

# Antecedents of SMEs' satisfaction and loyalty towards Islamic microfinance

Loyalty toward Islamic microfinance

## Evidence from Central Java, Indonesia

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### Abstract

**Purpose** – The purpose of this paper is to examine factors influencing the level of satisfaction of Islamic microfinance customers and their loyalty toward their patronized institution in Central Java, Indonesia.

**Design/methodology/approach** – The target population is all customers of Islamic microfinance institutions in Central Java, Indonesia. A sample of 300 respondents is selected for this study using purposive sampling and only 246 data are used in the analysis. The data are then analyzed using structural equation model with cost of loan, risk of loan, loan repayment, family welfare and *Shariah* issues as exogenous variables and satisfaction and loyalty as endogenous variables tested in the model.

**Findings** – The findings have shown that there is a significant effect of cost of loan, risk of loan and loan repayment upon the customers' satisfaction and from the customers' satisfaction toward the customers' loyalty. The *Shariah* issues and family welfare were statistically insignificant to predict the customers' satisfaction, which imply a big homework of Islamic finance academics and practitioners in Indonesia to educate people about Islamic finance and to show the real positive impact of Islamic finance models toward poverty.

**Originality/value** – Central Java is the province with a large number of SME and microfinance institutions, both conventional and Islamic, in Indonesia. This study provides a good insight for researchers seeking updated information about microfinance in Indonesia.

**Keywords** Indonesia, Customer satisfaction, Customer loyalty, Islamic microfinance, Baitul maal wat-Tamwil, Loan repayment

**Paper type** Research paper

### 1. Introduction

Islamic microfinance has gained popularity in many Muslim majority countries since early 1990s, especially in Indonesia. The Islamic microfinance institution (IMFI) in Indonesia, which was established in 1990 and named *Baitul Maal wat-Tamwil* (BMT), is an important new source for the establishment of microcredit institutions in the country (Rokhman, 2013; Fianto *et al.*, 2018). Currently, in Central Java province alone, where the data for this research were obtained, more than 515 IMFIs were established and operate side-by-side with conventional microfinance institutions and rural banks.

However, the development of BMT today is no longer unique because some cooperatives are also offering similar services. As a result, the performance of BMTs is affected by tight competition leading to customers' switching across IMFIs. Thus, BMTs are encouraged to pay their attention to understand their customers' preferences in order to survive in the



current competitive environment. Moreover, with the existence of rural banks offering similar products and services, the competition shifted to a higher level and service quality will be the final judgment for customers to make decision whether they should remain with the current IMFI or move to other financial institutions offering microfinance services for more satisfaction (Khan and Akhter, 2017).

Over the years, research on microfinance has mostly concentrated on three key areas i.e. outreach to the poor, sustainability of the institution, and impact among its clients (Rokhman, 2013; ZahidMahmood *et al.*, 2017). Studies conducted in the area of IMFI clients' satisfaction, especially in Indonesia, are still limited. Therefore, this paper is aimed at investigating factors influencing customer's satisfaction upon the performance of IMFIs in Indonesia, particularly in Central Java Province. In addition, the study also tested the impact of microfinance customer satisfaction upon their loyalty toward the institution.

The rest of this paper is structured as follows. Section 2 provides the review of existing literature on the antecedents of customer satisfaction and customer loyalty, and the application of those variables in the area of microfinance or microcredit. Section 3 describes the data and methods used for the analysis while Section 4 discusses the findings and the managerial implications from it. Lastly, Section 5 summarizes and concludes the paper.

## 2. Literature review

### 2.1 Cost of loan, risk of loan and loan repayment

In general, the microfinance institution has to cover three types of cost when it deals with microfinancing, which are as follows:

- (1) cost of loan;
- (2) risk of loan or cost of loan defaults; and
- (3) transaction or operational cost.

The cost of loan or the cost of fund is usually based on the reasonable rates from international markets where the institution access its capital. For example, Al-Zoghbi and Alvarez (2015) records that Bank Al-Baraka in Algeria had been using LIBOR + 3 per cent as the cost of funds for the Musharaka products for their micro-*Shariah* business unit.

In a recent study, Salifu *et al.* (2018) examines the determinants of loan repayment's performance of SMEs in Ghana. The study had confirmed that higher cost of loan, loan size and interest rate are significantly and negatively affecting loan repayment. In addition, the study also evidenced that the educational background of entrepreneurs has a positive and significant role upon loan repayment.

