with interest rate system. Hence, the profit is derived from profit sharing system with businesses that use the funds of Islamic banks as well as investments of Islamic banks themselves. Characteristics of the operational principles of sharia banks is to use a profit-sharing system, it is different to the interest system (Yuliadi, 2001).In general, Islamic banks are financial institutions whose main business is providing financing and other services in traffic in payments as well as money circulation which operates in accordance with the principles of Islamic Sharia (Yuliadi, 2001)

The presence of sharia banking in the world gets great enthusiasm from all over the world. This is evidenced by the rapid development of Islamic Banks in each country that occurs not only in the Islamic State. Western countries are beginning to apply sharia banking as one of their banking systems, such as the UK and Australia (Kurniati, 2012)

The development of sharia financial industry in Indonesia began in 1991 the establishment of the first Sharia Bank (BUS) in Indonesia, namely Bank Muamalat Indonesia, It shows the needs of the public will the presence of financial institutions that can provide financial services in

accordance with sharia (Bank Indonesia, 2002). Islamic banks are emerging as the solution of the wishes of Muslims in Indonesia who want to release from usury as used by conventional banks (Rivai & Ismail, 2013). Not only that, sharia banks also appear as a solution to the weakness of resilience or stability that occurs in conventional banking in the face of crisis shocks. This is because sharia banks are pointed out by some experts have better resistance to crises than conventional banks. This is because the distribution of benefits and risk sharing takes place fairly (Faiz, 2010)

The important role of sharia banking can be measured from the institutional development and how much financing is channeled. In general, sharia banking business consists of Sharia Commercial Bank (BUS), Sharia Business Unit (UUS), and Sharia Rural Bank (BPRS). The number of banks continuing to conduct business based on sharia principles continues to grow in line with the operation of new sharia Banks.

Islamic banks have proven their performance as a financial institution that can survive in the midst of global crisis so that Islamic banks can survive until now, research conducted by (Boumediene & Caby, 2009) found that Islamic banks are more resistant to flare subprime mortgage crisis.

Profitability is the level of the bank's ability to increase profits. Profitability level can be measured using Return On Asset (ROA) ratio. Is a ratio to measure the ability of management in managing assets to generate profits. Rasio ini is one element in measuring the soundness of banks (CAMEL) of Bank Indonesia. In the business activities of banks that encourage the economy, high ROA ratio shows the Bank has distributed credit and earn income.

Identification of macro variables that can affect the profitability of banks needs to know to get the maximum performance. ROA is important for the bank because to measure the effectiveness of the company in generating profits by utilizing the owned, ROA is the ratio between profit after tax to total assets. the performance of the company the better, because the rate of return (return) is greater (Husnan, 1998)

According to Haron (1996), divides the determinants of bank profitability into two, namely internal factors and external factors. the internal factor determinant consists of several variables such as fundraisers, capital management, liquidity management and cost management, all internal variables are deemed to be controlled by bank management, while external variables are factors considered under the control of bank management. Among the external variables are discussed much is competition, regulation, market share, ownership, the amount of money in circulation, inflation, interest rates.

Therefore, the objectives to be achieved in this research are to know the effect of inflation, exchange rate, money supply and Bi rate to the profitability of sharia banking in Indonesia period 2012 to 2015 which is measured Return On Asset (ROA). The objective is elaborated into four specific research questions:

How is the effect of Interest rate (BI's Rate) on the profitability of Islamic banking as proxied by ROA.

How is the effect of inflation on the profitability of Islamic banking as proxied by ROA.

How is the effect of exchange rate on the profitability of Islamic banking as proxied by ROA.

How is the effect of money supply on the profitability of Islamic banking as proxied by ROA.

THEORETICAL FRAMEWORK

Exchange Rate

Exchange rate is a value indicating the amount of domestic currency required to earn one unit of foreign currency (Sukirno, 2002). Meanwhile, according to (Triyono, 2008) exchange rate is the exchange between two different currencies, which is a comparison of the value or price between the two currencies.

