

# Monetar Policy, Macroeconomic Variables and the Performance of Islamic Banks Financing

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## ABSTRACT

Islamic banks are banks that operate based on sharia, where one of the principles is free from usury or interest rates. Instead of the rates, the banks use a profit sharing system. In Indonesia, the Islamic banks grow significantly, even though the prevailing monetary policy is still based on the interest system. This phenomenon is interesting to study, because on the one hand there is a close relationship between banking and monetary policy, but on the other hand monetary policy is based on interest rates while the Islamic banks are based on profit sharing rates. This study aims to examine the relationship and influence of monetary policy and macroeconomic variables on the performance of the Islamic bank financing. This research was conducted from 2010 to 2019, by using statistical approaches of Vector Auto Regression (VAR) and Pearson Correlation. The results show that the performance of Islamic bank financing, both profit-sharing-based and murabahah financings, is influenced by monetary policy and several selected macroeconomic variables. In addition, the profit sharing rates of financing is influenced by conventional bank interest rates and the rates of some monetary instruments. One important thing in this finding is that the financing and the profit sharing rate applied by Islamic banks resemble those of conventional banks, so that the influence of interest rates is very dominant in the operations of Islamic banks, both from monetary policy instruments and other interest rates.

**Keywords:** Monetary Policy, Macroeconomic Variables, Islamic Banks & Financing

## INTRODUCTION

The term "Islamic bank" is a new term in the realm of Islamic Economic and Finance. Such the term first appeared when the Islamic Development Bank (IDB) was founded in 1975 in Jeddah, Saudi Arabia (Egresi & Belge, 2015). After that, several large Islamic banks emerged, such as Dubai Islamic Bank (1975), Faisal Islamic Bank of Egypt (1977). However, even though Islamic banks were formally established in the 1970s, the essence of Islamic banking practices have existed before. It means that before the 1970s some financial institutions have operated without applying an interest-based system and implemented a profit sharing-based system instead, but they were not named formally by "Islamic bank".

Islamic banks are defined as financial institutions adopting Islamic regulations in their activities (Al-Harbi, 2015), and do not implement interest rates (Samad, 2019). After the financial crisis of 2007-2009, the banks were at a significant growth either in developed or developing countries (Berger et. al, 2019). Islamic banks play an essential role towards the financial and economic sectors (Samhan & Al-Khatib, 2015). However, assimilation of the Islamic principles into the financial system requires absolute integration in conceptual

foundations and applications (Omar, 2011). Indonesia is an Islamic country that establishes the rights for the existence of Islamic banks, where they have been operating since 1991 indicating with the establishment of Bank Muamalah Indonesia (Adnan & Muhammad, 2007). Hence, two banking systems are operating simultaneously in Indonesia and have the rights equality under the Indonesian constitution, Islamic banks and Commercial banks, also known Conventional banks.

Currently, the implementation of the Islamic banking and finance system has started a new episode in Indonesia, where one of the provinces in the country, namely Aceh, only allows the Islamic banking and finance system to operate. This is due to the granting of privileges or specificity to the region applying the Islamic law. However, it should be underlined that this momentum is very important, if this is successful in the sense that the Islamic banking and finance system implemented results in an increase in the economy, it will be imitated and followed by other regions or province in Indonesia.

Neither interest rates nor usury is accepted in Islamic banks, they are prohibited in the banking system (Omer, 2019), which differentiates specifically from commercial banks (Rasheed & Chauhan; 2015). They use profit sharing rates (PSR) instead. Moreover, the PSR are regarded as the most important instrument instead of interest rates. Such the reality prevails in the Indonesian Islamic banks in which the banks do not utilize interest rates, they adopt PSR system instead. The development of an Islamic financial system generates a challenge to discover a monetary policy, which conforms with Islamic economics principles. (Ahmad & Ismail, 2018)

However, monetary policy which supervises, and has strong relationship with the Indonesian banks including the Islamic banks, is still an interest-based. Moreover, regulations related to monetary policies, such as monetary instruments, still contain interest rates, while the Islamic banks must be free from the rates. This, of course, will sway the stability of Islamic banks, their financing in particular, whereas the financing is one of the most essential activities in the Islamic banks. In addition, by theory, Islamic banks are influenced by economic conditions in a country.

