DOMINATION OF MURABAHA FINANCING OF ISLAMIC MICROFINANCE IN DEVELOPED AND UNDERDEVELOPED AREAS IN BOGOR REGENCY

1ROFIQOH FERAWATI, 2BAMBANG JUANDA, 3YUSMAN SYAUKat, 4DEDDY S BRATAKUSUMAH,

Islamic Economic of IAIN STS/Graduate Student of PWD Program, IAIN Telanai Jambi 1
Department of Economic, PWD Program, IPB Dramaga 2
Department of Economic, Economic Science Program, IPB Dramaga 3
Department of ITSL, Faculty of Agriculture, IPB Dramaga 4
rofiqohferawati@yahoo.com, rofiqohferawati@gmail.com

ABSTRACT

Islamic Microfinance (IMFIs) is an alternative for micro business to access financing that easier than that of from banks. IMFIs, on its early stage, offer different system than the conventional micro financial institutions with their “core product”, which is the profit sharing system. However, over time, the core product shows less expected development than other products using buy and sell system known as murabaha. The murabaha system dominates financing product of ninety percent of IMFIS in Indonesia. Similar percentage also occurs in Bogor Regency. This research aims to study the domination of murabaha financing in developed and underdeveloped areas in Bogor Regency and factors influencing preference of micro businesses toward murabaha financing. The model used in the research is descriptive analysis and Logit Multinominal. The result shows the reasons of the domination of murabaha financing in developed and underdeveloped areas in Bogor Regency. The first reason is that this financing system has lower risk than other financing products. The second reason is that, by this system, the revenue of IMFIS is earned from pre-agreed margin, thus has a higher level of certainty. The micro businesses prefer to use the financing system based on the terms of credit period, time spent to gain information, as well as installment certainty. Time period variable of murabaha preference of micro business is 0.98 times higher than musyaraka financing. Installment certainty variable shows that the lower the certainty of murabaha system’s installment the tendency of customers prefer to choose musyaraka system is as high as 0.01 times. Whereas, the variable of financing source shows that the tendency of micro businesses to choose murabaha financing system is 0.549 times higher than musyaraka.

Keywords: Islamic Microfinance, Multinomial Logit, Murabaha, Micro Business

INTRODUCTION

Micro business sector proofed to have stronger durability in facing crisis than other sectors. The economic crisis provided precious lesson that the development that bias to big-scale business is indeed inappropriate, especially in the effort towards people welfare equity. The important lesson according to Syukur (2002) that can be drawn from economic crisis is that the development equity strategy through the ‘trickledown effect’ approach is difficult to implement manifestly. This phenomenon shows that micro business has higher flexibility from the threat of crisis, so that it is reliable to be regarded as ‘social safety net’ for poor people. Capital constraint caused by limited access to financing sources that is faced by micro business, especially the access to formal financial institutions such as banks, results in the number of bank-financed micro business, up to August 2012, is only as much as 17 percent of all micro business in Indonesia (Bank Indonesia 2012).

This is due to the bank esteemed micro business as potential to be developed, yet generally they are no bankable for not owning legal and sufficient asset.
to be secured to the bank. To cover the risk of bad debt, bank imposed high interest for micro business debtors that extremely higher than commercial loan to customers with security for loan. Moreover, there is a common stigma among people that it is difficult to access credit from banks. Studies show that, in line with its business scale characteristic, micro businesses do not need huge capital. This small need of capital in big business unit results in less interest of big formal banks to finance micro business since the transaction cost is extremely high (Syukur 2002).

A liable strategy is to develop microfinance that is able to reach and serve more business units that are impossible to be reached directly by common banks and financial institutions. Microfinance is a credible alternative that allows poor people to have access to low-cost financial service (Abdelkader and Salem 2013). The purposes of microfinance are to finance micro and poor business entrepreneur with small amount of loan by generally flexible and easy-to-understand conditions, as well as trust based with no loan security (Abdelkader and Salem 2013). MFIS is an institution that provides financial service to small and micro business, as well as low-income people that are unable to be served by formal financial institutions that are market oriented for business interest (Rudjito 2003).

IMFIS, bearing business (tijarah) mission, as well as social (tabarru) mission, should capable to contribute in developing micro business sector. IMFIS has also increasingly developed across the world, especially in poor countries, as a credible alternative that allows poor people to have access to low-cost financial service. Durrani, Usman et al. (2011) shows that IMFIS not only helps to create earning, but also capable to promote social standard of poor people, as well as raising the purchase power and becomes an effective instrument to fight poverty. IMFIS is an instrument that encourages and facilitates the creation of micro, small, and medium scale financial and business (Ahmed 2002). Several studies also show that IMFIS plays important role in accelerating continuous development in developing countries, by providing soft loan to develop and maintain its customers’ business. The financing of IMFIS not only improve economic situation of poor people, but also having positive effect towards life standard and social life (Ali and Alam 2010). Brook, Hillyer et al. (2008) shows, poor and very poor people are more actively involved in microfinance than other people. IMFIS also plays a role in poverty elevation as well as increases environmental awareness in coastal, highland, and lowland areas. In terms of its effect towards poverty elevation in those areas, it is shows that IMFIS plays important role in poverty elevation. However, different result occurs in terms of environmental awareness (Effendi 2013).

