



Factors That Affect Savings In Islamic Banking

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Abstract

Purpose - The purpose of this study is to examine the effect of macroeconomic variables on the amount of savings in Islamic banks in Indonesia.

Method - This study use quantitative research type using secondary data using OLS (ordinary least square) analysis which aims to examine the independent variable on the dependent variable.

Result - The results of this study indicate that inflation and exchange rate variables do not affect the amount of savings, M2 variable has a positive and significant effect on the amount of savings. While the SBI variable has a negative and significant effect on the amount of savings.

Implication - This study uses the data from Central bank of Indonesia

Originality - This study uses several macroeconomic variables that are used to test its effect on the amount of savings in Islamic banking. By using secondary data taken from official government institutions for several years. The results show that macroeconomic variables greatly affect the customer's decision to save in Islamic banking.

Keywords: inflation; M2; exchange rate; interest rate financing.



Introduction

Indonesia as a country with the largest Muslim population should be the largest potential customer in the Islamic financial industry, including in Islamic banking. Islamic banking is currently experiencing very rapid development in Indonesia marked by the increasing number of third party funds, opening of the head offices, branch offices, and Islamic banking networks, making it easier for people to save their funds.

One typical problem that is often faced by developing countries like Indonesia is the lack of capital for investment used to support economic development. Sources of funding for the country's development can come from within the country and abroad. One of the alternatives to get financing funds in the country can be sourced from public savings, government savings, tax revenues and private investment. Therefore, the existence of Islamic financial institutions is very necessary in financing economic development.

The development of the amount of savings in Islamic banking from 2011 and 2017 has relatively increased from year to year. However, in 2014-2015, the growth of Third Party Funds has decreased from the previous periods. Whereas in the previous five years period of 2009-2013 the growth of Islamic bank assets experienced an average growth of 43 percent. However, in the 2014-2015 period, the growth experienced a relatively dramatic decline, this slowdown was not only seen from the decline in assets but also the financing provided by third party funds. The decrease was also seen in the liquidity ratio and profitability ratio. This is expected due to the influence of the world financial crisis and high inflation. But the decline that occurred was not gradual. In 2016-2017 the growth of Islamic bank assets as indicated by Third Party Funds increased relatively high.

The development of Islamic bank savings is influenced by inflation rate. In developing countries inflation can reduce the level of savings because of the urge to spend on durable goods, therefore reducing the level of savings. Encourage people to replace nominal assets into real assets. Interest rates also have a role in Islamic banking savings rates, because interest rates are a



factor that can affect the macro economy. Although Islamic banking does not use interest rates. However, interest rates are still a benchmark to determine the ratio and profit sharing. In addition, the money supply factor also has an important role in increasing the amount of Islamic banking savings, because all economic and financial activities are carried out using money. Where the money function is no longer only used as a means of payment, it is also used as a tool to save wealth or in case of protection. The exchange rate of rupiah against dollar which is a global payment instrument is an external factor that has an influence on the amount of savings in Islamic banking. So that the crisis which occurs globally both directly and indirectly will affect Islamic financial institutions in developing countries including Indonesia.

In response to the growth of Third Party Funds that are experiencing relatively volatile growth, it is necessary to evaluate what factors can influence the growth of Third Party Funds. So that Islamic banking can make efforts in tackling the phenomenon of deceleration growth that will occur. For this reason, this study wants to reveal the factors causing the growth of third party funds based on macroeconomics.

Based on the explanation above, the formulation of the problem in this study is to determine the effect of macroeconomic variables on the amount of Islamic Bank Savings. The purpose of this study is to examine the effect of macroeconomic variables on the amount of Islamic bank savings in Indonesia.

Literature Review

Sources of Bank Funds

The main sources of bank funds come from deposits in the form of giro (demand deposits), time deposits, and saving deposits. These three types of funds are often called traditional sources of bank funds (Siamat, 2005).