The exchange rate of a currency affects the economy if the currency exchange rate is appreciated or depreciated. Fluctuations in exchange rate changes are the focus of the foreign exchange market. Trade between the State where each State has its own currency means that the ratio of the value of a currency to another currency, which is called the exchange rate or foreign currency.

The exchange rate system can be classified according to how much the exchange rate is controlled by the government, the category of exchange rate system according to (Madura, 2008) is as follows:

The fixed exchange rate system is a monetary system where the exchange rate is made constant or only allowed to fluctuate within very narrow limits. If the exchange rate starts to move too sharply then the government can intervene to maintain within the limits in question.

The floating exchange rate system In this system, the floating exchange rate is a monetary system in which exchange rate is allowed to follow market forces without intervention from the government, within this system multinational companies need to submit substantial resources to measure and manage foreign exchange risk.

The floating exchange rate is under control a monetary system in which the exchange rate is allowed to fluctuate indefinitely, but the central bank may intervene to influence the movements of the exchange rate. The ups and downs of currency exchange rates can occur in various ways, it can be done officially by the government of a country that embraces managed floating exchange rate system.

Inflation Rate

One important indicator to maintain the economic stability of a country by keeping macro variables one by keeping the inflation rate in the country in order to keep the balance, High inflation rate is usually associated with overheated economic conditions, the economic condition is experiencing demand over products that exceed their supply capacity, so prices tend to increase.

According to Tandelilin (2010), inflation is a tendency in increasing the price of the product as a whole, resulting in a decrease in the purchasing power of money. Inflation is the increase of prices in general and continuously related to market mechanism which can be caused by various

factors, increased publicity, excess liquidity on the market that triggers consumption or even speculation, or includes the consequences of non-current distribution of goods.

Inflation is the process of an event that is used as an indicator to see the rate of change and is assumed to occur if the process of price increase takes place continuously, theoretically, inflation rises in the price of goods in general and continuously. Thus, inflation cannot be said when the increase occurs only in small groups of goods and price changes that occur only once (Yuliadi 2008).

Inflation is measured by the rate of inflation that is the rate of change from the general price level. The perspectives are as follows (Karim, 2008: 136)

$$\text{Rate of inflation} = \frac{\text{pricelevel1} - \text{pricelevel} - 1}{\text{pricelevel} - 1} \times 100$$

Interest Rate

The interest rate of Bank Indonesia (BI Rate) is an interest rate policy that reflects the stance of the monetary policy set by Bank Indonesia and announced to the public (Bank Indonesia). The interest rate is one indicator in determining whether a person will make an investment or saving (Boediono, 1994)

The development of unusual interest rates can directly disrupt the development of banking. The interest rate becomes a measure of how much it costs or income in relation to the use of money for a period of time.

Money Supply

The amount of money in circulation is money in the hands of the people. Broad Money (M2) consists of M1 and coupled with quasi-money, while money circulates in the narrow sense consisting of currency and demand deposit (M1).

According to Boediono (2005), states that in the modern economy, the money supply is controlled by the Central Bank as the holder of monetary authority. The creation of money supply is a market mechanism, which is a process of interaction between demand and supply of money, and not just printing money or a government decision.

In general, there is a policy that can be done by the government of a State, namely fiscal policy and monetary policy. Both policies are interrelated and inseparable. The fiscal policy discusses the government's policy to change its expenditure and tax receipts while monetary policy leads to changes in the money supply that affects the financial institutions, including the banks and consequently affecting interest rates, investment and output levels.

Given the importance of stability of macroeconomic variables for the smoothness and achievement of national development targets, the Government must commit to continuing

creating and stabilizing macroeconomic stability. One direction of the macroeconomic framework in the medium term is to maintain macroeconomic stability and prevent excessive fluctuations in the economy, especially in maintaining financial system stability through financial institutions including in-country banking.