The function of IMFIS is as a financial intermediation, that is, an institution that collects and distributes funds to debtors with no interest. Customers’ fund collected through deposits, savings, or investment then utilized or allocated into business transactions permitted by Islamic system (Antonio 2001). The profit gained from customers’ fund utilization will be distributed to customers. The development of IMFIS in Indonesia, in terms of number, shows an increase. In 2012, there are 159 BPRS (Islamic People Credit Bank), an increase of 5.33 percent from 2011. The number of IMFIS BMT (Baitul Mal wat Tamwil / House of Social Wealth and Business) in 2012 increased 16.77 percent becomes 3,900 units with total asset of 5 trillion rupiah, as well as 3.5 million customers and 60 thousand employees.

The increasing number of IMFIS is expected to be able to encourage the performance of micro business in line with the objective of IMFIS establishment. Ahmed (2002) shows that IMFIS is an efficient instrument to encourage entrepreneurship as well as promoting the potential of micro business. Islamic financing scheme can be utilized for investments in real and consumption sectors. Islamic financing scheme is a relatively new model in national financial market insight, yet it shows rapid development in recent years. Bogor Regency is a potential area in the development of IMFIS. The number of BPRS in Bogor Regency is the second largest in West Java Province. There are 4 units of 27 BPRS in West Java, as well as 9 units of BMT (Bank Indonesia and ABSINDO 2013).

This large number of BPRS is proportional to the increasing number of customers for the last five years. In 2008, the number of IMFIS customers is 2,294 people. In 2009 it increased to 3,186 and 5,646 customers in 2012. IMFIS in Bogor Regency
spread in many areas, both developed and underdeveloped. IMFIS and micro businesses to be studied in this research are those located in the most developed and the most underdeveloped areas. IMFIS, in this case, BPRS, have its primary objective to develop people economy based on Islamic Law, as regulated in Regulation No. 21 year 2008 on Islamic Banking. The development of intermediation function and financial performance of IMFIS in Bogor Regency for the last four years are as shown in Figure 1.

From Figure 1, it is known that the total progress of IMFIS performance viewed from financial performance indicator shows an increase from 2010 to 2013. The establishment of IMFIS is expected to help micro and poor entrepreneurs to start a new business, developing the running business, reducing the people susceptibility of external factors, as well as allows them to earn sufficient income to cover their daily expenses. (Morduch 1998) and (Effendi 2013). The IMFIS financing tries to improve the economic condition of poor people by increasing their incomes and profits, so that they can be elevated from poverty, as well as increasing their life standard through financial allocation (Ahmed 2002).

On the other side, if we pay attention to the development of IMFIS, it is, apparently, not counterbalanced with their financing composition equality. This can be proofed from the domination of murabaha product over the profit sharing products such as mudharaba and musyarakah. Statistical data of Islamic banking in 2013 shows the percentage of these financing as: murabaha (80.19%), musyarakah and murabaha (11.92%), Qardhul Hasan (2.14%). It is quite peculiar since the profit sharing products should be more appropriate for micro business, considering that this product is the specialty of IMFIS over the conventional MFIS. Muhammad (2005) suggested that Islamic finance institution, in truth, having a core product which is profit sharing financing.

This phenomenon also occurs in IMFIS in Bogor Regency. From the data of IMFIS in Bogor Regency, in 2013, the murabaha financing still dominates the Islamic financing composition (Table 1) Table 1 shows the unbalanced financing composition of IMFIS in Bogor Regency, where the murabaha financing is as high as 91.16 percent, followed by Musyarakah, Mudharabah, and Qardhul Hasan financing. The domination of murabaha financing is paradox with the early objective of IMFIS establishment, which is appeasing their core product based on profit sharing principals (Muhammad 2005). It is also paradox with the benefit of mudarabah financing itself, that it should be able to bring real sectors into the play. Beik (2007) suggested the superiority of profit sharing financing system that is that this system will actuate real sectors since this system has a productive nature, which is allocated for investment and capital needs.

This phenomenon not only takes place in Indonesia. It also colors the Islamic banks and financial institutions across the world. Since the early 1984, murabaha financing model in Pakistan reaches 87 percent of total financing. Similarly, in Dubai, the murabaha financing model reaches 82 percent of total financing (Islamic Banking Community 2013). Saeed (1998), finds that the murabaha financing model becomes dominant since it is a type of short-term investment mechanism. Another reason is because the mark up in murabaha system can be determined in such way so that it can be assured that Islamic financial institution will gain their profit in such way. Najjar (2011) says that murabaha becomes dominant since it has low risk. Jannah (2013) observes that the customers prefer murabaha contract for its margin and fast disbursement. Kotler and Keller (2009) suggested that a product or offer would succeed if it provides value and satisfaction for buyers. An expansive collection and allocation of financing regardless the efficiency factor eventually will affect the profitability (Kurnia 2004).

IMFIS as an alternative institution for collection and allocation of the third-party fund operated based on the Islamic law is expected to plays important role in driving the regional economic wheel, especially the poor people economic. Thus, a good performance of IMFIS is required to maintain company’s viability, so that it can continues to finance in order to elevate poverty.
Based on these backgrounds, the purposes of this research are:

1. To study on factors contribute in the domination of murabaha financing both in developed and underdeveloped areas in Bogor Regency.
2. To find out what factors influence micro businesses in developed and underdeveloped areas in choosing financing types offered by IMFIS.

