Risk Analysis of Customers Churn Rate at the Bandung Mandiri Shari’a Bank

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Abstract

Shari’a banking are expanding and growing rapidly nowadays, as shown by the increasing market shares at several already existing shari’a banks as well as births of new shari’a banks induced by conventional banks. Such growth is also proven at Bank Shari’a Mandiri (BSM), namely the Bandung Mandiri Shari’a Bank, by a significant increase in the number of its financing customers. Indeed, the increase could not be separated from the churn rate, namely customer migration and absorption from conventional banks or the other existing shari’a banks to Bandung BSM. Financing customer migration thus becomes an important matter to be studied, in order to find out about the driving factors for financing customers’ preferences to be made an input for Bandung BSM for planning a strategy to cope with the market share increase. This research was aimed at identifying financing customers’ preferences toward Bandung BSM by studying the dominant factors influencing the financing customers to choose and migrate to Bandung BSM and using the factor analysis method to observe the churn rate risks. Samples are taken from a number of Bandung BSM customers, selected through questionnaires. There are three factors influencing customer preferences for choosing Bandung BSM, namely: availability of supporting facilities, leadership, and shari’a. Based on impact probability matrix analyses, it’s shown that there are three attributes that have high probability values, that is, profit sharing system, administrative easiness, and leadership factors. Results of this research also showed that the Bandung BSM churn rate risks were of medium to high probability, and this will greatly impact the bank’s performance. Therefore, some real effort is necessary to minimize the churn rate risks.

Keywords: customer preference, churn rate risk, factor analysis, risk analysis, risk identification, risk measurement, impact probability matrix.
Introduction

A great number of people believe that, compared to conventional banks, sharia banks will be more resilient in facing a crisis. This means that depositing their money in sharia banks will be safer, and borrowing money from sharia banks will be fairer. The basic main consideration for such perception is that sharia banks have less business risks as the other conventional banks. Sharia banks are believed of being able to evade liquidation risks due to speculation and interest system that usually affect conventional banks, namely because of the profit sharing system used by sharia banks.

In line with the provision from the monetary authority (Bank Indonesia) pertaining to the obligation of banks to put risk management into practice in all banking activities (Bank Indonesia, 2006). In year 2004 Bank Shari’a Mandiri has actively straightened up and improved all aspects concerned to implementing risk management. Until the end of year 2004 Bank Shari’a Mandiri has carried out the action plan for implementing risk management. The undertaking covers improvement of all instruments of operational policies and regulations towards risk based supervision. In this context, the implementation of risk management at Bank Shari’a Mandiri was also directed towards enhancing the active roles of the Directors and Commissioners as well as the Dewan Pengawas Shari’a (Shari’a Supervisory Board) in implementing risk management (BSM, 2004).

Being the largest sharia bank, Bank Shari’a Mandiri has been managing the eight different risks as stipulated by Bank Indonesia, namely: Financing Risks (credits), Liquidity Risks, Market Risks, Operational Risks, Legal Risks, Strategic Risks, Compliance Risks, and Reputation Risks (BSM, 2004). Management of all these risks should be implemented in all branches all over Indonesia, without exception, also at Bank Shari’a Mandiri Bandung.

Bank Shari’a Mandiri Bandung provides three categories of products and services, that is, funding, financing, and services. Within the category of financing products, at present BSM Bandung have already 700 customers in Bandung and another 700 customers in other places in West Java, the figures are increasing rapidly year by year (BSM Bandung, 2006). The increasing number was indeed due to the churn rate of customers from conventional banks as well as from other existing sharia banks to BSM Bandung.

The migration of financing customers became an important matter worth studying, that is, to find out the driving factors the financing customer preferences to be made as inputs for BSM Bandung for the bank’s future strategies in enhancing its market shares through provisions of its best banking services (Bensapudi and Berry, 1997).

Studying the migration of financing customers will also become an interesting matter as it is not impossible that existing or candidate customers of BSM Bandung will migrate to other banks because of churn rate as a risk in the banking business (Bosc, Allen and Hamilton, 2001).

