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# **Factors That Affect The Demand For Mudharabah Sharia Financing**

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## **ABSTRACT**

*This paper is intended to review factors that affect the demand for mudharabah sharia financing and to identify how significantly these factors influence the demand for mudharabah sharia financing in Islamic banks in Indonesia. The regression approach model was used in identifying the significance of these factors. This research involved sampling 15 months of demand for mudharabah sharia at all the sharia banks in Indonesia covering the recorded from November 2011 to January 2013. The independent variable for this research are the margin of mudharabah financing and people's access to Islamic banking. This research shows that the margin of mudharabah financing has a significant influence on the demand for mudharabah sharia financing, as does access to Islamic banking. In other words, mudharabah financing is influenced simultaneously by two variables: the margin of mudharabah and people's access to Islamic banking.*

*Keyword: Demand of mudharabah, financing, margin, and acces.*

## **INTRODUCTION**

The development of Islamic banking in Indonesia has shown an increase as Islamic banking is currently under development. The total assets held by Islamic banks at the end of 2011 amounted to Rp. 145,5 trillion rising to 193,1 trillion by the beginning of 2013. In 15 months Islamic banking assets saw a gain of nearly 50 trillion. However, if we compare the amount of current assets held by Islamic banks with those held by conventional ones, assets held in Islamic banks account only for 4,6% of the market, and as such Islamic banking must continue its struggle for a greater market share. In order to encourage the growth of Islamic banks a more mature analysis is necessary, both in the context of competition with conventional banks as well as in terms of response to market conditions.

In 2011 the amount of financing provided by Islamic banks amounted to Rp. 102,6 trillion. Included among the many types of Islamic bank financing are murabahah financing (Rp. 56,4 billion for 2011), musharakah (Rp. 18,9 trillion), and qardh (Rp. 12,9 trillion). It is necessary to find a way to sustain the increase in financing coming years. However, of the many types of financing in Islamic banking, only musharakah able to increase the economic growth rate as it will increase production and provide employment. Other contracts uses the principle of buying and selling, rental, and contract appendages (such as hiwalah); these cannot increase economic growth as they are generally used for consumptive purposes rather than venture capital and investment. Of musharakah and mudharabah contracts, it appears

that the latter is less commonly requested; it is necessary to study what factors have influenced this.

## **LITERARY REVIEW**

### **1. Mudharabah as financing**

#### **a) Definition**

Mudharabah is derived from the word *al - dharb* which means walking or traveling (Suhendi, 2011). In Islamic finance, it is an agreement between two (people) in which one gives up one's property to another party in return for a predetermined portion of the profits (such as 50% or 30%), and with predetermined conditions. It can also be view as a contract between two parties in which one party as the financier entrusted their money another person to be managed by both parties with the aim of gaining profits (Karim, 2010). Meanwhile, according to Al - Mushlih and Ash - Shawi mudharabah capital is lending money to people for business in exchange for a portion of the profits (Ascarya, 2007). From these above definitions it can be concluded that mudharabah is an agreement between two people, a capital owner and a person seeking capital, who agree to and are working towards profit sharing.

Financeing or credit by Bank Indonesia is the provision of money or equivalent claims based on a borrowing agreement or contract with another party that requires the borrower to repay the debt – with interest – after a certain period of time. In terms of Islamic banking, however financing is the provision of funds or the equivalent bills including: (1) transactions in the form of mudharabah and musharaka, (2) transactions in the form of ijara leases or lease purchases in the form of ijara muntahiya bittamlik, (3) transactions in the form of buying and selling such as murabahah receivables, salam, and istishna', (4) transactions in the form of borrowing such as qordh receivables, and (5) multiservice transactions in the form of ijara.

#### **b) Factors Affecting the Demand for Mudharabah**

The term *demand* is understood differently in economics than everyday life. In everyday terms demand is defined as the number of items required by consumers. Needs have meaning when backed by purchasing power and as such the definition of demand is closely related to the purchasing power of consumers, and (it follows) price. Therefore, demand is defined as

the amount of goods and services demanded of a person or people in a particular time at a variety of price levels.