1. METHOD

The subjects of this research were micro businesses in commercial sector, especially groceries and daily needs shops. Data collection technique was interviewing respondents guided with questionnaire. Sampling method used was the non-probability sampling technique (non-random) through quota sampling. The sampling consideration was based on the year of receiving IMFIS financing in developed and underdeveloped areas, as well as the business sector. The sample of the research were 100 respondents, consisted of 50 respondents as the IMFIS financing acceptor in developed area, and 50 respondents of those in underdeveloped area in Bogor Regency. Data processing and analyzing method of this research was a descriptive method. The method was carried out using two forms of approaches, which were qualitative and quantitative analysis. Quantitative data analysis was executed by showing data gained in form of table. Whereas, the qualitative data analysis was executed by collecting factual data obtained in field from the interviews with micro business owner.

The research used scalogram method for the determination of developed and underdeveloped areas in the regency, and mapped them using the analysis tools of Arch View Geographic Information System (GIS). Descriptive qualitative analysis was primarily focused on analyses regarding the calculation of transactional costs including information, decision making, and administration costs, as well as terms and conditions that regulate the credit contract between the lenders and borrowers. The presence of asymmetric information can causes problems heading to the risk of miscasting the type of financing, which will results in high transactional cost. To test the relationship between the underlying reason of customers’ financing preference and the transactional cost that will influence customers’ decision in choosing available financing system (in this case, the buy-and-sell-based financing represented by murabaha, and the profit sharing financing represented by musyaraka and mudharabah), a statistic binary response model, that is a multinominal logit (MNL) model was used. Logit model is a non-linear regression model that produces equation where the dependant variable is categorical Juanda (2009). The purpose of multinominal logit model is to predict the probability of customers’ preference of each available alternative in selection opportunity. Category of multinominal logit model is category value (Y), consist of Y = 0,1,…,J. The model assumes that the household/micro business i (i=1,2,3,…n) has various preference alternative (j = 0,1…j), where j = 0, 1, 2, 3 , each of these represents murabaha, mudharabah, and musyaraka financing. Gujarati suggested that the logit model is frequently used in classification data, where dependent variable is influenced by independent variables that could have the nominal, ordinal, interval or ratio nature. A multinominal logit model can be formulated as following:

For a model with four categories, the probability for each category is:

\[ P_0 = \Pr(Y = 0|x) = \frac{1}{1 + e^{x_1} + e^{x_2} + e^{x_3}} \]
\[ P_1 = \Pr(Y = 1|x) = \frac{1}{1 + e^{x_1} + e^{x_2} + e^{x_3}} \]
\[ P_2 = \Pr(Y = 2|x) = \frac{1}{1 + e^{x_1} + e^{x_2} + e^{x_3}} \]

Multinominal logit model transformed with natural logarithm can be formulated as following:

\[ Z_1 = \ln \left( \frac{P(Y_i = Mudharabah)}{P(Y_i = Musyarakah)} \right) = \beta_{i0} + \beta_{i1}X_{i1} + \beta_{i2}X_{i2} + \ldots + \beta_{in}X_{in} \]
\[ Z_2 = \ln \left( \frac{P(Y_i = Murabahah)}{P(Y_i = Musyarakah)} \right) = \beta_{i0} + \beta_{i1}X_{i1} + \beta_{i2}X_{i2} + \ldots + \beta_{in}X_{in} \]
Regression model = \( Z_j = \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_n X_n \)

Where:
- \( j = 1, 2, \ldots, n \) (respondent)
- Micro business that prefers 3 types of financing status: micro business that prefers murabaha (3)
- micro business that prefers mudaraba (2)
- micro business that prefers musyarakah (1)

\[
X_1 \ldots X_n = \text{Transactional Cost}
\]

\[
X_{i1} = \text{Financing Magnitude (Rupiah)}
\]

\[
X_{i2} = \text{Financing time needed (month)}
\]

\[
D_{i1} = \text{Information period dummy}
\]

\[
1 = \text{Short} \quad 0 = \text{Long}
\]

\[
D_{i2} = \text{Security dummy}
\]

\[
1 = \text{Light} \quad 0 = \text{Heavy}
\]

\[
D_{i3} = \text{Financing source dummy}
\]

\[
1 = \text{BMT} \quad 0 = \text{BPRS}
\]

\[
D_{i4} = \text{Other financing source dummy}
\]

\[
1 = \text{Available} \quad 0 = \text{Not available}
\]

\[
D_{i5} = \text{Installment certainty dummy}
\]

\[
1 = \text{Certain} \quad 0 = \text{Uncertain}
\]

\[
D_{i6} = \text{Area dummy}
\]

\[
1 = \text{Developed} \quad 0 = \text{Underdeveloped}
\]

**DISCUSSION**

**The Concept of Developed and Underdeveloped Area**

Area concept used in this research is nodal area. According to Rustiadi, Saefulhakim et al. (2009), nodal area concept is a simple functional/system area concept since it views an area dichotomously (separated into two section), which are the core and the plasma. There is interdependency between the core and the plasma. Historically, the growth of a center or town is supported by good hinterland. Operationally, the area centers are having a specific hierarchy determined by the capacity of their service. Physically and operationally, resources that are easy to value in the calculation of service capacity are artificial resources (infrastructure).