This research is to explore financing stability of the Islamic banks under interest-based monetary instruments. The research is very essential because it will uncover the crucial problems happening in the financial market world, where one side that financing of Islamic banks must be free from interest rate, but the other side they must follow to monetary policy with interest rates. This seems to contradict one to another, which affect on the stability of financial market. Besides, the research will reveal the existence of some core economic variables towards the Islamic banks.

## **LITERATURE REVIEWS**

### **Islamic Bank**

There are several definitions given to Islamic banks by experts. In general, an Islamic bank, also known "Sharia bank", means a bank based on the main sources of Islamic law, which is the Holy Quran and the Hadith of the Prophet Peace be Upon Him (pbuh). In addition, the Islamic bank can be interpreted as a financial institution that applies the Islamic economic principles. The more simple definition of Islamic bank that is commonly understood by the general public is a bank that does not contain or utilize interest rates, or the bank implements a profit sharing

system instead of the rates. Some defines the Islamic banking is a banking system which is based upon equity type of financing (Tabash, 2019)

The main principle of Islamic banks' operation as regulated by either the Holy Quran or the Hadith is that there should be no element of usury or ribawiy in their activities. Eliminating *riba* is considered a crucial part of Islamic business principles (Ahmad & Hassan, 2015). Because the interest rate system is similar to ribawi (*riba qardh*), the interest rates is prohibited by the majority of Islamic scholars (*ulama*). Therefore, interest rates are not allowed under the Islamic banking system. Moreover, the prohibition on interest rates is not only limited to banking matters, but for all forms and types of economic and financial activities.

The crucial principle for Islamic banks in their activities is sharing of the output, either profit or loss, which is usually known as the Profit-Loss Sharing (PLS) principle. The relation between investment accounts holders and shareholders, in Islamic banks, is based upon the PLS principle to which considered as the foundation of Islamic banking intermediation (Hamza, 2015). However, due to as a business institution, Islamic banks also employ a number of financing in order to achieve the profit as much as possible, such as mark up-based financing and etc.

Based upon experiences throughout the world either in Muslim countries or not, Islamic banks face a strong competition with their counterpart, conventional or commercial banks, usually in terms of generating of a profit and serving customers. Therefore, the competition faced by Islamic banks has forced them to concentrate dominantly the fixed return instruments like *Murabahah*, *Ijara*, and *Diminishing Musharakah*. (Rashid & Jabeen, 2016). In this case, Fakhri and Darmawan (2021) argue that, one of the solutions, is Islamic banks must make a number of improvement so that more resilient to external problems and conditions, such as strengthening liquidity management and managing the financing quality.

### **Financing of Islamic Banks**

Islamic banks use the term "financing" instead of the term "credit" of conventional or interest-based banks. Basically, the purpose of financing of Islamic banks and credit of conventional banks is the same, namely to gain profit or to carry out their function as intermediary institutions. Theoretically, there are many forms of financing in Islamic banking, however, only three kinds of them dominantly operated by Islamic banks throughout the world, including in Indonesia. They are *mudharabah*, *musyarakah* and *murabahah* financing.

The most important thing that differentiating between financing of Islamic banks and credit of conventional banks is with respect to the existence of interest rates. Islamic banks, according to the theory, do not use the interest rates as the yardstick of financing, like their counterpart of conventional banks. They use the variable of profit-sharing rates in a variety of financing products instead. Therefore, financing of Islamic banks can be formulated as the following:

$$Fin = f(PSR) \quad (1)$$

PSR is Profit Sharing Rates, calculated under an ratio-based between the banks and the costumers, not a percentage-based. Besides, the Islamic banks' financing is also influenced by the economic growth which indicates the interrelationship between two sectors, banking and economy.

$$Fin = f(PSR, GDP) \quad (2)$$

However, PSR as mentioned above is for mudharabah and musyarakah financings. Such the financings are also known PLS-based Financing. The Islamic bank financing correlates significantly and positively with economic growth and capital accumulation (Furqany & Mulyany, 2009). Concerning PSR, the rates in principle must be in the form of ratio, not a percentage-based. Nevertheless, Islamic banks dominantly apply it in the form of percentage and refers to interest rates. Therefore, the PSR is influenced by interest rates. Then,

$$PSR = f(r) \quad (3)$$

Experiences show that nearly all forms of financing correlate with interest rates, both the rates of conventional banks and monetary instruments. Another financing is murabahah defined as a re-sale-based financing with a mark-up on purchase price, and also known as a cost-plus financing (Siddiqi, 2004). Murabahah is a very beneficial financing that is asset based financing for Halal (lawful) purposes (Hanif, 2011). Basically, murabahah is a type of sale where the total profit is determined as percentage of the cost or as an absolute amount (Shah & Niazi, 2019).