Macroeconomic stability depends not only on macroeconomic management but also on the structure of markets and sectors. To strengthen macroeconomic stability, macroeconomic policies, through well-coordinated fiscal and monetary policies, should be supported by structural reform policies aimed at strengthening and improving market function, including capital and money markets, labor markets and goods and services markets, and sectors include such as industry, agriculture, trade, finance, and banking sectors.

RESEARCH METHODOLOGY

This research aims to examine the effect of macroeconomics variable such as inflation, exchange rate, and gross domestic product, (independent variable) to the performance of Islamic Bank in Indonesia by using the Return on Assets (ROA) (dependent variable). Based on how to obtain the data, the type of data in this research are secondary monthly time series data starting January 2012 until December 2015 from Statistical Central Board (BPS), Financial Services Authority (OJK), and Bank Indonesia, and this research uses Multiple Linear Regression analysis.

RESEARCH FINDINGS

Classical Assumption Test

This test is intended to detect the presence or absence of autocorrelation, heteroskedasticity, and multicollinearity in the estimation, because if there is a deviation of the classical assumption then the estimation of the equation model is done to be invalid and disrupt the conclusion of the analysis.

Heteroskedasticity Test.

Heteroskedasticity is a detection to see if the interference variable is not constant. The heteroskedasticity test aims to test whether in the regression model there is a variance inequality of the residual one observation to another fixed observation, it is called homoskedasticity and if the variant is not constant or changing it is called heteroskedasticity. A good regression model is a homoskedasticity or there is no heteroskedasticity (Gujarati, 2007).

The way to find out whether or not the symptoms of heteroskedasticity in this study to test with *Harvey* test If the probability $Obs * R-squared > 0.05$ then the model there is no heteroskedasticity, and if the probability $Obs * R-squared < 0.05$ then the model is confirmed there is heteroskedasticity.

Table 4.1: Heteroskedasticity Test Result

Heteroskedasticity Test: Harvey

F-statistic	1.873168	Prob. F(4,43)	0.1326
Obs*R-squared	7.122782	Prob. Chi-Square(4)	0.1295
Scaled explained SS	8.934511	Prob. Chi-Square(4)	0.0628

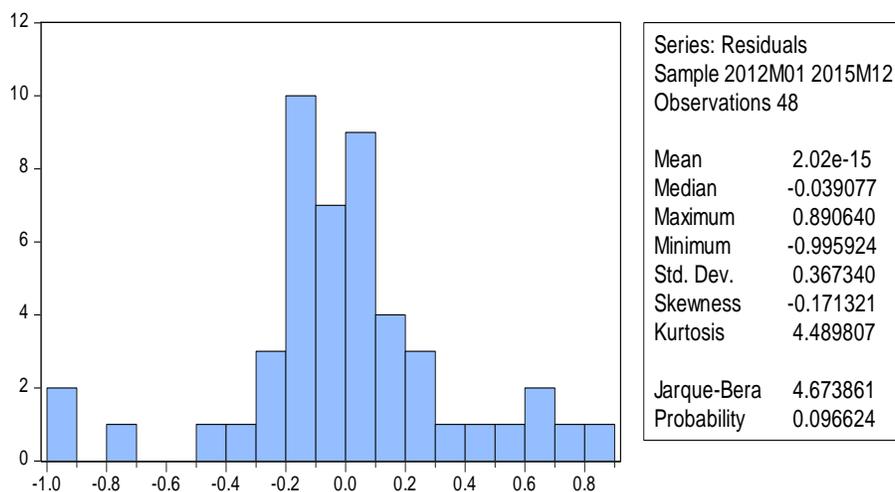
~~Source: Secondary Data Processed~~

Table 4.1 shows heteroskedasticity test by using *Harvey Test*. we can see that the probability value of *Obs * R-squared* is 0.1295 or greater than 0.05. Then it can be concluded that data in this research variable there is no heteroskedasticity.