Therefore, it is of great importance to have a special discussion on preferences of financing customers towards BSM Bandung to look into the risks of churn rates, using the factor analysis method.

Research objectives

The objective of this research was to provide inputs for BSM Bandung, namely an analysis of financing customers’ preferences to look into the existing churn rate risks, spelled out as follows:

1. To obtain a picture on financing customers’ preferences toward BSM Bandung by looking into the dominant factors influencing choices or migration of financing customers to BSM Bandung.
2. To identify the churn rate risks that could influence the migration of financing customers from and to BSM Bandung to be used as inputs for preparing the right strategies for increasing market shares.

Methodology

This research is carried out by means of collecting primary data from questionnaires, distributed to BSM Bandung financing customers as samples. The important factor in designing the questionnaires is deciding on the variables to be used. Therefore, the variables should first be defined as concepts that are operationally measurable and could represent the expected objectives.

The questionnaire is divided into three parts:

1. Part I: expressing the variables of respondents’ identity concerning characteristics of respondents.
2. Part II: expressing the variables of customers’ preferences, being derived from marketing mix of services, namely the 7 P.
3. Part III: expressing the variables of attributes for assessment of customers’ expectations and present condition of performance at BSM Bandung.

The identified variables of customers’ preferences are derived from the marketing mix factors of Zeithaml and Bitner (1996) in service marketing, namely: product, price, place, promotion, people, physical evidence, and process. These factors will shape the customers’ preferences toward Bank Shari’a Mandiri Bandung, as follows.

<table>
<thead>
<tr>
<th>Marketing</th>
<th>Elements of Marketing Mix</th>
<th>Definition</th>
<th>Statement</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bandung</td>
<td>Features and instruments of BSM Bandung in providing services for the customers</td>
<td>Available and wide-spread ATM facilities to facilitate customers’ transactions</td>
<td>P1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Service features</td>
<td>-Already use on-line system for depositing and withdrawing money</td>
<td>P2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Financing platform</td>
<td>-Financing platform negotiated between the bank and customers</td>
<td>P3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-BSM gives clear information on different financing products the bank provides, thus making it easy for customers to choose the financing products that they want</td>
<td>P4</td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>Profit-sharing system</td>
<td>The profit-sharing system applied by BSM Bandung is related to the Islamic shari’a held firmly as the base and that there are some administration fees for the customers to pay</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Administration fee</td>
<td>Using the Islamic shari’a’s system for implementing a clear profit-sharing system in accordance to MUI and RI stipulations. -Clear, measurable, and transparent calculation of the profit-sharing system between the bank and its customers -Negotiable (flexible) profit-sharing system benefiting both parties -Credit is borne by the customers will not be too heavy due to the profit-sharing system -The bank provides high financing facilities for customers (in accordance to prevailing regulations) -BSM Bandung shall not impose high administration fees -There will be no extra fees or other costs for customers to pay -The profit-sharing system applied by BSM Bandung already in compliance with the Islamic shari’a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td>Accessible location</td>
<td>Location of the BSM Bandung office -Easily reached strategic location -BSM located near the place of activity, thus, making it easier for customers in transacting</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Promotional media</td>
<td>Related to promotional activities -Promoting in good manners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>People</td>
<td>Leadership factor</td>
<td>Staff services -Reputation and proficiency of BSM Bandung staff in providing good services, administrative or operational, so that customers feel safe and comfortable -The management provides assistance in the administrative process of customers -Putting forward deliberations and relationships in problem solving -Availability of management policies to facilitate customers -Friendly leaders/managers -Good-looking leaders/managers -Professionalism of management in making decisions and policies -Attention and responsiveness of staff -Good and friendly services -Security of customers’ privacy and confidentiality</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical evidence</th>
<th>BSM physical appearance</th>
<th>Real proofs of service-producing objects, i.e. appearances of building, interior, and other physical supporting things</th>
<th>Satisfactory conditions of building and offices, giving the impression of comfort and safety (parking areas, WC, prayer facilities, etc.) -Occupying a clean and comfortable building with nice interior -The length of time of BSM establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>-Quick service -Simple administration</td>
<td>Series of activities conducted by BSM Bandung staff to provide services to customers</td>
<td>Time needed in the procedure for accepting candidates of financing customers -Time needed and speedy administration process -Quick, right, and accurate services -Not too long a queue for obtaining services -BSM Bandung has good image and reputation in the eyes of customers -BSM Bandung provides facilities in the administration process -BSM Bandung is flexible on matters related to administrative requirements for obtaining financing products -Clear, measurable, and transparent credit agreements and provisions from BSM Bandung -Easy and clear procedures for obtaining financing (each company/individual will have easy access to financing from BSM Bandung) -Obtaining recommendations from relatives -Although using the profit-sharing system, it should already been standardized in compliance with RI provisions -BSM Bandung facilitates the customers in making transactions (both withdrawal and deposit)</td>
</tr>
</tbody>
</table>