Infrastructure capacity of an area can be measured from the number of service infrastructure, the number of available service types, as well as the quality of service infrastructure. The hierarchy of area center can be determined using the scalogram method. In this research, area infrastructure was determined from the number of education and healthcare infrastructure (quantity), as well as the ratio of teacher and served students, and the ratio of physician and served patients (quality). Education and healthcare quantity to determine the hierarchy of most developed and most underdeveloped area in this research was measured using the scalogram method. Education quality (ratio of teacher and served students) to determine the hierarchy of most developed and most underdeveloped area in this research was measured using Discriminant Function Analysis.

Figure 3 is area mapping using nodal area concept adopted according to Rustiadi, Saefulhakim et al. (2009) in determining developed and underdeveloped areas in Bogor Regency was using the Arch View, there were five areas regarded as developed, areas with green color. In order to strengthen the research the determination of developed and underdeveloped areas was determined through quantity and quality. The education and healthcare quantity to determine the hierarchy of developed and underdeveloped area in this research were measured using scalogram method. Education quality represented by the ratio of teacher and served students.

The result of scalogram analysis shows that the ratio in Leuwiliang Ward was lower than in Darmaga Ward. Whereas for the healthcare, according to preliminary research, the ratio of physician and served patients in Leuwiliang Ward was lower than that of Darmaga Ward. It means that Leuwiliang Ward is more developed than Darmaga. From above mapping, it can be explained that the green-colored areas are included in developed areas, whereas the blue areas are the underdeveloped. From quality and quantity-based mapping above, the next step is to map the availability of Islamic microfinance in those developed and underdeveloped areas.
ANALYSIS OF MURABAHA FINANCING DOMINATION

The result of field research on IMFIS in developed and underdeveloped areas in Bogor Regency found that the predominant financing system was murabaha (buy and sell system). This is in line with the findings of researches in Pakistan (87 percent of total financing), as well as in Dubai (82 percent of total financing) (Islamic Banking Community 2013). The domination of murabaha financing preference in this research discussed in two sides: an interviewed conducted with IMFIS (in this case BPRS and BMT), and data collection supported by questionnaire obtained from customers who were commercial micro business owners (traditional market merchants) that received financing in developed and underdeveloped areas in Bogor Regency.

The result of interview with IMFIS shows that the underlying reason of murabaha domination—from the IMFIS point of preference—are: First, the murabaha financing system has lower risk than other financing products. In the profit sharing based financing system such as mudharaba and musyaraka, IMFIS was involved in customers’ business activity. The income earned by IMFIS was sourced from the profit sharing of customers’ business, thus it is uncertain. It means that in this case, trust and moral hazard is extremely needed. Usually, the problem of adverse selection is faced by the financial institution when they are unable to distinguish the risky and risk-free borrowers. If the financial institution finds it difficult to monitors their customers’ business, there could be a serious risk of moral hazard (Effendi 2013). Bester in Effendi 2013 explained that the lenders are usually reduced the moral hazard and adverse selection through the requirement of security as a personal selection and incentive mechanism. However, problems could occur when the borrowers’ security is low. Khan and Ahmed (2001) explained that the risk rank of Islamic financing product has different level of financing risk.

Table 2 can be explained this way: the ratio interval was stated in the interval of 1 (not severe) to 5 (highly severe). According to Table 2, it can be seen that the risk of murabaha financing is the lowest. It is ranked as not severe. The risk ratio of musyarakah financing ranked the first with the ratio of 3.69. This means that the musyarakah financing is regarded as severe-risked. The musyarakah m Wagner and mudharaba also ranked as severe. It is in line with Ahmed and Khan is Najjar (2001), who finds that the domination of murabaha financing is caused by its low risk.

The second reason of murabaha domination is, by this financing system, the revenue gained by IMFIS is sourced from the pre-agreed margin, thus it is more certain and has a relatively lower financing risk. With this certain pre-agreed margin, the risk of moral hazard can be minimized. The result of this research regarding the domination of murabaha financing is in line with Saied (1998) who finds that murabaha financing becomes dominant since the mark up in this system can be determined in such way, so that the profit of Islamic microfinance can be assured. Moreover, the murabaha system avoids the uncertain business income. It also prevent Islamic bank from interfering customer’s business management since they are not their customers’ partner. The relationship between bank and its customers is the relationship between creditor and debtor. Usmani (2003) proposes several reasons of murabaha financing domination in the investment operation of Islamic banking. The first is that murabaha is a short-term investment mechanism and the second is that murabaha prevents the capital owner to interfere the business management.

FACTORS THAT INFLUENCED IMFIS FINANCING PREFERENCE OF MICRO BUSINESS IN DEVELOPED AND UNDERDEVELOPED AREA IN BOGOR REGENCY

Factors that influenced Islamic financing customers/micro business in choosing their preferred financing can be observed from various variables. Each variable will depict the effect of preferred financing type. Those factors are from various aspects, such as: the requirements of financing type, time needed to receive the fund, amount of possible financing, as well as the credit period. These aspects are grouped into what is called the transaction cost. Regardless from these aspects, the areal aspect is counted as well. This means that regardless all requirements, the
availability of IMFIS in certain developed or underdeveloped area will also influences micro business owners in choosing their financing preference.

Analysis was carried out quantitatively by distributing questionnaires to micro business owners of commercial sectors. Kotler and Keller (2009) suggested that a product or offer would succeed if it provides value and satisfaction for buyers. The process of choosing and receiving financing fund requires a cost called the transaction cost. This cost exists between the lender and borrower. The transaction cost can influence one’s decision in choosing preferred financing type, where one shall prefers a financing system that is able to provide satisfaction for him/her, as well as requires lower transaction cost.