Normality Test.

This test is to know whether the variables used in the study are either distributed or not. The normality test referred to in the classical assumption of the OLS approach is the residual (data) formed by a normally distributed regression model. To test the assumption of test normality by *Jarque Berra*. If the *Jarque Berra* probability test is greater than 0.05, then the data is good and distributed normally, but if it is less than 0.05 then the data is not good and not normally distributed.

Table 4.2: Normality Test Result



Source: Secondary Data Processed

Table 4.2 shows that the probability value is $0.096624 > 0.05$ so it can be said that the probability value of this model is not significant, while based on normality test results can be seen from the

probability value jargue-bera (JB), if the probability > 0.05, then the model in normal state, based on this parameter is known that the value of probability value at JB is 0.096624 greater than the value of 0.05 Thus It can be concluded that the regression model meets the assumption of normality.

Multicollinearity Test.

Multicollinearity test aims to determine whether there is a relationship between independent variables. The multicollinearity test aims to test whether the regression model finds a correlation between the independent variables. The multicollinearity test is used to detect the presence or absence of relationships between some or all of the independent variables in the regression model. Multicollinearity is a state in which one or more independent variables are expressed as linear conditions with other variables.

A good regression model should not be a correlation between independent variables. The results of this test can be seen from the Variance Inflation Factor (VIF) with the VIF equation = 1 / tolerance. If VIF is less than 10 then there is no multicollinearity.

Table 4.3: Multicollinearity Test Result

Variance Inflation Factors

Variable	Coefficient	Uncentered	Centered
	Variance	VIF	VIF
Money supply	1.08E-13	5.976.784	8.474.544
Exchange Rate	1.02E-08	5.047.572	5.510.722
Inflation	0.007193	1.577.328	1.004.198
Interest rate	0.022724	3.499.427	5.145.119

Source:

Secondary Data Processed

Table4.3 shows the results of multicollinearity test. VIF values for Money Supply, Exchange Rate, Inflation and Interest Rate variables are 8.474.544, 5.510.722, 1.004.198, and 5.145.119 mean that the Centered VIF value of the four variables is no greater than 10. Then it can be it is said that there is no Multicollinearity in the independent variable.

Based on the classical assumption of linear regression with OLS, a good linear regression model is free from multicollinearity. Thus the above model has been free from the existence of Multikolinearitas.

Autocorrelation Test

The autocorrelation test aims to test whether in a linear regression model there is a correlation between the confounding error in period t with an error in period t-1 (previous). The correlation test aims to determine whether there is a correlation between the members of a series of observed

data by time series or cross-section.

Autocorrelation is a situation where there is a correlation between residual of this year with an error rate of the previous year. To determine the presence or absence of autocorrelation in the model, it can be seen from the statistical value Durbin-Watson

Table 4.4: Autocorrelation Test Result

Variable	Coefficient	t-Statistic	Prob
AR(1)	0.582613	5.650.392	0,0000
SIGMASQ	0.091672	6.283.442	0,0000
Durbin-Watson stat			1.775.961

Source : Secondary Data Processed

Table 4.4 shows the correlation test results that have been improved by using the AR model (1) there is a DW value is 1.775.961. From this model, it is known that $k=4;n=48$. Then we can determine the value of d_U and d_L from Durbin-Watson table which is known that the value of d_U is 1.72 and d_L 1.36, and $4-d_U$ is 2.28, since the value of Durbin-Watson statistic is between d_U and $4-d_U$, then in this data is free of autocorrelation problems or in other words there is no autocorrelation from the data.

The Result of Regression Estimation

Table 4.5: The Result of Regression Estimation

Variables	Regression		
	Coefficient	T-Test	Prob
Constanta	5.664345	10.59119	0.0000
Money Supply	-0,000134	-4.068792	0.0002
Kurs	0.000270	2.676791	0.0105
Inflation	0.000750	0.008844	0.9930
Bi Rate	-0.309501	-2.053142	0.0462
R-Squared	0.731482		
F-Statistic	29.28451		
Prob F-stat	0.000000		

Dependent Variable : ROA

Source : Secondary Data Processed.

