The Determinants of Musharaka Financing in Indonesia

Ayif Fathurrahman* and Abriani Sita Devi

Abstract: The purpose of this study is to determine the determinants of Musharaka Financing in Islamic commercial banks in Indonesia, which was carried out using secondary data or quantitative data from the period of January 2015 to August 2019. The model used to analyze the results of this regression was the Multiple Linear The dependent variable used in the object of this study was musharaka financing, while the independent variables used in this study consisted of inflation, exchange rates (exchange rates), Return on Assets (RoA), and third-party funds. From the results of the multiple linear regression analysis that has been processed, it can be explained that simultaneously the inflation, exchange rates (exchange rates), RoA, and TPF have a significant effect on Musharaka Financing. However, partially the exchange rate (exchange rate), RoA and TPF have a positive and significant effect on Musharaka Financing, while inflation has a positive and insignificant effect on musharaka financing at Islamic Commercial Banks in Indonesia.

Keywords: Musharaka; Financing; Inflation; Exchange Rate; RoA; TPF

JEL Classification: G21, F62

Introduction

In the era of globalization, economic conditions have experienced changes and developments in many aspects of life. Economic development cannot be separated from the role of the banking sector, which functions as an intermediary for the community when there is a money deficit and surplus (Kasmir, 2012). In Indonesia, there is dual banking systems, namely first, conventional banks which are commercial banks that carry out their performance using two methods, namely setting interest as the selling price and buying price or known as spread based, and setting fees in services or called fee-based (Hardianti & Saifi, 2018). Second, Islamic banks are banks that provide activities in the form of payment traffic services on the basis of sharia principles, economic democracy, and prudential principles based on the Koran (Yaya, Martawireja, & Abdurahim, 2009).

The growth of Islamic banks has experienced quite positive developments, especially in Islamic Commercial Banks (BUS). This growth is evidenced by the number of BUS agencies, namely 14 units and 1,894 total offices.
Apart from the number of agencies and the number of offices, it can be seen from the total assets as of June 2019 that it has reached Rp. 499 trillion. The market share of Islamic banking to national banking has reached 5.95%. The high growth in assets cannot be separated from the growth in third-party funds and the growth in distribution of funds. Fund collection growth increased by 396 trillion followed by distribution of public funds of 343 trillion (SPS-OJK June 2019).

The development of financing in 2019 at Islamic commercial banks shows that murabahah financing still dominates other financing which reaches 49.95% of the total distribution of funds, while musharaka financing is in the second level after murabahah at 42.74%, mudharabah financing at 4.29%, ijarah financing at 3.25%, qardh at 2.75%, istishna at 0.56%, others at 0.28% (SPS-OJK, 2019).

Figure 1 Development of financing at Islamic Commercial Banks in Indonesia

Examining the information by Figure 1, it can be explained that musharaka financing was relatively significant during June 2019 period. This means that almost 50% of the financing in Islamic commercial banks is held by musharaka and causes the Indonesian population to have a great interest in using the musharaka contract. This statement is reinforced by Basyariah (2018) that the development of musharaka financing is relatively significant because current murabahah financing has deviated from the mission of sharia as a profit-sharing based banking and has led some customers to choose musharaka because sharia principles are still pure. This is in line with Kusmyati’s (2019) research stating that musharaka has a contract concept that is in accordance with the Islamic concept in carrying out cooperation and capital is obtained from both parties so that the risks that occur are shared which causes customers to use this financing. In the last five years, the development of musharaka financing at Islamic commercial banks in Indonesia can be seen in the Figure 2.
Observing the Figure 2, it can be explained that from 2015 to 2019, musharaka financing has increased quite significantly, meaning that the development of musharaka financing shows positive results from year to year on the role of Islamic banks in Indonesia. The development of musharaka financing for Islamic Commercial Banks in Indonesia cannot be separated from various factors, such as bank specific variables (Pratiwi, 2018; Ovami & Thohari, 2018; Kusmiyati, 2019; and macroeconomic variables (Priyanto, Fahmi, & Ismal, 2016; Nahae & Saker 2017; Amelia & Hardini, 2017). In addition, the virtue of musharaka financing is also a consideration, especially in the real sector of SMEs (Trimulato, 2017).