From this definition, two economic variables can be seen, namely the number of items demanded and the price level. Both variables are interrelated, while the time variable is assumed to be constant. The variable of price in demand concept affects the quantity of goods demanded, and as such is often termed the independent variable. Meanwhile the quantity of goods demanded is an affected also known as the dependent variable.

Factors affecting the number of goods demanded by consumers include:

a. The price of goods

Price largely determines the amount of demand for goods. If the price of goods is high, then demand for these goods will be low. Conversely, if the price of the goods is low, the demand for goods will be high.

b. Needs intensity

Increase and decrease in demand is closely related to the level of need. That is, if the need for goods and services urgent, then demand will increase, and vice versa; if the need is not urgent then demand falls. For example, before Eid the need for meat increases and thus so does the demand, but afterwards meat is no longer needed as urgently, and thus demand for meat falls.

c. Consumer taste

An item's ability to satisfy consumer tastes will lead to increased demand for said item. Goods which do not satisfy the tastes of consumers are conversely faced with low demand.

d. Income or Purchasing Power

Declined income results in declined purchasing power, and eventually a decrease in demand. An increase in purchasing power will conversely increase demand.

e. Price of Substitutes Goods and Complementary Goods

Changes in the price of substitutes and complementary goods will affect the demand for an item. For example, an increase in the price of coffee (a substitute goods) will increase the demand for tea, whereas the rise in the price of sugar (a complementary goods) would reduce the demand for coffee. As such, the price of substitute goods has a positive relation with the demand for an item, while the price of complementary goods has a negative relation with the demand for an item.

#### f. Population

If there is a high number of people then it follows that more people are in need of an item. As such the demand for goods increases.

#### g. Consumer expectations of price

Consumer's expectations often weaken the law of demand. If consumers expect that the price will continue to rise, this expected increase will increase demand. Conversely, if consumers think price will fall, a decline in prices will reduce demand.

#### h. Advertising

A company's advertising is a promotional strategy aimed to attract customers to buy goods. So if advertising intensified, the more consumers are asking for or buying goods.

This study will focus only on two factors that can affect the demand for mudharabah, namely:

1. Prices of goods. In banking, the price of goods is the cost incurred by customers when obtaining financing services, in the form of interest rates, margins, nisbah, fee, or the value of things which must be secured.
2. Advertising or efforts made by manufacturers to increase sales. One form of promotion in banking is to increase the number of branches becomes easier for customers to access the bank.

## 2. Margin in Mudharabah

Linguistically *margin* is profit or earnings from interest rates on financial loans, while *profit margin* is profit made by borrowing money from the capital to other parties. In a mudharabah contract, margin is the profit earned by the Islamic bank, and is usually determined by said banks based on a variety of considerations before being agreed upon by the customer. Margin is usually expressed as a percentage. We suspect that margin negatively affect the demand for mudharabah. This means that the higher margins prescribed by Islamic banks, the fewer the number of financing requests. This is because customers will always look for cheaper loan products to maximize their profits.

A profit margin is a profitability ratio that measures the effectiveness of overall management, as shown by the large amount of profit in relation to the sale and investment.

This margin in terms of credit issued by Bank Indonesia is the amount of profit that is agreed upon between the bank and customers for their financing transactions. Margin funding is fixed, and does not change during the term of the financing.

Margin is synonymous with the price of the goods, that is the price of financing. This is because the margin is the price that must be paid by customers because they have requested (purchased) financing. It can then be concluded that the higher the margin of mudharabah, the lower the demand of mudharabah. Conversely, the lower the margin of mudharabah, the higher the demand. This is in line with the law of demand, which characterizes the relationship between price and demand as a negative one if all other factors remain constant (*ceteris paribus*).

Sharia bank set their profit margin for sharia financing products based on Natural Certainty Contracts (NCC), a business agreement that provides certainty of payment, both in terms of quantity and time. This is applied in such financing contracts as murabahah, ijara, ijara muntahiya bittamlik, salam, and istishna. Technically, profit margin is a certain percentage defined by calculating the profit margin on a daily basis, with 360 days in a year for calculation purposes. Calculation of the profit margin can be also done on a monthly basis, with 12 months of the year specified.