Islamic Bank Savings

According to Sharia Banking Law No. 21/2008, savings are deposits based on Wadi'ah contracts or investment funds based on mudharabah or



contracts that do not conflict with sharia principles, which can be withdrawn according to agreed terms and conditions, but cannot be withdrawn by check, crossed checks, and or other similar instruments.

In the National Sharia Board Fatwa No. 02 / DSN-MUI / IV / 2000, there are two types of savings, namely: 1). Savings are not justified in sharia principles in the form of savings based on interest calculation; 2). Savings that are justified in sharia principles, namely savings which are based on mudharabah and Wadi'ah principles. Means that income is not spent on consumption. In this matter, saving is not a leftover concept. After all consumption is fulfilled, it is a choice between spending it or not spending it (Partadiredja, 1985). Meanwhile, according to Rianto savings is a form of liquid customer deposits, this means that this product can be taken at any time if the customer needs, but the profit sharing offered to deposit customers is small (Partadiredja, 1985).

Islamic banks apply two contracts in savings, namely akad Wadi'ah and mudharabah. Savings that use a wadi 'ah contract follow the principles of the Wadi'ah yad ad-dhomanah. Savings using a wadi' ah contract do not get profits from the bank because of its entrusted nature. However, banks are not prohibited if want to give a bonus / gift. Whilst savings that apply mudharabah contracts follow mudharabah principles. Where the profits from the funds used must be divided between Shahibul Maal and Mudarib. And there is a grace period between the funds provided and the profit sharing (Partadiredja, 1985).

Inflation

Manurung (2004) defines inflation as a symptom of rising prices of goods that are general and continuous (Manurung, 2004). Karim (2008) defines that inflation is a general increase in prices of goods/commodities and services during a process of increasing the price level which is generally and continuously caused by an excess of demand over supply capacity and is a problem that is often experienced by various countries (Nopirin, 1989).



Relation of Inflation to Third Party Fund

A high and uncontrolled inflation rate can disrupt banking efforts in mobilizing public funds due to high inflation rates that cause real interest rates to decline. This fact will reduce people's desire to save, so that the growth of banking funds sourced from the community will decrease (Pohan, 2008).

Money Supply (M2)

According to Partadiredja, the money supply in the broad sense is symbolized by M2, which consists of a narrow meaning of money or M1, that is coins, banknotes, and current accounts (Partadiredja, 1985). And quasi money consisting of time deposits, various types of savings, and foreign exchange accounts owned by domestic private companies. Money supply is all types of money circulating in the economy, which is money in circulation plus demand deposits in commercial banks.

Components who give contribution to the M2 escalation are M1 and quasi money increases. The increase was mainly donated by an increase in the number of loans or financing issued by Islamic banks both in rupiah and foreign currencies. In addition, the M2 growth slowdown was the slow creation of money due to the suboptimal function of banking intermediation.

Exchange Rate

According to the Karim Exchange rate or more popularly known as the currency exchange rate is the quotation of the market price of a foreign currency in the domestic currency or its reciprocal that is foreign currencies. The exchange rate represents the rate of exchange of one foreign currency to its other currency and is used in various transactions, including international trade transactions, tourism, international investment, or short-term money flows between countries that cross geographical or legal boundaries (Karim, 2011).



The exchange rate is an external factor which also has an influence on the amount of third party funds. The weakening of the rupiah against the US dollar will reflect uncertain economic conditions. Thus increasing the risk that will be responded by the business world. The exchange rate is thought to have influence on the development of Islamic bank third party funds. Islamic banks' third-party funds are sensitive to fluctuations in the rupiah exchange rate. And has a tendency to increase in line with the strengthening of exchange rate (Hadzmi, 2011).