The novelty of this research is to link the study of the market share of Islamic banking in Indonesia, which is represented by third-party funds (TPF) variable, to musharaka financing. It also aims to determine the general relationship between the development of the market share of Islamic banking and musharaka financing.

Research Method

The type of data used in this study is secondary data. This data collection technique is documentation that has been published by the Financial Services Authority (OJK), Bank Indonesia, and the Central Bureau of Statistics.

The Classical Assumption Test is used in a research to identify the presence or absence of a good linear estimator from the regression model, such as the normality test, multicollinearity test, heteroscedasticity test and autocorrelation test (Basuki, 2017). This study used the Multiple Regression Analysis model that can be used in stata. Multiple regression analysis in this study was processed using analysis tools or often called STATA 14.2 software. Stata is a statistical program that is known for its completeness in processing research data through the ability of statistical functions (Putra, Widarsa, & Astuti, 2016). The multiple regression model can be formulated as follows:
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\[ Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \epsilon_i \]  

**Explanation:**  
- \( Y \) = Musharaka Financing  
- \( \beta_0 \) = Intercept  
- \( \beta_1 - \beta_5 \) = Regression coefficient  
- \( X_1 \) = Inflation  
- \( X_2 \) = Exchange rate  
- \( X_3 \) = RoA  
- \( X_4 \) = TPF  
- \( \epsilon \) = error  

The results of the normality test which explains that the test shows a good significance level mean that the data are normally distributed, and this can be proven by the probability value (Prob> Chi2) of 0.1172.

Based on the multicollinearity test, it can be explained that inflation has a VIF value of 1.03 <10 and a 1 / VIF value of 0.967829 > 0.1, the exchange rate has a VIF value of 1.76 <10 and a value of 1 / VIF of 0.569152 > 0.1, the RoA ratio has a VIF value of 2.97 <10 and a 1 / VIF value of 0.336455 > 0.1, while TPF has a VIF value of 3.04 <10 and a value of 1 / VIF of 0.328484.

Based on the heteroscedasticity test result, it can be concluded that the probability value of heteroscedasticity is 0.0028 <0.05, which means that this regression model has a problem. However, according to Basuki (2017), one way to eliminate the problem of the heteroscedasticity test is to improve the regression model which is transformed into a logarithmic form. Based on the heteroscedasticity test with Breusch-Pagan, where the data has been transformed into a logarithmic form the probability value of heteroscedasticity is 0.1709 > 0.05, meaning that in this regression model there is no heteroscedasticity problem.

Based on the autocorrelation test result, it can be concluded that the chi square probability value is 0.0000, meaning that in this regression model there is an autocorrelation problem. Based on the opinion of Gujarati (2007), if there is an autocorrelation problem in the regression model, this regression model can be done by improving autocorrelation. This autocorrelation improvement can be done with first differences or derivatives. Based on the autocorrelation test with the Breusch-Godfrey method, where the data has been transformed into a first difference form, the value of prob> chi2 autocorrelation is 0.1249 > 0.05, meaning that in this regression model there is no autocorrelation problem because it is larger than 0.05.
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Result and Discussion

Result

Data processing used in this research is STATA software. The results of the estimation or data processing are presented in the Table 1.