Kizilaslan, Gokalp Goktolga et al. (2008) studied socio-economic factors that influence customers in the city of Torkat, Turkey, in picking the location to sell meat. Kizilaslan emphasized socio-economic factors that influence the customers’ preference to healthy meat outlet. Response variable in the model was the meat outlet (local market, meat market, and hypermarket). Whereas the explanatory variables were sex, age, education, household size, domicile, mother’s status, income, price difference, quality difference, hygiene, freshness, and seller’s image. Since the response variable of this research was nominal-scaled and consisted of two categories, thus the multinominal logit was used in data analysis. Multinominal logit model assumed that the household preference was to maximize its utilization. The model also assumed that each household i ( i=1,2,3…n) had various alternative J+1 (j=0,1,…j), where j = 1, 2, and 3, each represented the financing alternatives of musyaraka, mudharaba and murabaha. Pij was probability of household i to choose alternative j as the main choice of preferred financing.

In this research, the financing type preference referred to the financing offered by IMFIS, that were buy-and-sell-principal-based and profit-sharing-based financing. Preferred financing type includes micro business that chose murabaha, micro business that chose mudharaba, as well as micro business that chose musyaraka financing. Transaction cost analyzed included the time needed by customers to gain information, time needed for the examination by account officers, time needed for loan disbursement, amount of loan, profit margin, as well as the credit period. Those micro businesses were located both in developed and underdeveloped areas in Bogor Regency with available Islamic financial institution. The financing source and other financing source dummies were observed as well. Moreover, the influence of transaction cost to customers’ decision in choosing financing type of IMFIS was analyzed using multi-nominal logit regression model. The model assumed that the main preference of micro business is to maximize their utilities. Valuing the fit model can be referred to the following Table 3.

The result of simultaneous study can be seen from the output of model fitting information. The number of -2 Log Likelihood on the early model (intercept only) is 131.164. Whereas the number of -2 Log Likelihood on final model is 43.263. Since this result shows a declining, thus we can draw a conclusion that this model shows better multinominal logit model, and it can be decided that we can use a complete model in executing the analysis. The probability value of Chi Square resulted is 0.000, lower than Alpha 5%. Thus, the result is to reject null hypothesis and stated that there is a minimum of one independent variable that is significantly influences its dependent variable.

Goodness of Fit

The model goodness of fit can be seen from two sides (substantial/material and statistical). From substantial side, the resulted model can be defined by science discipline. The question that are expected to be answered in this research is what factors influence micro business owner in choosing IMFIS financing, as well as how high is the possibility of each financing system to be chosen. The model statistical goodness-of-fit-test, in addition of overall test, was also done by Pearson Test, Nagelkerke R-Square (Table 4).

The output result of Chi Square was 89.507 for Pearson coefficient and 43.263 for Deviance coefficient significant on 1, thus this value is above α= 0.05. Hence, the model can be regarded as fit, thus it is acceptable.
Statistical value of R-Square ($R^2$) on logistic multinominal analysis is approached by the value of Pseudo R-Square: Cox and Snell, Nagelkerke and McFadden. Value on the interval of 0-1, closer and closer to 1, thus there are more variations that can be explained by the model. Cox coefficient value was 0.585, Nagelkerke coefficient value on the table is as high as 0.800. This means that the variability of dependant variable that can be explained by independent variable variability is 80 percent (Table 5).

Partial test

Ho: The $x^{th}$ independent variable significantly influences dependent variable

H1: The $x^{th}$ independent variable is not statistically significant to influence dependant variable.

Critical area/non-Ho: if the prob. value of Chi Square for $x^{th}$ variable is smaller than Alpha 5% or Chi Square count is higher than Chi Square table.

Likelihood Ratio Test or partially test is a model significance test that shows the contribution of influence of each independent or factor variable on model (Table 6). The output result of logit multinominal on the Sig column shows that for eight independent variables (financing amount, information time, credit period, security, financing source, installment certainty, other financing source, and area), statistically, there were three dependent variable that are positive and significantly influence micro business owner in choosing financing type offered by IMFIS. The first variable was time needed to gain information is positive 59.128 and at the significance level of 99. This result shows that the faster the customer to gain information up to disbursement process of a loan, the more the customer—in this case the micro business owner, especially traditional market merchants—to choose the financing model offered by IMFIS.

The second influencing variable was the time period that shows a positive result of 58.336 and significantly—proofed by its probability of smaller than alpha 5% (0.001)—influence dependent variable. This result means that the shorter the time period, the more the micro business owner will chose the financing type offered, in this case, it is the murabaha.

A positive and significant variable that influence micro business owner in choosing one of three financing model offered by IMFIS is the certainty of installment amount to be paid regularly by them, who are, in this case, traditional market merchants. Data processing result shows that the variable probability of paid installment is smaller than Alpha 5%, which is 0.000. This means that the micro business owners who were traditional market merchants prefer the financing model with certain/fixed installment more than other model with uncertain/unfixed installment. This is in line with the domination of murabaha financing, where the installment to be paid by customers is fixed. Since the other two financing models (i.e. mudharaba and musyarakah) are based on the profit sharing principals, the installment to be paid by customers is uncertain/unfixed for it is depends on the amount of profit gained by invested business. If the profit gained is high, so will the installment to be paid, vice versa.

