



# Factors Influence Switching Behavior of Islamic Bank Customers in Malaysia

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## Abstract

An Islamic bank is now not only facing competition from its peer Islamic banks but also from conventional banks, which offer Islamic banking products through their Islamic subsidiary. When the competition becomes tougher, customers are given more options to choose their banks and switch from their current bank to other Islamic banks. Thus, the objective of this study is to evaluate factors influence the switching behavior of Islamic banking customers, in the case of Malaysia, based on the *syariah* compliance issues. Using logistic regression, the results show that the customer's religion, type of account, and whether or not they have account in conventional bank are the significant factors to influence their switching behavior when they encounter non-*syariah* products and practices in their Islamic bank.

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*Keywords:* Islamic banking, switching behavior, *syariah* issues, logistic regression

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## 1. Introduction

In spite of the current vagueness in the global financial market, the Islamic banking and finance industry has continued to retain higher performance. Growth estimates for the industry have remained impressive, ranging from 15 percent to 20 percent per annum. According to the UK Islamic Finance Secretariat, part of the CityUK lobby group, the global market for Islamic finance at the end of 2011 was worth around \$1.3 trillion. The total value of *syariah*-compliant assets has grown by 150% since 2006 with banks hold over 90% of Islamic assets.

The sustained demand for the Islamic banking and finance services during the current global financial markets uncertainties can partly be attributed to the increasing interest from the conventional investors who are considering these services as viable alternatives to those of the conventional banking and finance. As a result of the increased customer demand, many of the conventional financial services providers have started to offer Islamic banking products and services either through the Islamic banking windows or establishing a full-fledged Islamic subsidiary.

Due to these developments, the industry now comprises of larger number of players, resulting in stiffer competition not only among the Islamic banking institutions, but also from the conventional banks that are offering the Islamic banking products. The integration of the Islamic financial institutions into the global financial market has also resulted in competition from the international players. In this very challenging environment, it is vital for the Islamic banks need to improve on their services and expand the customer base by attracting new customers as well as retaining the existing ones. Maintaining the existing customer is particularly demanding in the era of advanced information and communication technology since it is relatively easy for the customers to gather the various information on the options of banking services that are available in the market. Also, the increased consumer sophistication in the context of modern banking is posing a great challenge for the Islamic banks. As competition intensifies, customer's satisfaction on service quality becomes highly critical, thus becoming the deciding factor for the customers whether to

stay on or to switch to another bank (Naser et.al., 1999). In this regard, the ability of banks to retain existing customer, in addition to attracting new ones, is a major factor determining the Islamic banks' performance and survival in the industry.

Thus, the ability to ensure long-term customer relationship is highly critical for the survival of the banking institutions. Banking institutions resort to various strategies to retain their customers since the customers are able to "switch" from one institution to another that are deemed able to offer them better services. Furthermore, the cost of acquiring new customers is relatively high, but the probability that they would stay is quite low. Amid the intensifying competitive pressure among the financial services providers, considerable attention is given towards establishing "customer loyalty" to ensure or long-term relationship between the service providers and their customers. In this regard, investigating switching intentions among customers enables the service providers to implement suitable marketing strategies for their customers.

## 2. Literature Review

Empirical studies on consumption market show that, customer satisfaction is positively correlated with repeat purchase intention (Oliver and Swan, 1989; Taylor and Baker, 1994). So, improving customer retention rate or at the same time is decreasing the switching rate, is the main target in customer satisfaction management (Fornell, 1992).

### 2.1. Customer Satisfaction in Islamic Banking

Customer satisfaction is a measure of how organization's total product performs in relation to a set of customer requirements (Hill and Alexander, 2006). In the banking industry, as competition increases its level, banks should be more focusing on increasing customer satisfaction and customer retention by improving the service quality level of their banks (Goode and Moutinho, 1996).

Levesque and McDougall (1996) argues that customer satisfaction is essential for retail banks as it has an impact on the organization's profit. Furthermore, in today's competitive environment, providing quality service is an essential strategy for success and survival (Liang and Wang, 2004). In line with this, Trubik and Smith (2000) and Garland (2002) identify direct and strong relationship between customer loyalty and customer profitability in retail banking, while Wisskirchen et.al (2006) found that long-term growth and profitability of banks rely on banks' ability to attract and retain loyal customers.

In term of service quality dimensions in the financial services industry, there were various dimensions have been revealed. Parasuraman et.al (1985), for instance, identify 11 dimensions of service quality which are reliability, responsiveness, competence, access, courtesy, communication, credibility, security, competence, understanding the customer, and tangibles. However, based upon their findings, Berry et al. (1985) and Zeithaml and Bitner (1996) indicate that service quality consists of five dimensions which are tangibles (appearance of physical facilities, equipment, personnel, and written materials), reliability (ability to perform the promised service dependably and accurately), responsiveness (willingness to help customers and provide prompt service), assurance (knowledge and courtesy of employees and their ability to inspire trust and confidence), and empathy (caring and individual attention the firm provides its customers).