There are three variables that significantly affect the determination of the margin of murabahah, namely overhead costs, cost of loanable funds, and profit targets.

Overhead costs include labor costs, general and administrative expenses, depreciation expenses, reserves for uncollectible expenses, and other costs associated with the bank's operations. The cost of loanable funds is the cost of the loans granted by the Islamic bank to its customers. Profit targets considering the inflation rate, interest rate market, the risk premium, the spread, and the need for a reserve for doubtful receivables.

### **3. Islamic Bank Access**

Islamic Bank access is the ability of the public to become a customer of, or to obtain information about Islamic banks. One way to assess this by looking at the number of existing banks. A larger number of banks will facilitate access to society and have a positive impact on demand so that demand for mudharabah financing will also be higher. Conversely, if there are fewer Islamic banks, this complicates public access to such banks and will thus negatively affect the demand for Islamic financing.

Access is synonymous with advertising or promotion. This means that the more Islamic banks provides access to financing the higher the demand. This is because people with access to Islamic banks will have an easier time requestsing financing. Conversely, if there is little access to Islamic banks, there will be little demand for financing. This is because people will have difficulty assessing financing from the Islamic banks, and thus have difficulty financing. It can be concluded Islamic Banking access has a positive relationship with the request of financing. Here is the data on the development of mudharabah margin, the amount of access (office) Islamic banks, and the amount of financing.

## RESEARCH METHODOLOGY

Research for this paper used the Ordinary Least Squares method. This research method is considered to be relevant to the regression model framework or the theoretical framework that describes the effect of independent variables (margins and access) to dependent variables (the demand for financing). This study used the analytical tool SPSS version 16.

## DISCUSSION

### 1. Research Object Description

The object of this research is the amount of mudharabah financing requested during that period from November 2011 to January 2013. The amount of financing requested, as discusses here is the amount of financing extended by Islamic banks. The amount of this financing (such as murabahah, musharaka, and qardh) then mudharabah financing is granted in lower amounts and less often than other forms of Islamic financing.

**Table 1**  
**Development of Financing from Islamic Financial Institutions 2006-2011 (in billions of rupiah)**

No	Type	2006	2007	2008	2009	2010	2011	2006-2011
1	Mudharabah	4,062	5,578	6,205	6,597	8,631	10,229	6,167
		0%	+0.37%	+0.11%	+0.06%	+0.31%	+0.19%	+1.52%
2	Musyarakah	2,335	4,406	7,411	10,412	14,624	18,960	16,625
		0%	+0.89%	+0.68%	+0.40%	+0.40%	+0.30%	+7.12%
3	Murabahah	12,624	16,553	22,486	26,321	37,508	56,365	43,741
		0%	+0.31%	+0.36%	+0.17%	+0.43%	+0.50%	+3.46%
4	Qardh	250	540	959	1,829	4,731	12,937	12,687
		0%	+1.16%	+0.78%	+0.91%	+1.59%	+1.73%	+50.75%

From the above data we can see that financing from Islamic financial institutions experienced a considerable increase between 2006 to 2011 particularly murabahah financing, which saw a growth of Rp. 43,741 billion, or 346%. Musharaka financing, which increased by Rp. 16,625 billion, or 712%; and Qardh, which increased by Rp. 12,687 billion (5.075%). Mudharabah financing saw a smaller increase than the three types of Islamic financing rising only Rp. 6,167 billion or 152%.<sup>1</sup>

This is the curious phenomenon, and it would be interesting to determine what factors affect the demand for financing. From the theoretical studies above it can be seen that many factors are thought to affect the demand for financing. However, this study only examines two variables: the profit sharing margin and access (total number of Islamic banks and branches). This limitation is deliberate, because these two variables are considered to be the most decisive variables affecting the number of request for financing.