Furthermore, Nanayakkara and Stewart (2015) compare the performance of loan repayment among microfinance institutions in Indonesia and Sri Lanka. The findings provide evidence that in Indonesia, three factors significantly affecting the performance of loan repayment which are:

- time to approve and disburse the loan;
- interest repayment frequency; and
- gender.

On the other hand, significant factors affecting the performance of loan repayment in Srilanka are:

- time to approve and disburse the loan;
- loan cycle;

- gender;
- age; and
- visiting frequency by the loan officers.

As an equity financing, Islamic micro-financing is carrying a higher risk than debt-based products in conventional microfinance. Hence, the financiers are normally asking the SMEs to devote more time and effort in managing the possible financial risks of these financing. This situation is expected to give influence upon the performance of the SMEs and definitely their satisfaction toward Islamic microfinance institutions. This study refers this as the risk of loan or the cost of loan defaults.

Kingsbury (2007) mentions that in most of the cases, the total payment should be paid by the customers of microfinance institution is the principal plus the cost of financing which could be as high as 60 per cent in cumulative basis. This is certainly a high cost that leads the customers to a higher level of the risk of loan defaults. Ashraf (2010) argues that if the internal rate of return of the business run by the customers cannot reach as much as the overall cost of the financing, the risk factor would be higher and affect the loan repayment. The situation where the loan repayment is high due to the unpleasant requirement of the internal rate of return would affect the customers' psychological aspects, especially their satisfaction toward their patronized IMFI.

From the aforementioned explanation, it is expected that the cost of loan, risk of loan and loan repayment would influence the satisfaction level of the microfinance customers. Hence, the following hypotheses are proposed:

- H1.* The cost of loan influences the satisfaction of the customer toward their patronized IMFI.
- H2.* The risk of loan influences the satisfaction of the customer toward their patronized IMFI
- H3.* The loan repayment influences the satisfaction of the customer toward their patronized IMFI.

## 2.2 Family welfare

Doeringer (1980) explains that the family welfare, mainly represented by family income and living standard, is one of the most important socioeconomic factors of the microfinance institutions. Recently, Fianto, *et al.* (2018) confirms that Islamic microfinance institutions in Indonesia have significant role on rural households' income. Moreover, Rokhman (2013) also provides evidence of a positive impact of microcredit from Islamic microfinance in Indonesia on poverty alleviation, family education, improving of family standard of living and others. Microfinance institutions give financial assistance to the poor in order to help them to develop and improve their small-scale businesses. It is expected that the customers' micro-enterprises assets could gradually grow using the financial aid, and thus will enhance their income earning capacities, and improve the family welfare (Geburu and Paul, 2011). When the customers are able to improve their family welfare through the improvement of their income and living standard, the satisfaction level is also expected to improve. From the aforementioned explanation, the following hypothesis is proposed:

H4. The improvement of family welfare influences the satisfaction of the customer toward their patronized IMFI.

### 2.3 *Shariah issues*

Abduh *et al.* (2012a) and Abduh (2017) study the importance of *Shariah* issues upon the Islamic banking selection criteria in Indonesia and Russia respectively. The former evidences that *Shariah*-compliant issues, customers' awareness on the fatwa announced by National Ulama Council on the impermissibility of bank interest, safety of fund as main reason of using banking services and customers' perception on bank advertisement are the significant factors which classify the bank customers in Indonesia. Meanwhile, the latter confirms that awareness upon *Shariah*-compliant banking existence and perceptions of people perceived important are the two drivers to patronize Islamic banks. Other studies have also confirmed the importance of *Shariah* issues in influencing customers' decision to patronize Islamic financial institutions. Moreover, Usman *et al.* (2017) indicates that religiosity can be the customer's determining factor in choosing Islamic banking services in Indonesia.

According to the report from Masyita and Ahmed (2011), despite the fact that most of the IMFIs are informal institutions, the demand for IMFIs' services is very high in Muslim majority developing countries like Indonesia, Bangladesh, and Pakistan. In Indonesia, the IMFIs are part of its microfinance system since 1990, when the first Islamic cooperative of Baitul Maal wat-Tamwil (BMT) was established. It was established in order to provide Muslim SME owners with *Shariah* compliance financial products and services. Therefore, *Shariah* issues are believed to be one of the important factor to achieve satisfaction among the IMFIs' customers. The following hypothesis is proposed:

H5. *Shariah* issues influence the satisfaction of the customer toward their patronized IMFI.