Table 1 Multiple Linear Regression Results

<table>
<thead>
<tr>
<th>Msy</th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>P &gt;</th>
<th>t</th>
<th></th>
<th>95% Conf. Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inf</td>
<td>1209.604</td>
<td>1112.324</td>
<td>0.282</td>
<td></td>
<td>-1023.48 to 3442.689</td>
<td></td>
</tr>
<tr>
<td>ER</td>
<td>2.02108</td>
<td>0.838454</td>
<td>0.019</td>
<td></td>
<td>0.3470658 to 3.695095</td>
<td></td>
</tr>
<tr>
<td>RoA</td>
<td>3326.528</td>
<td>1559.056</td>
<td>0.038</td>
<td></td>
<td>196.5923 to 6456.464</td>
<td></td>
</tr>
<tr>
<td>TPF</td>
<td>0.218359</td>
<td>0.016604</td>
<td>0.000</td>
<td></td>
<td>0.1850251 to 0.2516929</td>
<td></td>
</tr>
<tr>
<td>_Cons</td>
<td>-21828.79</td>
<td>10290.68</td>
<td>0.039</td>
<td></td>
<td>-42488.19 to -1169.401</td>
<td></td>
</tr>
<tr>
<td>Prob&gt;F</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj R-squared</td>
<td>0.9350</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data Processed.

Based on the Table 1, the results of the multiple linear regression estimation is that the inflation variable has a probability value of 0.282 with a regression coefficient of 1209.604. This means that the probability value obtained has a value greater than 5% and the inflation coefficient has a positive value indicating that inflation has a positive but insignificant effect on musharaka financing at Islamic commercial banks in Indonesia. The inflation regression coefficient value is 1209.604. meaning that if inflation at Islamic commercial banks has increased by 1% during January 2015 to August 2019, and then musharaka financing will increase by 1209.604.

The exchange rate variable has a probability value of 0.019 with a regression coefficient of 2.02108. The probability value of 0.019 is less than 5% with a positive exchange rate coefficient indicating that the exchange rate has a positive and significant effect on musharaka financing at Islamic commercial banks in Indonesia. The coefficient value on the exchange rate is 2.02108, meaning that if the exchange rate at Islamic commercial banks increases by 100 units during January 2015 to August 2019, then musharaka financing will increase by 2.02108. These results indicate that the higher the exchange rate, the higher the musharaka financing that is distributed to Islamic commercial banks in Indonesia.

The Return on Asset (RoA) ratio has a probability value of 0.038 with a coefficient level of 3326.528. With a probability value of 0.038 less than the alpha value of 5% and the regression coefficient level having a positive value, it means that RoA has a significant positive effect on musharaka financing in Islamic commercial banks. If there is an increase in RoA of 1%, there will be an increase in musharaka financing by 3326.528. This means that the higher the RoA at Islamic commercial banks, the higher the musharaka financing at Islamic commercial banks in Indonesia.

The ratio of third-party funds (TPF) has a probability value of 0.039 with a coefficient level of 0.218359. With a probability value of 0.039 which is smaller than the alpha value of 5% and the level of the regression coefficient having a positive value, it means that TPF has a
positive and significant effect on musharaka financing. If there is an increase in TPF by one billion, it will cause an increase in musharaka financing at Islamic Commercial Banks in Indonesia. This means that the higher the TPF ratio, the higher the musharaka financing that is distributed by Islamic Commercial Banks.

Based on the Table 1, the multiple linear regression analysis is that the adjusted R-squared value is 0.9350. It means that the value of $R^2$ indicates that the independent variable such as inflation, exchange rate, RoA, and TPF have an influence on musharaka financing by 93.50%, while the remaining 6.50% is explained by other variables outside of the inflation variable, exchange rate, RoA and TPF.

The regression analysis results shows that the Prob> F value of 0.0000 is smaller than the value of $\alpha = 5\%$ or equal to 0.05. Thus it can be concluded that Ho is rejected and Ha is accepted, meaning that simultaneously the independent variables consisting of inflation, exchange rate, RoA and TPF have a significant influence on musharaka financing at Islamic Commercial Banks in Indonesia.