**Table 2**  
**Margin Developments, Access, and Mudharabah**  
**(January 2009 - December 2011)**

	Period	Margin	Access	Mudharabah Financing*
2011	November	15.40	2052.00	10203.00
	December	15.33	2066.00	10229.00
2012	January	15.37	2142.00	10133.00
	February	15.20	2345.00	10122.00
	March	15.28	2225.00	10448.00
	April	15.16	2232.00	10349.00
	May	15.04	2288.00	10482.00
	June	14.93	2342.00	10904.00
	July	14.81	2373.00	11023.00
	August	14.96	2425.00	11180.00
	September	14.81	2501.00	11359.00
	October	14.71	2543.00	11380.00
	November	14.73	2575.00	11527.00
	December	14.33	2628.00	12023.00
2013	January	14.51	2664.00	12027.00

*\* in billions of rupiah*

## 2. Data Analysis

<sup>1</sup>Bank Indonesia, Statistik Perbankan Indonesia, Jakarta: Bank Indonesia, 2006 - 2011

OLS assumes that the disturbance variable ( $e_t$ ) has zero mean or  $E(e_t) = 0$  and constant variance or  $\text{var}(e_t) = \sigma^2$ , it also assumes that disturbance variables are not interconnected with one observation with other observations or  $\text{cov}(e_t, e_j) = 0$ . The resulting estimator is the Best Linear Unbiased OLS estimator (BLUE). The results show that the data are normally distributed.

The skewness ratio is  $-0.727/0.580 = -1.253$  and kurtosis ratio is  $-0.27/1.121 = -0.240$ . The acceptance range of skewness and kurtosis in this model is between -2 and +2. The results of calculations on the model results obtained showed normal distribution as in the range of -2 and +2.

A multicollinearity test was conducted to determine whether or not a close relationship between the independent variables exists in a regression model. A linear relationship between independent variables can occur in a perfect linear relationship or an imperfect one. The impact of the presence of multicollinearity is the variance and covariance estimator is so large that it is difficult to give a precise estimate. If the VIF value is greater than 10 then there is a problem of multicollinearity; if the probability value is less than 10 then there is no multicollinearity problem.

From the test results there is no multicollinearity problem with the model this is evidenced by VIF value which is smaller than 10. Partial testing results also indicate no multicollinearity problem because the significance value is greater than 5%, which means accepting  $H_0$  and rejecting  $H_1$ .

Multicollinearity test results and the partial test shows a significance value of 0.077 greater than 0.05 meaning the acceptance of  $H_0$  and rejection of  $H_1$ . As such there is no multicollinearity problem with the model.

A heteroscedasticity test was conducted to determine whether or not the variable is a confounding. If the variable is not constant then heteroscedasticity impaired. Consequently the estimator will not have the necessary minimum variance (will no longer be the best).

The method used to determine heteroscedasticity was the white test method assuming if the  $R^2$  count  $>$   $\alpha = 5\%$  or the probability is less than 0.05 then there is a problem of heteroscedasticity and if  $R^2$  count  $<$   $\alpha = 5\%$  or the probability is greater or equal to 0.05 then there is no heteroscedasticity problem. The test results indicate that in this model there are no heteroscedasticity problems because the significance value is greater than 5%, which means accepting  $H_0$  and rejecting  $H_1$ .

Autocorrelation is a condition in which there is a correlation between the members of the observations and other members from a different observation time. In this case the

autocorrelation is the correlation between a confounding variable and an other confounding variables. One of the assumptions in OLS is that there is no relationship between one confound and another.

If there is autocorrelation then the OLS estimator will not produce the BLUE estimator because it does not have the minimum variance. As a result, OLS standard errors can not be trusted. Furthermore interval estimation and hypothesis testing based on t and F distributions can no longer be trusted to evaluate the results of the regression.

The method used to test for autocorrelation in this study is the method of Durbin Watson. If the DW value is between  $d_u$  and  $4 - d_u$  then the autocorrelation coefficient is equal to zero, meaning that there is no autocorrelation.

The results of the above test indicate that there is no autocorrelation problem because the value is equal to 1.08  $d_u$  whereas  $4 - d_u$  is 2.92. The Durbin Watson value is 2.027 which exists between  $d_u$  and  $4 - d_u$ .