### 2.4 *Customer satisfaction and customer loyalty*

Customer satisfaction is a key element for organization as it determines the level of success (Khan and Akhter, 2017). Abduh (2011) mentions that customer satisfaction is the concept to measure how the customers' expectations could meet the quality of services provided by the institution. The customer satisfaction is a measure of how organization's total product performs in relation to a set of customers' requirements (Abduh *et al.*, 2012b). Kotler and Armstrong (2010) define customer satisfaction as a person's overall feelings of pleasure or disappointment that comes about as a result of comparing a particular product's perceived performance.

Parasuraman *et al.* (1985) suggested dimensions to measure the level of satisfaction of the customers. Those dimensions are reliability, responsiveness, competence, access, courtesy, communication, credibility, security, competence, understanding the customer, and tangibles. On the other hand, Berry *et al.* (1985) and Zeithaml and Bitner (1996) indicate that the level of customer satisfaction is based on the perceived values upon 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).

Customer satisfaction is a critical concept for every institution, especially financial institutions, including IMFIs, due to its direct and significant impact upon the institutions' profit. Therefore, it is suggested that financial institutions should pay more attention on how to increase or at least to maintain the level of customer satisfaction to retain them. The best way of doing it is by improving the facilities and service quality level of their institution.

When comparing the consumers' preferences between Islamic and conventional microcredit financing products and services in Egypt, [El-Ebrashi et al. \(2018\)](#) evidences that customers tend to select the products from Islamic microcredit than conventional microcredit in the manufacturing and trade sector. However, there is no evidence of significant relationship between consumers' demography and preferences upon IMFIs' products and services.

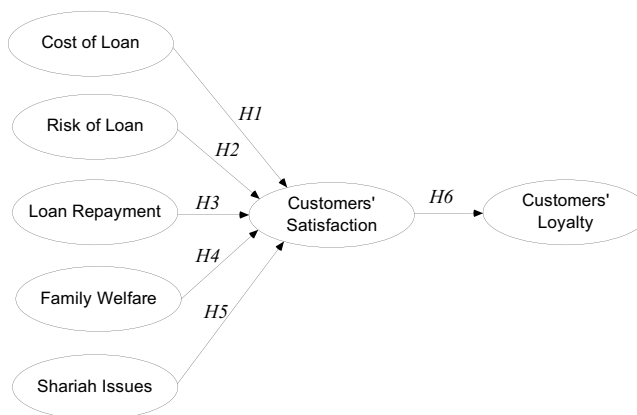
[Levesque and McDougall \(1996\)](#) posit that satisfied customer leads to the higher profit of the organization, therefore customer satisfaction becomes one of the most important elements in the successfulness of the business. In addition, the positive effect of customer satisfaction is the enhancement in customers' trust and loyalty, and eventually will improve the profit of the organization. Therefore, it is a strategic issue for the organizations to increase customer satisfaction and maintain their loyalty which indirectly will give impact upon the economic returns, i.e. profitability, market share, and return on investment ([Anderson et al., 1994](#)). From the aforementioned explanation, the following *H6* is proposed and the tested model is depicted in [Figure 1](#):

*H6*. IMFI customers' satisfaction positively affecting their loyalty toward their patronized IMFI.

### 3. Data and methods of analysis

#### 3.1 Data

The data of this study were collected from SMEs receiving financing packages from Islamic microfinance institutions in Central Java, Indonesia. Due to confidentiality issues and difficulties of having the list of SMEs as financing customers, the sampling technique used was decided to be snowball sampling. In this sampling technique, respondents were asked if



**Figure 1.**  
Theoretical model of  
the research

they can share their friends or colleague whom also a SME owner and receiving financing from any Islamic microfinance institutions. Most important thing is, willing to be the respondent.

As many as 300 questionnaires were distributed among SME owners but only 264 were returned which shows the response rate of 88 per cent. Unfortunately, a total of 18 respondents were removed from the analysis stage due to excessive missing data. Therefore, the final sample size was 246 respondents. Despite being unable to know the size of the targeted population and therefore it is uncertain to determine how representative is 246 as the sample, the 246 sample size is considered sufficient to run the structural equation model (SEM).

There are two parts of the questionnaire. First part is focused on gathering general information of the respondents which include some important demographic variables i.e. gender, age, level of education, current occupation, monthly income, duration as the customer of microfinance institution and amount of borrow. Second part of the questionnaire tries to measure the proposed latent variables in the model i.e. cost of loan, family welfare, loan repayment, *Shariah* issues, risk of loan, customer satisfaction, and customer loyalty.