Table 1: Research variables
Research results

1. Analysis of financing customers’ preferences towards BSM Bandung

Further analysis is made on the processed data regarding the BSM Bandung financing customers’ preferences towards the prevailing facilities, leadership, and sharia system.

a. Factors of BSM Bandung facilities

Most of the financing customers want to have facilities that could support and facilitate transaction processes, such as ATM facilities, on-line systems, strategic location, as well as supportive building and interiors, all that makes the customers feel comfortable and safe in doing transactions (see Gokey, 2001). Interviewing the respondents revealed that the present physical evidences of BSM Bandung, such as cleanliness, parking areas, comfort, services, and easiness in transacting, should be improved. Considering the location, building, and interior, all are quite supportive. Nevertheless, they should be well maintained. BSM Bandung has not yet had the necessary facilities for transacting, such as an on-line system. The bank only has a limited number of ATM facilities, and phone banking facilities are not yet supportive, whereas these facilities are really the ones greatly needed by the financing customers (see Crouhy et al., 2006).

b. Factors of leadership

BSM Bandung is operating for areas in the city of Bandung and the province of West Java. Bank Shari’a Mandiri Bandung was established in year 2004, and thus, the bank is still relatively new compared to the other branch offices of long established conventional banks, such as BCA, NISIP, BII, Bank Mega, Bank Mandiri, etc. Although in Bandung there was already a sharia’s bank, namely Bank Muamalat, most people in the city of Bandung and West Java are yet not familiar with the financing model using the sharia’s system. Therefore, special approaches to the communities are necessary to educate and capture new customers as many as possible.

Results of the analyses indicated that the factor of leadership is most influential in approaches of relationships and deliberation nature to arrive at the necessary agreements in administration processes. The leadership characteristics that made up the personal branding of BSM Bandung management staff are:

1) Emotional branding

The BSM Bandung managers/leaders become the important icon in marketing. The emotional nearness between the bank leaders and customers become an attractive power so that transaction processes can run easily, quickly, and appropriately.

2) Personally

The BSM Bandung managers/leaders should be honest, trustworthy, and should also have the other good characters.

3) Trust

Trust will grow along with reputation and this will take time. BSM Bandung had, until year 2006, shown satisfactory performances, as indicated by the increased profit and procured assets. The increased profits and procured assets are due to the increasing number of customers (market share) from year to year.

2. Churn rate risk analyses on financing customers of BSM Bandung

Based on analyses of factors of BSM Bandung financing customers’ preferences, the following is a study on churn rate risks of financing customers of BSM Bandung.

2.1 Identification of risks

Risk identification is the beginning and most important part of the whole risk management process. From the existing Bank Shari’a Mandiri classification of risks, strategic risk is the risk related to the discussed issue, namely the issue focusing on churn rate risks (see Evans and Olson, 2002). It is of great importance to investigate in detail the churn rate risks as they concern with the increase and decrease of market shares of BSM Bandung, which will have impacts upon the overall stability of the Bank Shari’a Mandiri business.