The regression models in this study is:

$$Y_t = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + e_t$$

Where Y is the dependent variable, namely the demand for financing,  $X_1$  and  $X_2$  are independent variables, namely margin-sharing and access, and  $e_t$  is a confound. If the t count > t table or the probability is less than 0.05 then  $H_0$  is rejected and  $H_1$  is accepted. If t count < t table or the probability greater than 0.05 then  $H_0$  is accepted and  $H_1$  is rejected.

The R value is 0.963 meaning that the variables have a relationship or correlation is strong because it is greater than 0.5. The square R value is 0.927 means 92.7% of the independent variables can explain the dependent variable.

The significance value is 0.000 less than 0.05 at a 95% confidence level. The F count value is 76.289 greater than F table which is equal to 3.81. Thus  $H_0$  is rejected and  $H_1$  is accepted meaning that the variables of rate margins and access to Islamic banks have a simultaneous effect on the demand for financing.

Partial test results indicate that the margin level significantly affects demand for mudharabah financing. From the significance value of 0.006 we must reject  $H_0$  and accept  $H_1$ . Meanwhile, the variable of access to Islamic banks has no significant effect on the demand for mudharabah financing. This is evident from the significance value of 0.389 which is greater than 0.05 at the 95% confidence level. This means that we must accept  $H_0$  and reject  $H_1$

indicating that there is no significant effect on the demand for mudharabah financing; the variable of access to Islamic banks can not explain the demand for mudharabah financing.

A regression model which can be made from the above test results is as follows:

$$\hat{Y} = 32,942.108 - 1,584.226 X_1$$

The variable of access to Islamic banks is not included in the regression model because it does not have a significant effect. From the equation above we explain that a rise in margin rates of 1% would reduce the demand for financing by 1,584.108 billion, whereas a 1% decrease in margin levels for mudharabah financing decreased would increase the demand for financing by 1,584.108 billion.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **1. Conclusions**

This study specifically examined public interest in filing for financing at Islamic banks covering the period from January 2009 to December 2011. From this research it can be concluded that:

1. Profit sharing margin has a significant negative effect on the demand for mudharabah financing. This is consistent with the framework built into the theory.
2. Access to sharia bank does not significantly influence the demand for mudharabah financing. This is contrary to the framework built into the theory.

### **2. Suggestions**

1. Islamic banks need to decrease the profit sharing margin as this will increase the competitiveness of sharia bank products particularly mudharabah. Islamic banks which generally set lower margin or interest levels than the margin other Islamic banks could increase the demand for mudharabah financing.
2. Further research on the influence of access to Islamic banks is needed particularly in regards to the demand for mudharabah financing at different periods. This will help determine whether access to Islamic banking affects the number of request for financing.

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## ANNEX

### Table Normality Test Table

#### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Unstandardized Residual	15	-3.97689E2	2.23541E2	.0000000	1.80713648E2	-.727	.580	-.027	1.121
Valid N (listwise)	15								

### Table Multicollinearity Test Results

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
		1	(Constant)	32942.108			8963.483	
	x1	-1584.226	479.696	-.765	-3.303	.006	.113	8.841
	x2	.707	.792	.207	.893	.389	.113	8.841

### Table Partial Multicollinearity Test Results

#### Correlations

Control Variables			x1	x2
y	x1	Correlation	1.000	-.488
		Significance (2-tailed)	.	.077
		Df	0	12
x2	x2	Correlation	-.488	1.000
		Significance (2-tailed)	.077	.
		Df	12	0

### Table Test results heteroscedastisity

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-6884.827	4266.004		-1.614	.133
	x1	383.188	228.302	1.291	1.678	.119
	x2	.549	.377	1.121	1.457	.171

### Table Autocorrelation Test Results

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.963 <sup>a</sup>	.927	.915	195.19305	2.027

### Table Correlation and Regression Analysis

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.963 <sup>a</sup>	.927	.915	195.19305

### Table Simultaneous Regression Analysis

#### ANOVA<sup>b</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5813239.685	2	2906619.843	76.289	.000 <sup>a</sup>
	Residual	457203.915	12	38100.326		
	Total	6270443.600	14			

### Table Partial Regression Analysis

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	32942.108	8963.483		3.675	.003
	x1	-1584.226	479.696	-.765	-3.303	.006
	x2	.707	.792	.207	.893	.389