Exchange rate fluctuations and expectations of a large rupiah depreciation fluctuation cause community funds to move or run to high-quality banks and foreign banks in overseas and domestic banks. The turmoil will also cause bank debtors to experience business difficulties, with further consequences being unable to pay the principal debt and interest to the bank. As a result, banks experience liquidity difficulties and cause an increase in cost of funds so that banks cannot fulfill their obligations to third party funds. The impact on Islamic banking with the withdrawal of funds by foreign investors in various Indonesian companies, the bank experiences a liquidity crisis, a decline in the value of earning assets in the form of credit and securities purchased by banks, a reduction in capital adequacy (CAR) due to losses originating from reserves for a decrease in the quality of productive assets and default on loan interest.

Interest Rate

Interest rate is the presentation of income received by savers from the savings of money which is set aside, and interest rate is also the presentation of income that must be paid by the borrowers of funds (Sukirno, 2004).

According to Pohan, the abnormal development of interest rates can directly interfere with banking processing. Low interest rates will reduce public interest to save so that the amount of bank funds will decrease. However, on the contrary if interest rates are high, it will increase the desire of people to save in bank. Meanwhile, on the other hand high interest rates



will increase production costs in the country due to demand for bank credit also decreases with high lending rates (Pohan, 2008).

In Islamic economics the term interest rate often known as usury. Interest rates are not used as an Islamic banking instrument karena it is forbidden in the religion. In Islamic banking the instrument for obtaining bank income uses profit-loss sharing system where profits or losses that become uncertainty are shared. And using a contract that was proclaimed by Majelis Ulama Indonesia in 2000 which used two contracts, namely the Wadi'ah contract and the Mudharabah contract.

According to Sudarsono, the increase in BI rate to reduce inflation caused by the fall in the value of the rupiah against the dollar. The increase in the BI rate was responded to by massive increases in interest rates at conventional banks. However, the increase in interest rates does not directly affect Islamic banks. Islamic banks use a buying and selling system (ba'i) where margin payment is based on a fixed rate contract stipulation that does not change at any time as does the interest. In Islamic banks the interest rate is still a benchmark for Islamic banks in determining the level of margin and profit sharing ratio for Islamic banks (Sudarsono, 2017).

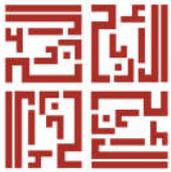
Methods

Types and Data of Research

The type of data used in this study is secondary data in the form of time series monthly data from January 2012 to December 2018. Data sources are derived from Islamic Banking Statistics, Finance Service Authorities, Bank of Indonesia. Variables used in this study the are the amount of Islamic banking savings (IB Savings), inflation, money supply (M2), interest rate (SBI), and exchange rates.

Data Analysis Method

Descriptive analysis is used in this study to provide an overview of the data obtained using graphs, tables and diagrams. In this study a descriptive



analysis was carried out to find out general description of the development of Islamic banking savings (IB-Saving deposits) in Indonesia during 2012 to early 2018. This analysis was also used to describe internal and external variables.

Ordinary least square (OLS) is an estimation method that is often used to estimate the population regression function and the sample regression function. The OLS criteria is "line best fit" or the sum of squares of deviations between the observation points and the regression line is minimum.

Results and Discussion

Classic Assumption Test

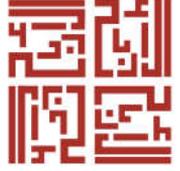
Multicollinearity Test

Multicollinearity test aims to test whether the regression model formed a high or perfect correlation between independent variables. If it is found that there is a high correlation between independent variables, it can be stated the presence of multicorlinear symptoms in the study.

Multicollinearity test have been fulfilled by all existing independent variables, that is a tolerance value of not less than 7.78 and a VIF value of no more than 10. Therefore it can be concluded that in this study does not occur correlation between one independent variable with another independent variable.