Churn rate risk is the risk due to migration of customers from a certain bank to another bank. From the existing definition of risks in the classification of risks usually available in banks, the churn rate risk is a derivation of strategic risk (Dowel, 2005).

Risk identification is conducted based on the classification of risks available at Bank Shari’a Mandiri, as shown in Table 2:

<table>
<thead>
<tr>
<th>No.</th>
<th>Risk type</th>
<th>Scored to position</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Credit</td>
<td>Moderate</td>
<td>Down</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Emerging exposures due to failures of counterparties to fulfill their obligations.</td>
</tr>
<tr>
<td>2</td>
<td>Market</td>
<td>Low</td>
<td>Stable/Unchanged</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Emerging exposures due to movements of market variables (interest rate and exchange rates) from the bank’s portfolio, adverse movement from expectations could bring disadvantages to the bank.</td>
</tr>
</tbody>
</table>
3 Liquidity  Moderate  Down  Emerging exposures among others because the bank could not fulfill its obligations at maturity date (financing criteria)

4 Operational  Low  Stable/ Unchanged  Arising exposures among others, due to inadequacy or the non-functioning of internal processes (process factor). Also due to system failure (system factor) in recording, booking, and reporting all transactions appropriately, comprehensively, and timely.

5 Legal  Low  Stable/ Unchanged  Arising exposures due to weaknesses in judicial aspects, among others due to prosecutions, absence of supporting laws and regulations.

6 Reputation  Low  Stable/ Unchanged  Exposures caused by negative publications on matters related to the bank’s business activities or negative perceptions towards the bank.

7 Strategic  Low  Stable/ Unchanged  Exposures due to the promulgation and implementation of inappropriate bank strategies, inaccurate business decisions or lack of the bank’s responsiveness towards external changes.

8 Compliance  Low  Stable/ Unchanged  Exposures due to the bank not complying or not implementing the prevailing laws and regulations.

Table 2: Risk identification of Bank Shari’a Mandiri

2.2 Measurements of risks
After the identification of risks that might arise at Bank Shari’a Mandiri Bandung, the next step is to conduct assessments or measurements on the respective risks. Measuring the probability of these risks to materialize and the extent of impacts that will affect Bank Shari’a Mandiri Bandung is one of the methods used for measuring risks. Risk measurement itself could be divided into two kinds, namely qualitative measurement and quantitative measurement.

The measurement of risks in this research is only conducted qualitatively by plotting the impact-probability matrix on data of chum rate risks obtained through interviewing (part III of the questionnaire) the financing customers at top management positions on their opinions about certain attributes. Results of the interviews were then processed to obtain the interpretations of BSM Bandung financing customers concerning the prevailing condition and their expectations (Nun, 2006; Kotler, 2000).

<table>
<thead>
<tr>
<th>No.</th>
<th>Attributes</th>
<th>Rating Categories</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Quick service</td>
<td>To be improved</td>
<td>Quite satisfactory</td>
</tr>
<tr>
<td>2</td>
<td>Simple administration</td>
<td>Administration to be made easier by providing knowledge and counseling to customers so that the process could run smoothly, accurately, appropriately, transparent, and easy</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Profit-sharing system</td>
<td>Providing mutually beneficial and attractive values of profit-sharing</td>
<td>Quite satisfactory</td>
</tr>
<tr>
<td>4</td>
<td>Leadership factor</td>
<td>Cooperation and team work should be improved</td>
<td>Good</td>
</tr>
<tr>
<td>5</td>
<td>Platform</td>
<td>To be improved</td>
<td>Quite satisfactory</td>
</tr>
</tbody>
</table>