This research using multiple linear regression analysis. The model of this research is : $Y_t = a + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + e$

Where :

$Y_t = ROA$

α = Constanta

X_{1t} = Money Supply

X_{2t} = Kurs

X_{3t} = Inflation

X_{4t} = Bi Rate

e = Error Term

$$Y_t = 5.664345 - 1.34E-06X_{1t} + 0.000270X_{2t} + 0.000750X_{3t} - 0.309501X_{4t} + e$$

Based on the estimation of regression, the dependent variables in this study is Return on Asset (ROA), and the independent variables are Inflation, Exchange Rate, Bi Rate, and Money supply. Based on table 4.5, it can be seen that Money supply, Exchange rate (Kurs), Bi Rate are significantly affecting the Return on Asset (ROA) in Islamic Banks in 2012-2015. While Inflation rate are not significantly affecting the Return on Asset (ROA) in Islamic Banks in 2012-2015.

F-test

F-test is used to determine the effect of independent variables on the dependent variable simultaneously together. According to Ghazali, (2013) the F test essentially aims to show whether all independent or independent variables included in the model have a reciprocal effect on the dependent or dependent variable. Test F is done by using significance value of Test F in this research is done using Eviews-7. Here is a table of F-test values.

Table 4.6: F-Test :M2, Kurs, Inflation, BI Rate to ROA

F-Statistic	29.28451
Prob F-stat	0.000000

Dependent Variable : ROA

Source : Secondary Data Processed

The explanation of the f-test results in table4.6, where the results of the F test in this study has a result of 29.28451 with (Prob F-stat) of 0.000000 results can explain that Prob F-stat smaller than the level of significance 0.05, so it can be concluded that the estimated regression model is feasible to be used to explain the effect of the independent variable (Inflation, Exchange Rate, BI Rate, and Money supply) on the dependent variable Return on Assets (ROA).

t-Test

The t-Test in multiple linear regression is intended to test whether the parameters (regression coefficients and constants) suspected to estimate the equations multiple linear regression models are appropriate parameters or not, the parameters are able to express the behavior of independent variables in influencing the dependent variable. t-Test in this research use Eviews-7 program. The result of multiple linear regression outputs in table 4.7 is as follows:

Table 4.7: t-Test :Money Supply, Kurs, Inflation, Bi Rate to ROA

Variables	Regression		
	Coefficient	T-Test	Prob
Constanta	5.664345	10.59119	0.0000
Money Supply	-0,000134	-4.068792	0.0002
Kurs	0.000270	2.676791	0.0105
Inflation	0.000750	0.008844	0.9930
Bi Rate	-0.309501	-2.053142	0.0462

Dependent Variable : ROA

Source : Secondary Data Processed

Constanta

Based on the result of regression in table 4.7, the constant value is 5.664345. That is, if all independent variables are Money supply, Inflation rate, Exchange rate (Kurs), Bi rate are considered to be constant, then the amount of ROA is 5.664345.

Money Supply (M2)

M2 variable shows t-statistic equal to -4.068792 with robability coefficient equal to 0.0002 hence meaning of variable M2 have negative and significant effect to ROA, because probability value less than 0,05.

Exchange Rate (Kurs)

Variable Exchange rate shows t-statistic of 2.676791 with probability coefficient of 0.0105 then the meaning of the variable Exchange rate has a positive and significant effect on ROA because the probability value is less than 0.05.

Inflation Rtae

Inflation variable shows t-statistic of 0.008844 with probability coefficient of 0.9930 then the meaning of Inflation variable has the positive and not significant effect on ROA because of probability value less than 0,05.

Bi Rate

Bi Rate variable shows t-statistic equal to -2.053142 with the robability coefficient of 0.0462 hence the meaning of variable Bi Rate have the negative and significant effect to ROA, because of probability value less than 0,05.