These results are in line with the result of Jannah (2013) that observed the reason why customers prefer the murabaha model and found that it was due to its margin and fast disbursement. Similarly, the result of Najjar (2011) suggested that the domination of murabaha financing is caused by its low-risk. Dewi (2006) found that murabaha financing dominates for its low-risk. This low-risk occurs since the bank acquires income certainty sourced from installment paid by financing customers. This is in line as well with Saeed (1998) that suggested that murabaha financing is empirically more interesting since it is a short-term investment and easy-to-use model compared to the profit sharing system. More detailed research result that observes how high is the tendency of micro business owner (traditional market merchants) in choosing financing model can be referred to the following table 7.

The result of multinominal logit regression test on Table 7 shows that the larger the financing amount that can be received by micro business owner, the higher their tendency to choose mudharaba financing model, which was 1,000 times higher than musyarakah financing. In other words,
according to reference category of *musyaraka* financing over the *mudharaba* is by executing a division function as $1/1 = 1$. Thus, it can be stated that the higher the financing amount that can be received by the micro business, their tendency to choose *mudharaba* financing is 1 time higher than the *musyaraka*.

Time needed to gain information from the early stage up to loan disbursement was significant and positive. It means that the more time needed by micro business owner (traditional market merchants) to gain information on *musyaraka* financing, their tendency to choose *mudharaba* financing is 18 times higher. Credit Period influences micro business owner (traditional market merchants) in choosing financing model. More detailed explanation is based on Exp (β) of 37.937, which is the tendency of micro business owner to choose *mudharaba* financing model for its shorter period is 37.937.

A The variable of financing source is significant and negative. This means that the tendency of micro business owner—if they are to receive financing sourced from BPRS—to choose *musyaraka* financing model is 0.13 time higher than *mudharaba*. Other significant variable is installment amount certainty. The installment amount of other financing models (*mudharaba* and *musyaraka*) is uncertain/unfixed since it is based on profit sharing system. This means that the amount of installment is depends on the profit gained by the business.

The result shows that the uncertainty of installment amount influences the tendency of micro business owner to choose the *mudharaba* financing 0.93 time higher than *musyaraka*. Both *mudharaba* and *musyaraka* financing is having uncertain amount of installment. The difference between these two models is that in *mudharaba*, all of the capital is sourced from IMFIS. Whereas in *musyaraka*, the capital is sourced from both parties (IMFIS and micro business owner). Data processing result using multinominal logit regarding the preference comparison between *musyaraka* and *mudharaba* shows that micro business owner (traditional market merchants) tended to choose *mudharaba* financing model over those sourced from BMT. It is because of the short processing time from the early stage until disbursement, the fixed installment amount, as well as the received financing amount. Data processing to compare the preference of *murabaha* over the *musyaraka* shows that the larger the received financing amount of *murabaha*, the tendency of micro business owner (traditional market merchants) to choose this financing model is 0.27 time higher over the *musyaraka*.

For the variable of time needed to gain information, the result shows that the micro business owner (traditional market merchants) tended to choose the *murabaha* financing model—if they need less time to gain information from the early stage until disbursement—0.176 time higher over the *musyaraka*. This means that the processing time from the beginning until disbursement for each financing model is different. The *mudharaba* and *musyaraka* models need more time since these models involved the IMFIS in fund allocation. Variable of time period can be interpreted with the value Exp (β) 0.98. This means that the tendency of micro business owner to choose *murabaha* financing model is 0.98 time higher than *musyaraka*. Installment certainty gained from data processing can be interpreted as the more uncertain/unfixed the installment of *murabaha* financing, the tendency of micro business owner to choose *murabaha* model is 0.01 higher. The variable of financing source is significant and negative. This means the tendency of micro business owner (traditional market merchants) who receive financing from BPRS to choose *musyaraka* financing 0.549 time higher than *murabaha*. The conclusion is that, from the processing result of the preference of *murabaha* sourced from BMT over the *musyaraka* is influenced by the amount of *murabaha* financing, the short disbursement time, and the fixed installment amount. Moreover, the interpretation for *murabaha* financing is that the more the amount to be received by the micro business owner, their tendency to choose *murabaha* model is 1.000 time higher over the *musyaraka*. In other words, based on reference category of *musyaraka* financing over the *mudharaba* by executing a division function of $1/1,000 = 1$, it means that the higher the financing amount to be received by micro business owner, their tendency to choose
musyarakah financing model is 1 time higher over the murabaha.

The variable of time needed by micro business to gain financing information can be interpreted as following: the tendency of micro business owner to gain information faster to choose mudharaba financing model over the musyarakah is 0.026 time higher over micro business that needs more time to gain information. Interpretation for murabaha financing is as following: the tendency of micro business owner who gain information faster to choose murabaha over the musyarakah is 9.341 times higher than other micro business that needs more time to gain information.