Based on the results, it can be explained that the independent variable of inflation rate has a $t$-statistic value of 1.09 < $t$-table of 2.00665 with a probability value of 0.282 and a coefficient of 1209.604. Therefore, the probability result obtained is greater than the value of $\alpha = 5\%$ and the coefficient is positive. Thus, it can be concluded that inflation has a positive and insignificant effect on musharaka financing.

The results shows that the independent variable of exchange rate has a $t$-statistic value of 2.42 > $t$-table of 2.00665 with a probability value of 0.019 and a coefficient of 2.02108. Therefore, with the obtained probability result less than the value of $\alpha = 5\%$ and the coefficient is positive, it can be concluded from these results that the exchange rate has a positive and significant effect on musharaka financing.

The data processing result shows that the independent variable of RoA has a $t$-statistic value of 2.13 > $t$-table of 2.00665 with a probability value of 0.038 and a coefficient of 3326.528. Therefore, with the obtained probability result less than $\alpha = 5\%$ and the coefficient is positive, it can be concluded that the RoA value has a positive and significant effect on musharaka financing.

Discussion

The Influence of Inflation on Musharaka Financing

Inflation has no effect on musharaka financing at Islamic commercial banks in Indonesia because the results of this study indicate that in the vulnerable period of January 2015 to August 2019, inflation was still in a mild condition, which was below 10%, meaning that Bank Indonesia always pays attention to inflation developments and it causes BI must take actions or policies to maintain economic stability, even though inflation in this case is categorized as mild. Therefore, the inflation rate cannot be said to be always bad, as long
as the inflation rate is still in a safe condition. It can be said to be bad or problematic inflation if the inflation is at a high enough value and is within the upnormal line.

Although inflation fluctuated during January 2015 to August 2019, it will not affect musharaka financing. On the contrary, musharaka financing will increase continuously, meaning that if there is inflation and people need capital for business, the public will go to Islamic banks to propose financing. If inflation does not occur and at that time the community needs capital to open a business as well, the community will borrow money from the bank and inevitably the bank will channel funds or finance to people who need capital.

According to theory, it can be explained that the effect of inflation depends on the degree. If the degree of inflation is high, it means that there will be a continuous price increase which will have an impact on customers in reducing their investment in the bank, while the degree of low inflation means that it will have an impact on encouraging customers to invest more money in the bank. So, the bank will not experience a deficit in channeling funds or financing to the public. Indonesian central bank must maintain inflation rate in the safety level for financial industry by following determined inflation target through appropriate monetary policies (Setiartiti & Hapsari, 2019; Fakhrunnas, 2020).

It is broadly strengthened or in accordance with the research conducted by Laelasari (2019) entitled the Effect of Inflation on the Financing of Micro, Small and Medium Enterprises (MSMEs) in 2015-2016 at BPRS Al-Masoeim and research by Amelia and Hardini (2017) with the research title of the Determinant of Mudharabah Financing a Study at Indonesian Islamic Rural Banking which state that inflation has no significant effect on musharaka financing. However, this opinion is contrary and inconsistent with the research conducted by Nahar and Sarker (2016) entitled the Are Economic Factors Substantially Influential for Islamic Banking Financing? Cross-Country Evidence, which explains that inflation has an effect on financing.

The Effect of Exchange Rates on Musharaka Financing

From the results of research conducted in the 2015 to August 2019 period, it shows that the exchange rate variable has a positive and significant influence on musharaka financing. In addition, it can be concluded that if the exchange rate depreciates, this is influenced by economic conditions in the United States where the dollar is getting stronger. Besides, that the balance sheet trade is in deficit because the country’s low exports cause many imported products to enter the country. The increase in the exchange rate will have an impact on domestic goods that are increasingly expensive compared to cheaper foreign products, so that it will reduce the production in domestic products and consequently the need for business capital and investment funds is reduced. However, the positive effect of the exchange rate on musharaka financing does not reduce the activities carried out by Islamic banks in financing the public. This is because the depreciation of the exchange rate in the study year is in a stable condition and does not occur in a long period of time.
Statement above is in line with research conducted by Amelia and Hardini (2017) with the title of Determinant of Mudharabah Financing a Study at Indonesian Islamic Rural Banking and Nahar and Saker's research (2016) with their research entitled Are Economic Factors Substantially Influential for Islamic Banking. It is concluded that the results of these two studies indicate that the exchange rate has a significant effect on financing.