In the case of Islamic banking, papers attempted to study customer satisfaction upon Islamic banking service quality are still scanty. Among those are papers written by Naser et al (1999), Al-Tamimi and Al-Amiri (2003), Okumuş (2005), Abdul Kader and Norizan (2009), Osman et al (2009), Hossain and Leo (2009), Golmohammadi and Jahandideh (2010) and Abduh (2011).

Those studies reveal that customers of Islamic banking are showing considerable degrees of satisfaction and dissatisfaction from many Islamic bank's facilities, services, and products in various countries. The customers are aware of specific Islamic banking products such as *murabaha*, *murabaha*, and *mudarabah*; however, Naser et.al. (1999) and Okumuş (2003) find that those customers only deal with some of them. The service quality dimensions uncovered by those studies are similar with what has been done within the conventional banking framework except for Abduh (2011) which recognizes *syariah* compliant dimension.

In terms of ranking the importance level of the service quality dimensions, many studies from different countries have presented different results. For instance, Al-Tamimi and Al-Amiri (2003) in UAE, Hossain

and Leo (2009) and Abdul Kader and Norizan (2009) in Qatar find that tangibles and empathy are the most important dimensions. In Iran, Golmohammadi and Jahandideh (2010) confirms that reliability is the most important dimension and tangible is the least important dimension for Iranian customers. Abduh (2011) verifies that the Islamic banking customers in Indonesia perceived *syariah* compliant and convenience as the most important dimensions of Islamic banking.

## 2.2. Customer Switching Behavior in Islamic Banking

Within the conventional banking framework, switching behavior of bank customers is modeled together with perceived value and customer satisfaction. Woodruff (1997) states that perceived value represents customer cognition of the nature of relational exchanges with their service providers, and satisfaction reflects customers' overall feeling derived from the perceived value while Varki and Colgate (2001) shows that customer value impacts customer satisfaction and there is an inter-linkage between perceived service value, customer satisfaction evaluation and intention to switch to other service providers. Similarly, findings from Wang et al. (2004) and Oh (1999) support the direct influence of customer perceived value on customer satisfaction and loyalty towards financial institutions.

In the case of Islamic banking services, Hashim and Latifah (2010) studies the relationship between customer perceived value, relationship quality and switching intention among Islamic banking customers in Malaysia. Using 456 observations, Hashim and Latifah (2010) evidences that customer perceived value significantly influence the level of customer satisfaction which then affecting the intention to switch. The relationship between customer perceived value and the level of customer satisfaction is positive whereas the relationship between the level of customer satisfaction and switching intention is negative.

In Indonesia, Suryani and Chaniago (2011) conducts a field survey towards Islamic bank customers in Surabaya in order to find the switching behavior among the Islamic bank customers. By using exploratory factor analysis, the result indicates that there are five factors that underlying customer switching behavior in Islamic banking services, namely: bank-customer relationship, *syariah* compliance issues, service quality, switching cost and risk perceived by customers. In addition, discriminant analysis shows that intention to retain is significantly affecting the customers' switching behavior in Islamic banks.

Therefore, the objective of this research is to study the customer switching behavior in the Malaysia Islamic banking industry. As to narrow and focus the discussion, this paper analyzes only the customer switching behavior with regard to the issues of *syariah* compliance in the Islamic banking products and practices. It is conducted in Klang Valley area of Malaysia using self-administered questionnaire distributed to more than 600 Islamic banking depositors. The number of usable questionnaires is 500 which reflects 83.33% response rate. The statistical method used is binary logistic regression.

## 3. Research Method

Regression analysis (OLS) has become an important method of inferential statistics used with any data analysis concerned with describing the relationship between a response variable and one or more explanatory variables. Many journal papers had been produced under this technique, either utilizing it as an analytical tool to cut into pieces the cake of data or to develop a new advanced technique based upon OLS ideas and therefore can be applied in a particular circumstance.

Amongst the techniques developed under the regression analysis framework is logistic regression. Hosmer and Lemeshow (2000) and Studenmund (2006) enlighten what distinguishes a logistic regression model from the OLS model, which is that the outcome variable in logistic regression is binary or dichotomous, whereas in OLS, it is a continuous numerical data. It is an estimation technique for equations with dummy dependent variables that avoids the unboundedness problem of the linear probability model by using a variant of the cumulative logistic function.