Muhammad (2005) explained that an agency problem could occur in mudharaba financing model. Mudharaba is a product where capital owner transfers a certain amount of money to business owner to be utilized in certain form of commercial business. The profit earned is shared between both parties in contract such as following: there are two bonded parties, which are fund (capital) owner, called the principal, and management skill owner, called the agent. Reichelstein in Muhammad (2005), suggested that agency problem will occur when there are a principal who rents an agent to do certain job. However, this agent is not receiving any part of what he/she has yielded. Stiglitz and Weiss (1992) suggested that the problem between the principal and agent is caused by imperfect information. Accordingly to both opinions above, the mudharaba contract run by Islamic banking is a contract with huge possibility of imperfect information if one of both parties is not honest. In other words, the mudharaba contract model has possibility of resulting imperfect competition in the relationship between the principal (shahibul mal) and the agent (mudharib). Thus the agency problem occurs (Aspiranti and Oktini 2011). The agency problem in mudharaba financing model could take various forms. One of those is the retained earnings to be shared to the capital owner, as well as other forms of fraud to reduce company assets or profit. Arifin (2003) acknowledged this phenomenon as the one that encourage the occurrence of agency theory. Asymmetric information occurs if the shahibul maal gained imperfect information regarding the management of fund transferred to micro business as the mudharib.

This imperfect information can take the form of hidden information, as well as hidden action that allow the moral hazard to be executed by micro business. Thus, asymmetric information will affect the performance of IMFIS in allocating the micro business financing

A more detailed analysis regarding classification power is as following: the multinominal logit model on the classification table in total shows a classification power of 92 percent (Table 8). Whereas the remaining 8 percent shows that the behavior of micro business owner in choosing the financing model offered by IMFIS are explained by variables other than those studied in this research. The classification power of musyarakah financing is 5 percent, mudharaba 17 percent, and murabaha 78 percent.

CONCLUSION

The predominant financing model of several models offered by Islamic Microfinance (Lembaga Keuangan Mikro Syariah / IMFIS) is the murabaha. The underlying factor viewed from institution’s point is that this model has a low risk. Next factor is the income. The income earned by IMFIS from murabaha financing model is sourced from pre-agreed margin, thus it is more certain. Whereas from customer’s point of view, the most preferred financing model is also murabaha. Factors that influence micro business owner to choose the financing model offered by IMFIS both in developed and underdeveloped areas in Bogor Regency—that is predominated by murabaha model—are the credit period, time needed to gain information, as well as the certain/fixed installment.

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17. Effendi, J. 2013. The Role of Islamic Microfinance in Poverty Alleviation and Environmental Awareness in Pasuruan East Java Indonesia, Universitatdrucke Gottingen


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44. Usmani, M.T. 2003. Murabaha an online Publication by Accounting.com


Source: Financial Report of IMFIS in Bogor Regency (Processed)

**Figure 1**: *Financial Performance Progress of IMFIS in Bogor Regency (in Thousand Rupiahs)*

Source: Islamic Bank Statistic of Bank Indonesia, 2013

**Figure 2**: *Financing Composition of IMFIS in Indonesia (percentage)*
Figure 3: Map of Developed and Underdeveloped Area of Bogor Regency

Figure 4: Map of IMFIS Spreading

Table 1: Financing composition of IMFIS in Bogor Regency

<table>
<thead>
<tr>
<th>Financing Composition</th>
<th>BMT</th>
<th>BPRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murabaha</td>
<td>91.16</td>
<td>90.71</td>
</tr>
<tr>
<td>Musyaraka</td>
<td>3.94</td>
<td>0.08</td>
</tr>
<tr>
<td>Mudharaba</td>
<td>0.55</td>
<td>0.05</td>
</tr>
<tr>
<td>Qardhul Hasan</td>
<td>0.09</td>
<td>0.06</td>
</tr>
</tbody>
</table>

Source: IMFIS of Bogor Regency 2014 (processed); Percentage (%)
Table 2: Risk Ranking of Islamic Financing

<table>
<thead>
<tr>
<th>Financing Facility</th>
<th>Risk Ratio</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Musyarakah</td>
<td>3.69</td>
<td>1</td>
</tr>
<tr>
<td>Msyarakah Muqayyadah</td>
<td>3.33</td>
<td>2</td>
</tr>
<tr>
<td>Mudharaba</td>
<td>3.20</td>
<td>3</td>
</tr>
<tr>
<td>Salam</td>
<td>3.13</td>
<td>4</td>
</tr>
<tr>
<td>Istin'a</td>
<td>3.13</td>
<td>5</td>
</tr>
<tr>
<td>Ijarah</td>
<td>2.64</td>
<td>6</td>
</tr>
<tr>
<td>Murabaha</td>
<td>2.56</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: Khan and Ahmed (2001)

Table 3: Model Fitting Information

<table>
<thead>
<tr>
<th>Model</th>
<th>Model Fitting Criteria</th>
<th>Likelihood Ratio Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-2 Log Likelihood</td>
<td>Chi-Square</td>
</tr>
<tr>
<td>Intercept</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final</td>
<td></td>
<td>131.164</td>
</tr>
</tbody>
</table>

Table 4: Goodness of Fit

<table>
<thead>
<tr>
<th></th>
<th>Chi-Square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson</td>
<td>89.507</td>
<td>166</td>
<td>1.000</td>
</tr>
<tr>
<td>Deviance</td>
<td>43.263</td>
<td>166</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Table 5: Pseudo R-Square Test

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cox and Snell</td>
<td>.585</td>
</tr>
<tr>
<td>Nagelkerke</td>
<td>.800</td>
</tr>
<tr>
<td>McFadden</td>
<td>.670</td>
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</table>
Table 6: Likelihood Ratio Test