### **Monetary Policy, Profit Sharing Rates and Interest Rates**

Monetary policy is a policy consisting of monetary instruments in regulating the circulation of money with the aim of achieving economic growth and stability. The most important target of monetary policy is to realize macroeconomic and price stability (Juhro & lyke, 2019). In Islam, monetary policies and theories have appeared when the religion was established and the Prophet Muhammad pbuh Himself as the monetary authority at that time (Khalidin, 2021). This policy is based on a perception that the circulation of money plays an important role in achieving a desired economic target. Monetary policy is divided into two categories, viz. quantitative and qualitative (Bidabad, et al., 2011), while the difference of the both lies in the form of instruments used in it.

Monetary policy has strong relationship between interest rates and profit sharing rates of Islamic banking. Monetary policy affects the real economic condition of a country through various channels or events, including bank lending (Majid & Hasin, 2014). Two core variables in the forms of bank lending channels are interest rates in conventional banks and profit sharing rates in Islamic banks. The both rates influence money supply in the economy through saving, credits and financing.

Monetary policy is carried out by the central bank in order to regulate the volume of money liquidity aimed at macroeconomic stability through demand management (Tahir, 2013). Monetary policy is a significant tool for a government to achieve goals and targets in the economy (Sari, 2012). Basically, monetary policy in Islam is the same as the existing monetary policy in terms of economic-targets of stability and growth. However, Islamic monetary policy are not interest rates based and must be far from the prohibited instruments in Islam such as gharar, tadlis etc. The core idea of monetary management in Islam is to reach the stability in money demand (Ascarya, 2014).

## ECONOMETRIC MODELS AND DATA

### Econometric Models

Similar to commercial banks, Islamic banks have also several kinds of financing, namely mudharabah, musyarakah, murabahah and others (Khalidin & Masbar, 2017). However, the financing of the banks in Indonesia is dominated by two main categories, PLS and Murabahah financings. Therefore, this research will explore the both types of financing in terms of the existence of monetary policy and some selected macroeconomic variables. The followings are econometric models used:

$$Fin_{pls} = f(PSR_{pls}, NBR_{wc}, NBR_i, BI_{rate}, JIBOR, CPI, ER, ICI) \quad (4)$$

$$Fin_{mura} = f(PSR_{mura}, NBR_c, NBR_i, BI_{rate}, JIBOR, CPI, ER, ICI) \quad (5)$$

$Fin_{pls}$  and  $Fin_{mura}$  are PLS-based Financing, consisting musyarakah and mudharabah, and murabahah financing respectively.  $PSR_{pls}$  and  $PSR_{mura}$  denote rates of profit sharing of the both financing, while  $NBR_{wc}$ ,  $NBR_i$ , and  $NBR_c$  are interest rates of commercial banks for working capital, investment and consumption respectively. Monetary policy is represented by BI Rate ( $BI_{rate}$ ) and Jakarta Interbank Offered Rate (JIBOR), issued by the Central Bank of Indonesia (BI), and three selected economic variables included in the model, they are Consumer Price Index (CPI), Exchange Rate (ER) and Indonesian Composite Index (ICI).

### Data

The data used are monthly time series with a period of ten years, from 2010 to 2019. There are two reasons for determining this period, firstly looking at the development of Islamic banks after the enactment of the Islamic banking law (UU Nomor 21/2008), the second is that after 2020, Islamic banks have been merged into one Islamic bank called BSI (Bank Syariah Indonesia).

The data was analyzed by a VAR method (Vector Auto Regression), and the following is a general form of VAR (Johnston & Dinardo, 1997).