Based on results of risk profile analyses during the fourth quarter of year 2004 conducted on all activities and products prevailing at BSM, in the overall, the predication of risks at BSM is low with a stable trend category. Mitigating efforts should be exerted to suppress credit and liquidity risks from moderate category to low category (BSM Annual Report, 2004). Chum rate risk is a part of strategic risks caused by the lack of bank responsiveness towards external changes. External changes are related to customers’ preferences for and expectations from the bank. The prevailing condition is that conventional banks are competing with each other to open shari’a branches, and the conventional banks that have not yet opened their branches are now improving the quality of their services through providing additional features that make it easier for the customers to transact. The phenomena could indeed affect the migration of customers from BSM to other banks.
Table 3. Financing customers' interpretations towards BSM Bandung

Results of the interviews indicated that certain attributes should have to be improved as an effort to enhance service quality at BSM Bandung. The results were then interpreted by assigning a probability score on each of the assessed attributes to find out the extent of churn rate risks on financing customers at BSM Bandung by drawing a matrix between of impacts and probabilities qualitatively (see Mun, 2004).

The assigning of rating level on results of interviews, as shown in Table 2, was based on judgments of experts during a panel discussion, carried out qualitatively using the Analytical Hierarchy Process (AHP), for later use in drawing the impact-probability matrix. The assessments for the category of ‘opinions on attributes for the present condition’ are interpreted by assigning a rating level for use in the impact-probability matrix.

2.3 Analyses of risks

As Lewis (2004) and Olsson (2003) indicate that to facilitate the plotting of the impact-probability matrix on the Cartesian coordinates, results of the qualitative assessments are then quantified through weighting using scores, as shown in Table 4.

The following table elucidates the conversion of qualitative to quantitative assessments. For example, the attribute of quick service in the category of evaluation of the present condition, the performance of BSM Bandung is considered quite satisfactory. The assessments are then converted on the probability score for the probability of improved service speed at BSM Bandung is medium, however, when it is happening, it will give high impacts on performance of BSM Bandung, and thus, given the scores of 4; 5; and 6, and so on. The complete evaluation results are as follows:

Table 4. Scoring of the rating categories

Note: Scoring is based on judgments of experts through a Focus Discussion Group

Table 5. Rating results of attributes for churn rate risks

The impact-probability matrix is plotted on a Cartesian coordinate, where the vertical line denotes the level of probability of happening of enhancement or improvement of each attribute at BSM Bandung. The horizontal line represents the level of impact on performance that might happen when improvement is made on the respective attribute.

Conclusions can be drawn from the matrix, namely that the attributes for churn rate risks are having medium to high probability level and will bring high impacts on improved performance at BSM Bandung. The probability for happening to the profit-sharing system applied at BSM Bandung is at the medium level, lower compared to interest rates of conventional banks. However, it will induce high impacts on enhanced performance at BSM Bandung. The probability for an increased profit-sharing is due to provisions related to other risks, such as market risks, country risks, BI policies, and others, which are difficult to handle internally.

With regards to the factor of leadership, the probability for happening when all elements of the leadership factor are enhanced will be high, and this will have highly significant impacts on performance at BSM Bandung, as at branch offices, the leadership factor is dominant.
A conclusion can be drawn from the above table, namely that the three factors are indeed the factors influencing financing customers’ preferences for choosing Bank Shari’a Mandiri Bandung. The available supporting facilities cover ease of use or administrative simplicity, the factor of shari’a that uses the profit-sharing system and not the interest system, and the factor of leadership with personal branding, thus, making it more reliable. The BSM Bandung management should indeed give extra attention to the three factors (see Parasuraman et al., 1988).

An earlier research conducted by the Research Center of Institut Pertanian Bogor (Lembaga Penelitian IPB, 2000) on shari’a banks in West Java (Bank Shari’a, Potensi Preferensi & Perilaku Masyarakat di Wilayah Jawa Barat) revealed the motivations of respondents for choosing the services offered by Bank Shari’a in year 2000, as follows.