Determination Coefficient Test (R²)

Determination Coefficient Test R² is used to measure how much variation of the dependent variable can be explained by the independent variable. The value of the coefficient of determination can be measured by the value of R-Square or Adjusted R-Square. When the

coefficient of determination value = 0 (Adjusted $R^2 = 0$), the variation of the related variables cannot be explained by the independent variable. While if $R^2 = 1$, then the variation of the dependent variable as a whole can be explained by the independent variable.

Determination Coefficient (R^2) essentially measures how far the model's ability to explain variations of dependent variables. The coefficient of determination is between zero and one. The small value of R^2 means that the ability of the dependent variables is very limited. A value close to one means the dependent variables provide almost all the information needed to predict the variation of the dependent variable (Ghazali, 2013: 97)

Based on the results of regression in table above can be seen that the value of determination coefficient test for the regression model between the Money supply, Exchange rate, Inflation, Bi Rate of ROA of 0.731482 or amounted to 73.14% ROA influenced by variable Money supply, Exchange rate, Inflation and Bi Rate. While 26,86% ROA explained by variable outside research variable ($100\% - 73,14\% = 26,86\%$).

DISCUSSION

**Table 4.8: The Accumulation of Independent Variable influence on
Dependent Variables**

Variables	Coefficient	Probability
Constanta	5.664345	0.0000
Money Supply	-0,000134	0.0002
Kurs	0.000270	0.0105
Inflation	0.000750	0.9930
Bi Rate	-0.309501	0.0462

The Influence of Money Supply on Return on Assets (ROA).

Test results show that the money supply has a negative direction and has a significant effect on sharia banking ROA because it has a probability of 0.0002 which means is below α of 0.05. The value of the Money supply regression coefficient is -0,000134 which means that if there is an increase in the amount of money in circulation of about 1 billion rupiahs, then the Return on Assets (ROA) of sharia banking will decrease around $-0,000134\%$, assuming other variables are constant. Therefore, the regression results are in accordance with the hypotheses in this study.

The results of this study is in accordance with the research conducted by several researchers, including Desi Marilyn dan Rohmawati (2012) which states that the amount of money in circulation has a significant effect on ROA, so that any increase in the amount of money in circulation will result in an increase in ROA, and so on any decrease in the amount of money in circulation will decrease ROA. In theory, if the amount of money in circulation rises, then the interest rate will decrease. Lower interest rates will increase investment in the economy. This

additional investment will affect the operational activities of sharia banks. With the increase in investment, demand for financing in Islamic banks will also increase. And for the next will affect the financial ratios of banks. One of ROA's profitability ratios (Sukirno, 2006: 283).

The Influence of Exchange rate (Kurs) on Return on Assets (ROA).

Test results show that the Exchange rate (kurs) has a positive direction and has a significant effect on sharia banking ROA because it has a probability of 0.0105 which means it is below α of 0.05. The regression coefficient value of Exchange rate of 0.000270 which means that if there is an increase 1 rupiah then the profitability of sharia bank ROA will increase by 0.000270 percent. Therefore, the regression results are in accordance with the hypotheses in this study.

From the test results means there is a positive and significant influence on exchange rate variables and profitability of sharia banks in Indonesia period 2012-2015. This result is in accordance with research conducted by Desi Marilyn and Rohmawati (2012) stating that the exchange rate will determine the return on real investment. A declining currency will clearly reduce the purchasing power of the income and capital gains derived from any type of investment. This decrease in investment will affect the bank's operational activities. With the decline in investment, demand for financing in Islamic banks will also decline. And for the next will affect the financial ratios of banks, one of which profitability ratios are represented by ROA (Sukirno, 2006: 38).