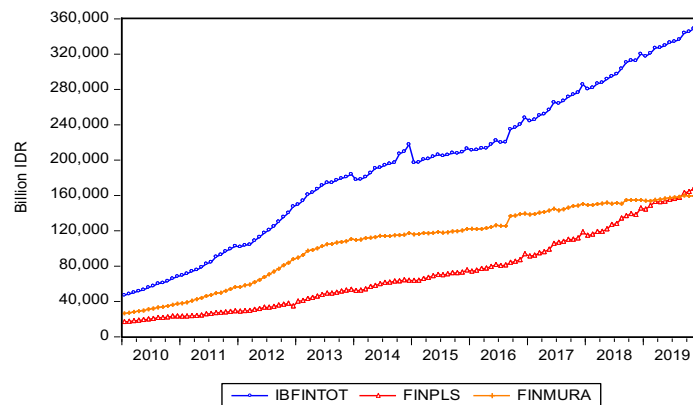
$$y_t = m + A_1y_{t-1} + A_2y_{t-2} + \dots + A_p y_{t-p} + \varepsilon \quad (6)$$

## EMPERICAL RESULTS

### The Indonesian Islamic Banks

The Islamic banking industry has been operating in Indonesia for four decades, namely since the 1990s. As a Muslim-majority country, Indonesia can be considered late in implementing the Islamic banking system when compared to other Muslim countries such as Pakistan, Egypt and Malaysia. Nevertheless, the growth of Islamic banking in Indonesia is quite significant, both in terms of savings, financing, number of customers and others. Even now there is province in Indonesia that require only Islamic banks to operate, while conventional banks or interest-based banks are not allowed to operate. The province is Aceh.

Not only do commercial banks but also Islamic banks play an important role as a financial intermediary towards economic growth and stability in Indonesia (Fikri, 2018). The Islamic banks were at a significant growth particularly after the 1997/1998 Indonesian monetary crisis. Currently, they are employing various types of financing generally divided into three main categories, viz. PLS-based financing, murabahah financing and non-commercial financing.



**Figure 1: Financing of the Indonesian Islamic Banks (2010 to 2019)**

As indicated by the figure 1, the Islamic banks' financing grew significantly where murabahah financing dominated the financing of the banks about sixty percent. PLS financing was only about thirty percent, and the remaining ten percent was other financings, such as ijarah, qardhul hasan, etc.

## Results

### Stationarity Tests

Stationarity tests were done by two unit root tests, Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP). The table 1 shows that all variables are stationary at the first difference, except PLS Financing and Murabahah Financing, where the both are stationary at the second level and at level respectively.

**Table 1**

No	Variable	ADF Test		PP Test	
		At Level	1 <sup>st</sup> Difference	At Level	1 <sup>st</sup> Difference
1	Fin <sub>pls</sub>	3.545	-2.071	6.711	-1.235**
2	Fin <sub>mura</sub>	2.801*	9.712**	-2.247	-10.306**
3	PSR <sub>pls</sub>	-0.535	-15.373**	-0.588	-16.061**
4	PSR <sub>mura</sub>	-1.582	-11.407**	-1.655	-26.330**
5	NBR <sub>i</sub>	0.102	-3.809**	-0.240	-9.820**
6	NBR <sub>wc</sub>	-0.080	13.720**	-0.211	-13.596**
7	NBR <sub>c</sub>	-1.018	-11.211**	-0.948	-11.354**
8	BI <sub>rate</sub>	-1.326	-7.098**	-1.402	7.202**
9	JIBOR	-2.206	5.811**	-1.933	5.798**
10	CPI	-2.239	-10.748**	-2.335	-10.748**
11	ER	-0.820	-11.922**	-0.807	-11.879**
12	ICI	-1.739	-10.215**	-1.736	-10.193**

**Note: \* and \*\* indicate level of significance at 10% and 1% respectively**

### Causality and Correlation Tests

Tables 2 and 3 are Granger causality results for the both models. Table 2 explores the causalities between variables under PLS Financing in the first model. Table 2 indicates that there are no correlation between the profit sharing rates of the banks with their financing. In the other

words, the PSR of PLS-Financing does not influence PLS-based Financing of the Islamic banks, viz. mudharabah and musyarakah.