<table>
<thead>
<tr>
<th>No.</th>
<th>Motivation for using lending services</th>
<th>Bank Shari’a customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Profile-sharing system</td>
<td>21</td>
</tr>
<tr>
<td>2.</td>
<td>Quick service</td>
<td>75</td>
</tr>
<tr>
<td>3.</td>
<td>Low transaction fee</td>
<td>16</td>
</tr>
<tr>
<td>4.</td>
<td>Variety of deposit products</td>
<td>2</td>
</tr>
<tr>
<td>5.</td>
<td>Not using the interest system</td>
<td>39</td>
</tr>
<tr>
<td>6.</td>
<td>Conducting the religious shari’a</td>
<td>19</td>
</tr>
</tbody>
</table>

Table 7. Respondents’ motivation for choosing or using deposit, lending, or other services offered by Bank Shari’a in year 2000
Source: IPB Research Team (2000)

Comparing the results of this research with those from the IPB research team in year 2000, there are some shifts in customers' preferences for choosing Bank Shari’a.

In the study conducted by the IPB research team, the largest percentage of respondents want quick service (23.1%) and because the bank is not using the interest rate system (12%). This is because people are comparing them with main advantages of conventional banks that already have a long record of professionalism in providing services as they have great accessibility and supporting facilities (IPB Research Team, 2000).

Results of this survey however, indicated that financing customers’ preferences for choosing Bank Shari’a Mandiri Bandung are due to the service supporting facilities such as an online system, availability of ATMs, easy access in transacting and simple administration. Apart from that, there is also the factor of shari’a, namely of using the profit-sharing system in compliance to the shari’a of Islam. Meanwhile, quick service no longer become the main factor, as services at BSM Bandung have been standardized by the available system, whereas improvement efforts have been exerted for the supporting facilities. The factor of leadership is of great support, as for each branch at certain areas or branches, the leader figure becomes an important icon for customers or applying customers.

The probability for improvement of administration easiness is medium however, when it is happening, it will have high impacts on improved performance at BSM Bandung. Low probability is due to the factor of human resources and the principle of prudence exercised by the bank in providing financing products to customers. Results of comparative studies on several sources indicated that the Shari’a Bank has only a few qualified human resources and thus, further trainings are necessary. When the physical appearance of the building is improved, the probability will be very high but not significant towards the impacts on performance at BSM Bandung. The reason is that nice building appearance will not affect performance when there are no other supporting facilities to enhance services and easiness of administration.

Results of the study reveal that the impact of churn rate risks is immense and therefore, it is of great importance the improvement efforts jack up performance of Bank Shari’a Mandiri in particular.

3. Interpretation of research results

From the results of the above factor analyses of customers’ preferences and impact-probability matrix, the following table is produced:

<table>
<thead>
<tr>
<th>No.</th>
<th>Results of factor analyses</th>
<th>Results of impact-probability matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Factor of facilities</td>
<td>Profile-sharing system</td>
</tr>
<tr>
<td>2.</td>
<td>Factor of leadership</td>
<td>Simple administration</td>
</tr>
<tr>
<td>3.</td>
<td>Factor of shari’a</td>
<td>Factor of Leadership</td>
</tr>
</tbody>
</table>

Table 6. Comparison of results of factor analyses and impact-probability matrix
Conclusions

Churn rate risk is part of the strategic risks caused by the promulgation and implementation of inappropriate banking strategies, inappropriate business decision making or lack of bank responsiveness to external changes.

Based on analyses of customers’ preferences towards BSM Bandung in general, there are three factors influencing financing customers’ preferences for choosing the Bank Shari’a Mandiri Bandung, namely: supporting facilities, leadership, and sharia.

The result from the impact-probability matrix analyses, there are three attributes with high probability values, namely: profit-sharing system, administration-easiness or simplicity, and leadership.

Risk analyses from the customers of BSM Bandung indicate that the churn rate risks have medium to high probability, which will have great impacts on performance of BSM Bandung and therefore, substantial efforts should be carried out to minimize the risks.

References