### 3.1. Model Specification

There are a number of distribution models that are suggested to be used in the analysis of a dichotomous dependent variable. However, the logistic model is the most widely used by researchers worldwide. Cox and Snell (1989) in Hosmer and Lemeshow (2000) mentioned two primary reasons for

choosing the logistic distribution; firstly, from a mathematical point of view, it is an extremely flexible and easily used function, and secondly, it lends itself to a clinically meaningful interpretation.

In linear regression, we assume that the mean may be expressed as a linear equation in  $x$  (or some transformation of  $x$  or  $Y$ ), such as

$$E(Y | x) = \beta_0 + \beta_1 x \quad (1)$$

This expression shows that it is possible for  $E(Y | x)$  to take any value as  $x$  ranges between  $-\infty$  and  $+\infty$ . However, in the logistic regression model, the specific model used is:

$$E(Y | x) = \pi(x) = \frac{e^{\beta_0 + \beta_1 x}}{1 + e^{\beta_0 + \beta_1 x}} \quad (2)$$

where,

$e$  = euler's number (2.7183)

$\pi(x)$  = function of  $x$  in logit model

And in order to give a meaningful interpretation,  $E(Y | x)$  is transformed with logit transformation to become:

$$g(x) = \ln \left[ \frac{\pi(x)}{1 - \pi(x)} \right] = \beta_0 + \beta_1 x \quad (3)$$

The significance of this transformation is that  $g(x)$  now has many of the desirable properties of a linear regression model. The logit,  $g(x)$  is now linear to its parameter. Hence, the relationship of dependent – independent variables in this study is expressed in the following equations:

$$p = \exp[a + b_1 x_1 + b_2 x_2 + \dots + b_{13} x_{13}] / (1 + [a + b_1 x_1 + b_2 x_2 + \dots + b_{13} x_{13}]) \quad (4)$$

$$\log(p / 1 - p) = a + b_1 x_1 + b_2 x_2 + \dots + b_{13} x_{13} \quad (5)$$

### 3.2. Fitting the Logistic Regression Model

In linear regression, the method used most often for estimating unknown parameters is the least squares method. In that method, concisely, we choose those values of  $\beta_0$  and  $\beta_1$  which minimize the sum of squared deviations of the observed values of  $Y$  from the predicted values based upon the model. It is proven that the least squares method produces estimators with a number of desirable statistical properties. Unfortunately, this does not work with a dichotomous outcome model.

In a model with a dichotomous response as the dependent variable, the Maximum Likelihood Estimation (LME) is used. The difference is, when the least squares method seeks to minimize the sum of squared distances of the data points to the regression line, the Maximum Likelihood Estimation method seeks to maximize the log-likelihood, which reflects on how likely it is (the odds) that the observed values of the dependent may be predicted from the observed values of the independents.

Since likelihood is a probability, therefore its values vary from 0 to 1. The log-likelihood is the log of the probability and its value varies from 0 to minus infinity because the log of any number less than 1 is negative. The log-likelihood is calculated through iteration, using the maximum likelihood estimation (Garson, 2010). The log-likelihood tests the significance of the researcher's model as a whole. In presenting information on the log-likelihood, statistical packages usually present not the log-likelihood itself but the log-likelihood multiplied by -2. The reason for this is that the log-likelihood when multiplied by -2 has approximately a Chi-square distribution (Menard, 1995). A finding of significance leads to the rejection of the null hypothesis that all of the predictor effects are zero. In other words, if this likelihood test is significant, at least one of the predictors is significantly related to the dependent variable.

In assessing the significance of the independent variables that can therefore be included in the model, the guiding principle is to compare observed values of the response variable to predicted values obtained from models with and without the variable question (Hosmer and Lemeshow, 2000).

$$G = -2 \ln \left[ \frac{(\text{likelihood} - \text{without} - \text{the} - \text{variable})}{(\text{likelihood} - \text{with} - \text{the} - \text{variable})} \right] \quad (6)$$

A non-significant likelihood ratio test indicates no difference between the full and the reduced models; hence justifying dropping the given variable in order to have a thriftier model that works just as well. On the other hand, for the significant variables, the larger the chi-square value, the greater the loss of model fit if that term is dropped (Garson, 2010).

#### 4. Result

Responses from 500 respondents are incorporated in this study consisting of 207 (41.4%) female and 293 (58.6%) male. In addition, 159 (31.8%) respondents are in the age group of 25 years and above while those in the age group of less than 25 years are 341 or 68.2% of the total respondents. Most of the respondents hold undergraduate degree and above (71.4%), meanwhile, those with diploma and high school are 28.6%. Thus, this survey is believed to represent the educated customers with good knowledge in banking, good experience and high frequency of dealing with the Islamic banks. Table 1 shows the completed descriptive statistics of the respondents' demography.