**Table 2: Granger Causality for Model 1**

No	Null Hypothesis	F-Statistic	Prob.
1	PSR <sub>pls</sub> does not Granger Cause FIN <sub>pls</sub>	0.33350	0.7171
2	NBR <sub>i</sub> does not Granger Cause FIN <sub>pls</sub>	275.032	0.0682*
3	NBR <sub>wc</sub> does not Granger Cause FIN <sub>pls</sub>	246.122	0.0899*
4	JIBOR does not Granger Cause FIN <sub>pls</sub>	223.074	0.1122
5	BI <sub>rate</sub> does not Granger Cause FIN <sub>pls</sub>	279.659	0.0652*
6	CPI does not Granger Cause FIN <sub>pls</sub>	0.13928	0.8701
7	ER does not Granger Cause FIN <sub>pls</sub>	0.48775	0.6153
8	ICI does not Granger Cause FIN <sub>pls</sub>	0.30615	0.7369
9	NBR <sub>i</sub> does not Granger Cause FIN <sub>pls</sub>	0.49061	0.6136
10	NBR <sub>wc</sub> does not Granger Cause FIN <sub>pls</sub>	0.51925	0.5964
11	JIBOR does not Granger Cause PSR <sub>pls</sub>	0.00502	0.9950
12	BI <sub>rate</sub> does not Granger Cause PSR <sub>pls</sub>	0.09559	0.9089
13	CPI does not Granger Cause PSR <sub>pls</sub>	159.174	0.2081
14	ER does not Granger Cause PSR <sub>pls</sub>	492.455	0.0089**
15	ICI does not Granger Cause PSR <sub>pls</sub>	214.024	0.1224

**Note: \* and \*\* indicate level of significance at 10% and 1% respectively**

Table 2 also shows that there is a causal relationship between the NBR variables for both investment and working capital affecting PLS financing in Islamic banks. The fifth row of the table also shows a causal relationship between profit sharing financing and the BI rate. Another variable contained in the model that affects PLS financing is the exchange rate variable, where this variable affects the PLS level of Islamic banks.

**Table 3: Granger Causality for Model 2**

No	Null Hypothesis	F-Statistic	Prob.
1	PSR <sub>mura</sub> does not Granger Cause FIN <sub>mura</sub>	360.523	0.0304*
2	NBR <sub>i</sub> does not Granger Cause FIN <sub>mura</sub>	169.059	0.1890
3	NBR <sub>c</sub> does not Granger Cause FIN <sub>mura</sub>	0.91124	0.4050
4	BI <sub>rate</sub> does not Granger Cause FIN <sub>mura</sub>	130.123	8.E-06**
5	JIBOR does not Granger Cause FIN <sub>mura</sub>	694.119	0.0014**
6	CPI does not Granger Cause FIN <sub>mura</sub>	0.18862	0.8284
7	ER does not Granger Cause FIN <sub>mura</sub>	492.477	0.0089**
8	ICI does not Granger Cause FIN <sub>mura</sub>	0.50540	0.6046
9	NBR <sub>i</sub> does not Granger Cause PSR <sub>mura</sub>	234.211	0.1008
10	NBR <sub>c</sub> does not Granger Cause PSR <sub>mura</sub>	0.58679	0.5578
11	BI <sub>rate</sub> does not Granger Cause PSR <sub>mura</sub>	173.160	0.1817
12	JIBOR does not Granger Cause PSR <sub>mura</sub>	0.12356	0.8839
13	CPI does not Granger Cause PSR <sub>mura</sub>	121.793	0.2997
14	ER does not Granger Cause PSR <sub>mura</sub>	349.907	0.0335*
15	ICI does not Granger Cause PSR <sub>mura</sub>	567.881	0.0045**

**Note: \* and \*\* indicate level of significance at 10% and 1% respectively**

In addition, a correlation test of the Pearson Correlation was also conducted. The table 4 describes correlations amongs the variables in the models.

**Table 4: Pearson Correlation Results for Model 1& 2**

Variable		FinP LS	PSR pls	NB Rw c	NB RI	BIR ate	JIB OR	CP I	ER	ICI
Fin <sub>pls</sub>	Pearson		-	-	-	-	.07	.31	.882	.91
	Correlat	1	.913*	.79	.791	.46	.07	.31	.882	.91
	ion		*	3**	**	6**	5	9**	**	4**
Fin <sub>mura</sub>	Sig. (2-		.000	.00	.000	.00	.41	.00	.000	.00
	tailed)			0	.000	0	4	0	.000	0
	N	120	120	120	120	120	120	120	120	120
		Fin Mur a	PSR mur a	NB RI	NB Rc	BIR ate	JIB OR	CP I	ER	ICI
Fin <sub>mura</sub>	Pearson		-	-	-	-	.15	.39	.93	.94
	Correlat	1	.890*	.62	.641**	.36	.15	.39	.93	.94
	ion		*	2**	**	0**	8	2**	8**	4**
Fin <sub>mura</sub>	Sig. (2-		.000	.00	.000	.00	.08	.00	.000	.00
	tailed)			0	.000	0	5	0	.000	0
	N	120	120	120	120	120	120	120	120	120