Autocorrelation Test

Autocorrelation test is a correlation that occurs between residuals in one observation with other observations in the regression model. Autocorrelation can be known through the Breusch-Godfrey Test, where if the value of prob < 0.05 then autocorrelation symptoms occur while if the value of prob > 0.05 then it does not occur. Autocorrelation symptoms are tests used to test the presence or absence of serial correlations in the regression model or to find out whether in the model used there is autocorrelation among the observed variables. From the autocorrelation test results, the probability is $0.611 < 0.05$,



so it can be concluded that there are no symptoms of autocorrelation in the research model.

Heteroscedasticity Test

Heteroscedasticity test is used to determine the presence or absence of a classic assumption deviation. Heteroscedasticity is the variance of the residual inequality for all observations in the regression model. The prerequisite that must be fulfilled in the regression model is the absence of heteroscedasticity symptoms. If the prob value is <0.05 then heteroscedasticity symptoms occur in the research model whereas if the value of prob > 0.05 then heteroscedasticity symptoms do not occur in the research model. The results of the heteroscedasticity test using the white method, the prob value is $0.25 < 0.05$ so that it can be concluded that there are no symptoms of heteroscedasticity in the study model.

Normality Test

Normality test to examine whether the standardized residual value in the regression model is normally distributed or not. Way to do a normality test can be done with the Plot normal graph analysis approach. In this approach residual values are normally distributed if the lines (dots) that represent the actual data will follow or move closer to the diagonal line. The test results, that the Jarque berra probability value is $0.25 > 0.05$, meaning that the research data residuals are normally distributed.

Discussion

With the number of $n = 84$, the value of t table is $n-5 = df-5 = 79$, the value of t table is 1.99. The SBI variable has a significance value of $0.02 < 0.05$ which means it has a significant negative effect on savings. The M2 variable has a significance value of $0.00 < 0.05$ which means that it has a significant positive effect on savings. The exchange rate variable has a significance value of $0.26 < 0.05$ which means that it has no significant negative effect for savings.



Inflation variable has a significance value of 0.30 < 0.05 which means that it has not significantly positive for savings.

In the OLS estimation on the Islamic Savings model, explain that which has significantly negative affects the sharia savings is the SBI variable, and that has significantly positive influences the sharia savings is money supply (M2), while the variable Exchange Rates of Rupiah against the Dollar is not significantly negative to the Sharia Savings, and Variables Inflation does not significantly positive affect Sharia Savings.

Money supply is known to have a positive and significant effect on the amount of Islamic Savings, this is contrary to research conducted by Sukmana and Halim (2017), which explains that an increase in the money supply will cause conventional bank lending rates to decline. This research is in line with the Panorama 2016 study, which explains that the money supply has a positive effect on the amount of sharia savings in the event of an increase in the money supply then the DPK will also increase. In addition, customers concerns over the impact of the Greek crisis that occurred in 2012 and 2015, made people prefer to hold money in their hands rather than keep money in the bank. This is in accordance with one theory of the motives of peoples behavior in holding money, which is a precautionary motive, in which to overcome things that are uncertain and not wanted, then we need to hold money. Assuming people will be more willing to pay attention to things that cannot be predicted beforehand if they have money (Deliarnov, 2016).

Then, the BI rate variable on Islamic savings has a significant and negative influence. This is because rising interest rates will increase deposit rates and conventional bank loans so that people tend to choose conventional banks as a place to store their funds. According to the classical economic view, saving is a function of the interest rate. High interest rates will encourage people to save and sacrifice consumption. But it is different from Islamic banks that use a profit sharing system for savings with mudharabah contracts and deposit bonuses for Wadi'ah contracts. The public prefers conventional banks over Islamic banks, this is because the level of profits in conventional banks is greater.