This study is supported by other research conducted by several researchers, among others: Dwijayanthy and Naomi (2009) state that any impact of exchange rate on profitability, where the bank identifies if exchange rate appreciation or depreciation, it will impact on the obligations abroad. bank currency at maturity. As a result, bank profitability will change if in such case, the bank does not hedge. This result is also supported by Samuelson's (2006) argument. The exchange rate is important because during the economic crisis there is generally an increase in the dollar, thus causing foreign debt to be unable to pay, so the bank will have difficulty in making payments.

The results of this study indicate that the exchange rate of rupiah has a positive and significant effect so that any increase in the exchange rate or appreciation of the value of the rupiah against the US dollar will result in an increase in sharia bank ROA and otherwise any depreciation of the rupiah or depreciation will decrease the ROA of sharia banks. Based on statistical data of Bank Indonesia (2013), in 2013 there was a significant depreciation of the rupiah against the US dollar. in the first quarter of the rupiah against the US dollar of Rp. 9719 per 1 \$ while in the quarter VI exchange rate of rupiah depreciated to reach Rp. 12.189 per 1 \$. The rupiah exchange rate depreciated by 20.6% and at the same time, the average sharia banking ROA decreased from 2.14% in 2012 to 2% in 2013. The decline in the profitability of sharia banking is due to the growth of Islamic banking assets and deposits experiencing a slowdown as a result of the declining liquidity condition of sharia banks and the slowing of sector activities.

The Influence of Inflation rate on Return on Assets (ROA).

Test results show that Inflation has a positive direction and does not have a significant effect on sharia banking ROA because it has a probability of 0.9930 which means is above α of 0.05. The value of the inflation coefficient is 0.000750 which means that if there is an increase of 1%

inflation, Return on Assets (ROA) will rise about 0.000750%, assuming other variables are constant. Therefore, the regression results are not in accordance with the hypothesis in this study. The results of this study in accordance with research conducted by some researchers, among others:

Suryanto and Kesuma (2012), inflation does not affect the Return on Assets. The high rate of inflation will lower the Return on Assets, while low inflation will cause economic growth to slow. This indicates that although inflation has increased, corporate profits have not decreased significantly and vice versa. If inflation rises, corporate earnings do not experience a significant decline and vice versa.

The results of this test show that inflation does not significantly affect the profitability of sharia banks in Indonesia period 2012-2015 because the value of significance is greater than the value of alpha, which is 0.05. This result is in accordance with research conducted by Anto and Wibowo (2012) stating that the inflation rate that occurred in Indonesia has no effect in increasing or decreasing the profitability of sharia banks. This is also supported by Rosanna (2007) who said that at the time of high inflation, the public believes more in sharia banks in comparison with conventional banking. The belief of the community is also due to historical experience during the economic crisis of 1997, during which time the inflation rate in Indonesia was very high and ultimately resulted in many conventional banks that went bankrupt due to applying the high rate of interest to offset the rate of inflation and to withdraw customers to keep placing their funds so as to result in a negative spread and in the end the bank can not refund the public funds that have been saved and the interest.

The Influence of Bi rate on Return on Assets (ROA)

The test results show that the Bi rate has a negative direction and has a significant effect on sharia banking ROA because it has a probability of 0.0462 which means it is below α of 0.05. The regression coefficient value Bi-rate of -0.309501 which means that if there is an increase of Bi rate of 1 percent then the profitability of sharia bank ROA will decrease by -0.309501 percent. Therefore, the regression results are in accordance with the hypotheses in this study.

This result is also in accordance with research conducted by Sahara (2013) which states that the BI interest rate has a negative effect on the profitability of sharia banking in Indonesia. The increase in the BI interest rate will be followed by an increase in interest rates on savings. This will result in customers moving their funds to conventional banks to obtain higher returns. The rise in conventional bank interest rates will affect the operational activities of sharia banks in terms of financing and channeling of funds. If this happens then the income and profit of sharia banks will decline.