**\*\* & \* Correlation are significant at the 0.01 and 0.05 level respectively (2-tailed)**



## Impulse Response Function (IRF)

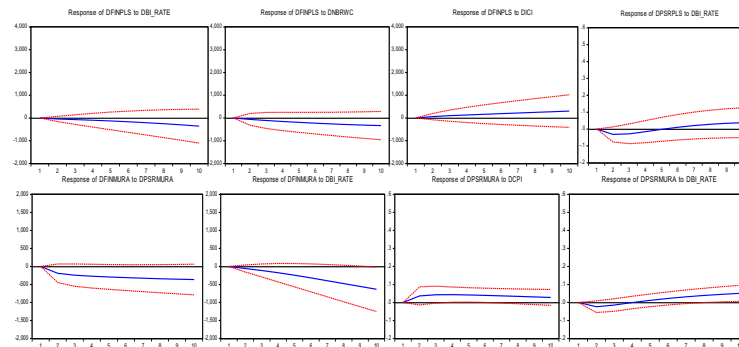


Figure 2: IRF of Selected Variables

### PLS-Based Financing, Monetary Policy and Macroeconomic Variables

As explained above, there are two types of financing that are popular in the operations of Islamic banks in Indonesia, namely PLS-based financing and mark-up-based financing called murabahah. The PLS-based financing is divided into two types of financing, i.e. mudharabah and musyarakah. In theory the PLS-Financing is the core financing under the Islamic banking system, in which Islamic banks must prioritize such the financing. The financing is a risk-sharing term which is one of the four principles of Islamic finance (Khan, 2010). However, the fact indicates that the Indonesian Islamic banks execute the type of financing only one third of the total financing.

According to relationship between monetary policy, macroeconomic variables and the PLS-Based Financing, tables 2 and 4 described clearly about it. Table 2 shows, according to the Granger causality test result, that monetary instrument of  $BI_{rate}$  (the Central Bank of Indonesia's rate) has a strong relationship with such the profit sharing-based financing. The probability value of the Granger causality as shown by the table is 0.0652, which indicates that  $BI_{rate}$  influenced significantly the number of the profit sharing financing in the Indonesian Islamic banks. In addition, another monetary instrument, that is, JIBOR (Jakarta Inter Bank Offered Rate), is considered to influence such the financing but not strong as the  $BI_{rate}$  does.

Besides, the table 4 of Pearson correlation strengthens the fact above stating a strong correlation between monetary policy of  $BI_{rate}$  and the PLS-Based Financing. The table 4 reveals that the financing correlated significantly with the  $BI_{rate}$  in spite of with a low correlation coefficient. Thus, based upon either the Granger causality or Pearson Correlation test, it can be concluded that the PLS-based Financing is influenced by monetary policy. In the other words, monetary instruments play the essential role in the Islamic banking industry in Indonesia.

Nevertheless, such the financing is not nominant in the Indonesian Islamic banks now. According to the Granger causality tests in the table 2, monetary policy represented by  $BI_{rate}$  influences the PLS financing. It is unique, moreover, that interest rates of commercial banks, i.e. NBR for investment and working capital ( $NBR_{wc}$ ,  $NBR_i$ ), determine the fluctuation of the PLS financing. It was similar to Korkut & Ozgur's findings (2017). Nonetheless, macroeconomic variables, CPI and ICI, except ER were not as determinant variables towards the PLS-based financing of the Islamic banks in Indonesia. Fluctuations of among the variables were described in the IRF of the figure 2.

### **Murabahah Financing, Monetary Policy and Macroeconomic Variables**

Actually, murabahah as explained previously is not financing, it is only a form of sale transaction, which in the Islamic fiqh is included in “al-ba’i al amanah”. In essence, this financing is an activity of selling goods to the customers where the bank's profit comes from the margin of such the selling. However, some Islamic banks apply it almost the same as the conventional bank-credit model with an interest system, where the bank offers a certain amount of money to the customer with a sale transaction without goods. The customer pays to the bank the amount lent plus an additional amount that resembles the interest rate of conventional banks.