<table>
<thead>
<tr>
<th>Effect</th>
<th>Model Fitting Criteria</th>
<th>Likelihood Ratio Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-2 Log Likelihood of Reduced Model</td>
<td>Chi-Square</td>
</tr>
<tr>
<td>Intercept</td>
<td>43.263&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.000</td>
</tr>
<tr>
<td>Financing Amount</td>
<td>45.365</td>
<td>2.102</td>
</tr>
<tr>
<td>Credit period</td>
<td>58.336</td>
<td>15.073</td>
</tr>
<tr>
<td>Information Time Dummy</td>
<td>59.128</td>
<td>15.866</td>
</tr>
<tr>
<td>Security Dummy</td>
<td>45.137</td>
<td>1.874</td>
</tr>
<tr>
<td>Financing Source Dummy</td>
<td>48.934</td>
<td>5.671</td>
</tr>
<tr>
<td>Installment Certainty Dummy</td>
<td>72.256</td>
<td>28.993</td>
</tr>
<tr>
<td>Other Financing Source Dummy</td>
<td>44.946</td>
<td>1.683</td>
</tr>
<tr>
<td>Area Dummy</td>
<td>43.595</td>
<td>.333</td>
</tr>
</tbody>
</table>

Table 7: Hasil Peluang Mudharaba terhadap Musyarakah dan Murabaha terhadap Musyarakah

<table>
<thead>
<tr>
<th>Financing Preference</th>
<th>B</th>
<th>Std.Error</th>
<th>Wald</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mudharaba</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>5.718</td>
<td>3.827</td>
<td>.046</td>
<td>.831</td>
<td></td>
</tr>
<tr>
<td>Financing_Amount</td>
<td>.000</td>
<td>.000</td>
<td>1.595</td>
<td>.207</td>
<td>1.000</td>
</tr>
<tr>
<td>Credit_Period = 0</td>
<td>2.899</td>
<td>1.952</td>
<td>2.206</td>
<td>.137</td>
<td>37.937</td>
</tr>
<tr>
<td>Credit_Period = 1</td>
<td>0&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Information_Time_Dummy=0</td>
<td>3.636</td>
<td>2.042</td>
<td>3.169</td>
<td>.075</td>
<td>18.155</td>
</tr>
<tr>
<td>Information_Time_Dummy=1</td>
<td>0&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Security = 0</td>
<td>.585</td>
<td>1.819</td>
<td>.104</td>
<td>.748</td>
<td>1.796</td>
</tr>
<tr>
<td>Security = 1</td>
<td>0&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Financing_Source=0</td>
<td>-4.316</td>
<td>2.252</td>
<td>3.673</td>
<td>.055</td>
<td>.013</td>
</tr>
<tr>
<td>Financing_Source=1</td>
<td>0&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Installment_Certainty=0</td>
<td>2.274</td>
<td>2.371</td>
<td>.920</td>
<td>.337</td>
<td>9.721</td>
</tr>
<tr>
<td>Installment_Certainty=1</td>
<td>0&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
</tbody>
</table>
Other_Financing_Source=0  | -1.879  | 1.543  | 1.482  | .223  | .153  
Other_Financing_Source=1 | 0b     | .     | .     | .     | .     
Area=0                    | -.877   | 2.035 | .186  | .666  | .416  
Area=1                    | 0b     | .     | .     | .     | .     
Murabaha Intercept       | 10.030  | 3.418 | 8.613 | .003  | .     
Financing_Amount          | .000    | .000  | 1.180 | .277  | 1.000 
Credit_Period = 0         | 2.327   | 1.487 | 2.448 | .118  | .098  
Credit_Period = 1         | 0b     | .     | .     | .     | .     
Information_Time_Dummy=0  | -2.234  | 1.653 | 1.827 | .176  | .107  
Information_Time_Dummy=1  | 0b     | .     | .     | .     | .     
Security = 0              | -1.189  | 1.664 | .511  | .118  | .304  
Security = 1              | 0b     | .     | .     | .     | .     
Financing_Souce=0         | -1.051  | 1.753 | .360  | .549  | .350  
Financing_Souce=1         | 0b     | .     | .     | .     | .     
Installment_Certainty=0   | 4.837   | 1.881 | 6.613 | .010  | .008  
Installment_Certainty=1   | 0b     | .     | .     | .     | .     
Other_Financing_Source=0  | -.734   | 1.338 | .301  | .583  | .480  
Other_Financing_Source=1  | 0b     | .     | .     | .     | .     
Area=0                    | .015    | 1.823 | .000  | .993  | 1.015 
Area=1                    | 0b     | .     | .     | .     | .     

Table 8: Classification

<table>
<thead>
<tr>
<th>Observed</th>
<th>Predicted</th>
<th>Musyarakah</th>
<th>Mudharabah</th>
<th>Murabahah</th>
<th>Percent Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Musyarakah</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td>50.0%</td>
</tr>
<tr>
<td>Mudharabah</td>
<td>0</td>
<td>14</td>
<td>2</td>
<td></td>
<td>87.5%</td>
</tr>
<tr>
<td>Murababah</td>
<td>2</td>
<td>1</td>
<td>75</td>
<td></td>
<td>96.2%</td>
</tr>
<tr>
<td>Overall Percentage</td>
<td>5.0%</td>
<td>17.0%</td>
<td>78.0%</td>
<td></td>
<td>92.0%</td>
</tr>
</tbody>
</table>