The Effect of Return on Asset (RoA) on Musharaka Financing

The results showed that a high Return on Asset can increase musharaka financing in Islamic commercial banks in Indonesia. Therefore, the more banks distribute funds in the form of financing, the higher the RoA ratio will be. Logically, if the bank finances musharaka to the public in large quantities, the profits that the bank will get will increase. So, in obtaining a high enough profit, the bank must apply financing risk management with prudent principles to avoid problematic financing that can trigger risks. In addition, RoA measurement can be seen through the net income that the company generates on the company's total assets.

This statement is in line with the research conducted by Kusmyati (2019) entitled the Effect of Capital Adequacy Ratio (CAR), Return on Asset (RoA), Non Performing Financing (NPF) on musharaka financing in Islamic commercial banks in Indonesia in 2015-2017. What is different from this research is also in line with the research conducted by Sari (2016) with the title of Determinants of Islamic Commercial Bank Financing in Indonesia which explains that RoA has a significant effect on musharaka financing. However, this opinion contradicts the research conducted by Annisa and Fernanda (2017) with their research entitled the Effect of CAR, NPF and RoA on Mudharabah and Musharaka Financing in Islamic Commercial Banks in Indonesia stating that RoA has no significant effect on musharaka financing.

The Effect of Third-party Funds on Musharaka Financing

The results show that the TPF ratio has a positive and significant effect on musharaka financing. Broadly speaking, third-party funds channeled by customers to banks and circulated by banks indicate that TPF has an important role in the financing factor. In this study, the significant effect of TPF on musharaka financing shows that third-party funds are mostly used for musharaka financing. In addition, this research shows that the musharaka financing that is distributed to the community depends on third-party funds. Therefore, the existence of musharaka financing channeled by Islamic commercial banks can indirectly encourage the economy in Indonesia, because the increasing number of musharaka financing that can be distributed to the public shows that the contribution of Islamic banks to this economy is increasing. In addition to having an impact on the country’s economy, musharaka financing can increase bank liquidity so that Islamic banks also benefit from musharaka financing that is distributed to the public. The increase in bank liquidity is obtained through bank profits after financing using a profit sharing system.
This statement is in line and evidenced by research conducted by Destiana (2016), Nurrochman (2016), Hasi and Sonjaya (2016), Medyawati and Yunanto (2019) stating that TPF has a significant effect on musharaka financing.

Conclusion

From the results of the research and data analysis conducted by the researcher, the conclusions can be drawn as follow: Inflation variable has a positive and insignificant effect on musharaka financing at Islamic Commercial Banks in Indonesia. Meanwhile, the exchange rate, return on assets (RoA) and third-party funds (TPF) have a positive and significant effect on musharaka financing at Islamic Commercial Banks in Indonesia.

The results have contribution to the determinant of the market share of Islamic banks in Indonesia which is a partnership-based pattern, considering that this pattern should be the virtue of Islamic ribanking, because it has a different spirit from the interest-based pattern. In addition, these results provide an overview of customer interest in musharaka financing in Islamic banking. Empirically, customer interest is strongly influenced by internal and external banking factors, such as macroeconomic factors.

The implication of this research is that macroeconomic variables are considerable. Islamic bank musharaka financing is highly dependent on macroeconomic determinants. The suggestion for further research is that it is better to multiply the determinants which theoretically and practically have a strong relationship to the financing of Islamic bank musharaka in Indonesia, with the hope of obtaining comprehensive and holistic research.

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