Table 1. Demography of Respondents

	Variable	Code	Frequency	Percentage
Gender	Male	1	207	41.4
	Female	0	293	58.6
Age	> 25 years	0	159	31.8
	25 years and below	1	341	68.2
Religion	Others	0	42	8.4
	Islam	1	458	91.6
Education	Diploma and Below	1	143	28.6
	Undergraduate and above	0	357	71.4
Monthly Income	RM5000 and below	0	442	88.4
	> RM5000	1	58	11.6
Customer Period	3 years or less	0	268	53.6
	> 3 years	1	232	46.4
Account type	Others	0	42	8.4
	Saving	1	458	91.6
Interaction Frequency	Others	0	271	54.2
	Once in a week	1	229	45.8
Services used	Internet Banking	0	167	33.4
	ATM	1	333	66.6
Bank Status	Subsidiary	0	188	37.6
	Full-fledged	1	312	62.4
Bank Ownership	Foreign	0	31	6.2
	Local	1	469	93.8
Conventional Bank Customer	No	1	152	30.4
	Yes	0	348	69.6

In this study, the dependent variable is "the intention to switch" when issue of non-syariah compliance in Islamic banking products and practices encountered by the customers with response is equal to "1" for "willing to switch" and "0" for otherwise. The independent variables are as depicted in Table 1. Table 2

depicts the classification ability of logistic regression. It shows that 73.2 percent of the respondents are classified correctly. It confirms the mediocre level of the classification ability of the model.

Table 2. Classification Table from Logistic Regression

Observed		Predicted		
		Have you ever think to switch other banks?		Percentage Correct
		Never	Yes	
Have you ever think to switch to other banks?	Never	13	121	9.7
	Yes	13	353	96.4
Overall Percentage				73.2

Table 3 shows that the variable of religion, type of account, and whether or not they have account in conventional banking are statistically significant in influencing Islamic bank customers to switch due to *syariah* compliance issues. In detail, Muslim customers have probability to switch for almost three times (2.787) bigger than non-Muslim customers when they encounter non-*syariah* compliance products and practices in their bank. Furthermore, saving account holders have shown that their switching intention is bigger as compared to non-saving account holders, two and half times. This can be due to the flexibility of saving account holders to move their money without any restriction while for non-saving account holders, particularly for *mudarabah* investment account, they try to avoid penalty by withdrawing money before the end of the investment period.

Table 3. Variables in the Logistic Regression Equation

Variable	B	S.E.	Wald	Sig.	Exp(B)
Gender (1)	-.083	.227	.135	.713	.920
Age (1)	.649	.343	3.591	.058	1.914
Religion (1)	1.025	.374	7.514	.006	2.787
Marital (1)	-.023	.342	.005	.946	.977
Education (1)	-.254	.334	.579	.447	.776
Monthly Income (1)	.813	.430	3.580	.058	2.255
Customer Period (1)	-.234	.219	1.145	.285	.791
Account type (1)	.919	.418	4.844	.028	2.507
Interaction frequency (1)	.204	.222	.846	.358	1.227
Services Used(1)	.105	.240	.192	.661	1.111
Bank Status (1)	.111	.232	.228	.633	1.117
Bank Ownership (1)	.165	.422	.154	.695	1.180
Conventional Bank Customer (1)	.640	.232	7.640	.006	1.897
Constant	-1.735	.666	6.780	.009	.176

Lastly, customers who have account in conventional banks are more reluctant to switch when they encounter non-*syariah* compliance products and practices in their Islamic bank as compared to those who do not have account in conventional banking. This is because those who do not have account in conventional banking is usually more strict and selective in their investment or saving decision as compared to those who have account in conventional banks which usually consider Islamic banking products as merely an alternative or simply to diversify their investment.

## 5. Conclusion

This study aims to investigate the customer switching behavior in the Malaysia Islamic banking industry, with regard to the issue of non-*syariah* compliance products and practices. Using logistic regression, the variable of religion, type of account, and whether or not they have account in conventional banking are found to be statistically significant in influencing their switching behavior due to non-*syariah* compliance issues.

This study is believed as the first empirical study in the field of switching behavior in Islamic banking under the framework of *syariah* issues. Thus, limitations in this study are inevitable. Among the limitations are (i) it focuses only to one aspect which is *syariah* aspect; and (ii) it does not include psychological aspect of the respondent as independent variables. Therefore, at least two suggestions for future researches, which are (i) study the customer switching behavior in Islamic banking not only from *syariah* aspect but also profitability and service quality, and (ii) incorporate psychological aspects of respondents in the independent variables.

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