The results of this study indicate that when the BI interest rate experienced the lowest rate of decline during the observation period of 5.75% in 2012 to the first quarter, the average ROA of Islamic banks increased from 1.8% to 2.93%. However, in the second quarter of 2013, the BI interest rate increased to the highest in late 2013 at 7.5%. the average profitability of sharia banks continued to decline in line with the rise in BI interest rates. This shows that the higher the BI interest rate, the sharia banking ROA will be smaller, so also if the interest rate decreases BI then ROA sharia banks will increase.

CONCLUSION AND POLICY IMPLICATION

Conclusion

The multiple linear regression is used to measure the relationship between inflation rate, exchange rate, money supply, and interest rate represented by Return on Assets (ROA) on Islamic Banking. Some conclusions are as follows:

Money supply has a negative and significant influence on the Return on Assets in Islamic banks. These results can show that a negative relationship between Money supply and ROA provides the sense that Money supply brings a negative impact on ROA, so if any increase in the amount of money in circulation will result in an increase in ROA, and so on any decrease in the amount of money in circulation will decrease ROA. In theory if the amount of money in circulation rises, then the interest rate will decrease. Lower interest rates will increase investment in the economy. This additional investment will affect the operational activities of sharia banks. With the increase in investment, demand for financing in Islamic banks will also increase. And for the next will affect the financial ratios of banks. One of ROA's profitability ratios (Sukirno, 2006: 283).

Exchange rate (kurs) has a positive and significant effect influence on the Return on Assets in Islamic banks. These results can show that a positive relationship between Exchange rate and ROA. The results of this study indicate that the higher the exchange rate of foreign currency will encourage the increase ROA. Foreign exchange investment is one option to attract the public because in addition to providing benefits when experiencing appreciation, will also provide benefits because it is safer than the effects of inflation. The increase in the exchange rate will result in the community more interested in saving the money in rupiah so that the number of deposits in rupiah will increase. If the amount of deposits increases then the funds disbursed will also increase and ROA will also increase. The results of this study is the Exchange will affect the decision of the community in terms of saving. When the rupiah appreciates, people tend to choose to keep their money in rupiah. This is because the community will benefit from the strengthening of the rupiah exchange rate. Conversely, if the rupiah depreciates, then the public will tend to choose to save money in the form of foreign exchange to avoid the effects of inflation.

Inflation has a positive and does not have a significant effect on the Return on Assets in Islamic banks. The results of this study in accordance with research conducted by some researchers, among others: Suryanto and Kesuma (2012), inflation does not affect the Return on Assets. The high rate of inflation will lower the Return on Assets, while low inflation will cause economic growth to slow. This indicates that although inflation has increased, corporate profits have not decreased significantly and vice versa. If inflation rises, corporate earnings do not experience a significant decline and vice versa.

BI rate has a negative and significant influence on the Return on Assets in Islamic banks. This result can show that the existence of a negative relationship between BI rate and ROA give the meaning that BI rate brings negative impact to ROA. The results of this study in accordance with research conducted by Sahara (2013) which states that the BI interest rate has a negative effect on the profitability of sharia banking in Indonesia. The increase in the BI interest rate will be followed by an increase in interest rates on savings. This will result in customers moving their

funds to conventional banks to obtain higher returns. The rise in conventional bank interest rates will affect the operational activities of sharia banks in terms of financing and channeling of funds. If this happens then the income and profit of sharia banks will decline.

Policy Implication

Based on the results of the analysis and conclusions, there are some suggestions with the aim of the author to be a policy taken both from Islamic Banking and the government, as follows:

Islamic banks should consider macroeconomics variable fluctuations, such as inflation, interest rate (BI rate), money supply, and exchange rate due to bank's financial performance especially profitability of Islamic banks are influenced by external factors.

Policy makers should set an optimal thresholds for those selected macroeconomic variables given that external shocks occur. Hence, these thresholds would inform on exact timing for intervention. The timely intervention is expected to be able in maintaining the positive profitability of Islamic banks.

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