Table 1. Variable Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SBI	-5009.968	2069.835	-2.420467	0.0234
M2	0.098939	0.008405	11.77162	0.0000
KURS	-0.367253	0.322016	-1.140482	0.2653
INFLASI	1131.248	1072.097	1.055174	0.3019
C	-185156.1	52384.07	-3.534587	0.0017
R-squared	0.984593	Mean dependent var		266422.1
Adjusted R-squared	0.982026	S.D. dependent var		36873.52
S.E. of regression	4943.581	Akaike info criterion		20.00515
Sum squared resid	5.87E+08	Schwarz criterion		20.24089
Log likelihood	-285.0747	Hannan-Quinn criter.		20.07898
F-statistic	383.4430	Durbin-Watson stat		1.589676
Prob(F-statistic)			0.000000	

According to Sudarsono, the increase in the BI rate was responded to by massive increases in interest rates at conventional banks. However, the increase in interest rates does not directly affect Islamic banks. Islamic banks use a buying and selling system (ba'i) where margin payments are based on a fixed rate. contract provisions do not change at any time as does interest. In Islamic banks the interest rate is still a benchmark in determining the margin level and profit sharing ratio of Islamic banks. Meanwhile, an increase in the interest rate will reduce the public's interest in saving funds in Islamic banks because the margin level is lower compared to the deposit interest rate at conventional banks. Islamic banks will be more profitable for investors because the margin charged is lower. The increase and exit for financing will cause the Islamic banks' financing deposit ratio (FDR) to increase while savers will run to conventional banks with higher profits, Bank deposits are reduced, the increases and out will raise the risk of Islamic bank liquidity. To overcome this situation, Islamic banks need to increase the rate of bonus fees / profit sharing for current accounts, savings and deposits.

The variable exchange rate of the Rupiah against the Dollar is known to has no negative effect on Sharia Savings. This is contrary/in line? with research conducted by Rudiansyah (2014) which shows that the exchange rate of the rupiah against the dollar has a positive effect on sharia savings



because there are a phenomenon in the sharia bank, it is the terms of emotional (spiritual) customers and rational customers. The results of this study are in line with the study of Dhendawidjaya (2008) which shows that changes in exchange rates do not affect sharia savings which states that the exchange rate is the exchange rate of a country's currency, if there is a decline in the exchange rate of course the value of a country's currency will decline in value, when it occurs resulting in the value of the debt that must be paid to the bank for the debtor will increase, the situation will certainly encourage the increase in the possibility of visible bad loans.

In the last variable, inflation does not have a significant and positive influence on Islamic savings, this study contradicts the recent research by Sukmana (2017), which explains that when the economy is in high inflation conditions, the results of this study are in line with Panorama's research (2016), If there is inflation, the number of Islamic banking deposits will decrease, due to the withdrawal of funds by customers by consumption needs. Inflation causes a decrease in purchasing power of the currency (the fall of purchasing power) so that more money is needed to consume the same goods. In this condition, to meet public consumption, withdrawal of Islamic banking savings is very possible. In the Fisher Effect theory states that when an inflation increase of one percent will result in an increase in interest rates by one percent will result in an increase in interest rates by one percent. In Islamic economics is not allowed to use interest rates, the Islamic banking will raise the Profit Sharing Ratio which is used as a step to overcome so that customers do not turn to conventional banks that offer high interest rates. So that by raising the Profit Sharing Ratio, customers will continue to save their funds in Islamic Savings.

Conclusion

Based on the results above, it can be concluded that the significant influence of sharia savings is the SBI variable, and the money supply (M2), while the Rupiah Exchange Rate variable against the Dollar and Inflation Variable are not significant for Islamic Savings.



The increase in Islamic savings caused by the exchange rate, then the Islamic banking community prefers the occurrence of a low exchange rate, and prefers when the BI Rate is low because this will increase sharia savings. Islamic savings are not only influenced by economic motives such as inflation, money supply (M2), exchange rates and SBI, but are also influenced by other factors not included in the study. The level of religiosity, reputation and public trust towards Islamic Banks has a positive and significant effect on saving behavior in Islamic Banks. And this proves that Savings modeling in Islamic Banks is not only caused by economic factors alone, but also due to non-economic factors such as religious variables (religiosity) and trust (trust). This can be used as reference material for an improvement for relevant agencies.

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