Based on the results of Granger causality and Pearson Correlation in tables 3 and 4 respectively, monetary policy affects on murabahah financing. In the other words, monetary policy with interest-based instruments is an important determinant for fluctuations of murabahah financing in the Indonesian Islamic banks. The Granger causality in table 3 shows that monetary instruments, viz. BI Rate and JIBOR, have a statistical and significant influence on murabahah financing. Table 3, line 4 and 5, shows probabilities values of the both monetary instrument towards murabahah financing are  $8.E-06^{**}$  and  $0.0014^{**}$  respectively, which means that correlation among the variables are very strong.

This result is also strengthened by the Pearson correlation-based statistical data in table 4. Table 4 shows that there is a significant relationship between monetary instruments, BI Rate and JIBOR, and murabahah financing with a negative direction. This means that the higher the interest rate, the lower the amount of murabahah financing, and vice versa. It is in line the research conducted by Kader and Leong (2009). According to their research, the customers of Islamic banks in Malaysia are profit motivated and the BBA financing (other kind of murabahah financing) is influenced by interest rates (BLR). Nevertheless, the variabel of PSR (Profit Sharing Rates) as the cornerstone of the financing, considered as the determinant of murabahah financing, where the probability value of Granger causality between the both are significant (0.0304).

With regard to macroeconomic variables, the Pearson Correlation in table 4 shows a significant relationship between murabahah financing and some important macroeconomic variables such as Consumer Price Index (CPI), Exchange Rate (ER) and Indonesian Composite Index (ICI). However, the data on Granger causality shows that only the ER variable has a significant one-way effect on murabahah financing. Coefficients and probability values of the variables CPI, ER and ICI are  $0.392^{**}$ ,  $0.938^{**}$  and  $0.944^{**}$  respectively. The data reveals that such the macroeconomic variables, CPI, ER and ICI are correlated significantly with murabahah financing. This result is the same as a research done by Yahya et al. (2017) finding that macroeconomic variables such GDP, Inflation Rate significantly influence on the Islamic banks in Yemen.

To conclude, either monetary or macroeconomic variables have correlation with the Indonesian Islamic banks financing. Interest-based monetary instruments influence murabahah financing as well. Besides, the phenomenon shows the execution of murabahah financing in the Indonesian Islamic banks do not fully reflect the implementation according to classic practice (Shofawati, 2014). Another fact reveals that murabahah financing accounts for two-thirds (2/3) of the total financing at Islamic banks in Indonesia, while the essence of Islamic banking is profit sharing-based, not sale-based (Khan, 2010).

### **CONCLUSIONS AND RECOMMENDATIONS**

Monetary policy is a policy consisting of various instruments with the aim of achieving economic growth and stability. It is a very important policy and affects the financial and banking sectors, including Islamic banks. Indonesia is one of the countries that implements the Islamic banking system, this is indicated by the ratification of the sharia banking law, UU Nomor 21 Tahun 2008. However, the monetary policy applied in the country is still based on interest rates. One of the characteristics of Islamic banks is that they do not use an interest rate system in their operations, they use a profit-sharing system instead. Both savings and financing do not use interest rate instruments, because these instruments are legally prohibited.

The results show that monetary policy has a close relationship with the financing performance of Islamic banks in Indonesia. In the other word, the performance of financing in Islamic banks based on profit sharing is influenced by monetary policy with interest rate-based instruments. Not only is the PLS-based financing but also the murabahah financing is influenced by monetary policy with interest rates in Indonesia. The murabahah financing was swayed by its profit sharing rates, not for the PLS-based financing. Economic variables such as exchange rates and Indonesian Composite Index, except Consumer Price Index, are considered as the determinants of the Islamic banks' financing. In general, the finding reveals that financing stability of the Islamic banks in Indonesia are determined by monetary policies and some selected economic variables.

There is interesting and very important in this study, namely with regard to determining the level of profit sharing in Islamic banks. As explained that Islamic banks do not use interest rates, they apply a profit-sharing system instead. However, the profit sharing rates of Islamic banks is strongly influenced by interest rates. Moreover, the profit sharing model applied is not much different from the interest rate system usually used by conventional banks. Because of this, it can be ascertained that the influence of interest rates on the performance of Islamic banking is very large, including interest rates for monetary policy instruments as well as for conventional banks.

Therefore, it is highly recommended that the Indonesian Government should issue a monetary policy that is in accordance with the performance of Islamic banks, namely monetary policy with profit sharing based instruments, not interest rate based. This is because that an Islamic banking industry will not develop and progress well if monetary policy still uses the interest system, because the policy is the engine or root of the performance of a bank including Islamic banks.

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