### *3.2 Test of the measurement model*

The measurement of this study is a modification from items developed by [Ashraf \(2010\)](#), [Angelova and Zeikiri \(2011\)](#) and [Narayandas \(1996\)](#). The cost of loan, loan repayment, *Shariah* issues, risk of loan are measured by using 15 items modification from [Ashraf \(2010\)](#) and [Ashraf and Noor \(2010\)](#). The measurement of customer satisfaction is adapted from the four-items measures used by [Angelova and Zeikiri \(2011\)](#). Similarly, the customer loyalty variable is also measured by using four-items measures adapted from [Narayandas \(1996\)](#). All variables are measured using five-point Likert-scales where 1= strongly disagree, 2 = disagree, 3 = neither disagree nor agree, 4 = agree, and 5 = strongly agree.

This study utilizes the SEM to examine the theoretical model. This method is an extension of the general linier model which was used to test the causal effect among the main construct of the hypothesized model. Accordingly, the SEM process consists of two steps, i.e. testing the measurement model through confirmatory factor analysis and testing the structural model. [Hair et al. \(2010\)](#) recommended that the measurement model is to be evaluated before constructing the structural model.

The main purpose of a measurement model is to describe how well the observed indicators serve as measurement instrument for the latent variables ([Kline, 2010](#)). It means that the measurement model depicts the link between the latent variables and the observed measures. The test of measurement model was conducted using the confirmatory factor analysis (CFA). Assessments of goodness of fit of each measurement model were determined by several criteria i.e. Chi-square, Root Mean Square Error of Approximation (RMSEA), Tucker-Lewis Index (TLI), Goodness-of-fit Index (GFI) and Comparative Fit Index (CFI). The CFA was conducted together all variables. The cutoff point and summary of measurement analyses is shown in [Table I](#).

### *3.3 Test of the structural model*

The subsequent analysis for testing the overall model and the developed hypotheses utilizes SEM using AMOS 7.0 program. The objective of the test is to assess the goodness-of-fit between the model and the sample data. The chi-square is one of the statistic to measure the goodness-of-fit of the theoretical model. A non-significant chi-square shows support for believing that the differences of the predicted and actual matrices are non-significant and it

| Demographic variable                            | Category           | Frequency | (%) |
|-------------------------------------------------|--------------------|-----------|-----|
| Gender                                          | Male               | 120       | 46  |
|                                                 | Female             | 126       | 54  |
| Age                                             | 20 and below       | 13        | 5   |
|                                                 | 21-25              | 58        | 24  |
|                                                 | 26- 30             | 57        | 23  |
|                                                 | 31- 35             | 29        | 12  |
| Level of Education                              | 36 and above       | 89        | 36  |
|                                                 | Elementary school  | 42        | 17  |
|                                                 | Junior high school | 61        | 25  |
|                                                 | Senior high school | 99        | 40  |
| Occupation                                      | University         | 44        | 18  |
|                                                 | Farmers            | 40        | 16  |
|                                                 | Employees          | 16        | 7   |
|                                                 | Traders            | 136       | 55  |
| Monthly Income (Million IDR) US\$1 = 13.800 IDR | Students           | 41        | 17  |
|                                                 | others             | 13        | 5   |
|                                                 | 1 and less         | 128       | 52  |
|                                                 | 2- 3               | 92        | 37  |
| Microfinance's Membership                       | More than 3        | 26        | 11  |
|                                                 | 1- 2 years         | 120       | 49  |
|                                                 | 3- 5 years         | 89        | 36  |
| Amount of Borrow (Million IDR)                  | More than 5 years  | 37        | 15  |
|                                                 | Less than 1        | 61        | 25  |
|                                                 | 1- 2               | 72        | 29  |
|                                                 | 2.1- 3             | 45        | 18  |
|                                                 | 3.1-5              | 40        | 16  |
|                                                 | 5.1 and above      | 28        | 12  |

**Table I.**  
The characteristics of  
respondents

indicates an acceptable fit, and therefore a non-significant chi-square is desired (Hair *et al.*, 2010).

However, the chi-square values are sensitive to sample size. When the sample size becomes large enough, significant differences will be found for specified model. For this reason others fit indices such as GFI, TLI, NFI, CFI and RMSEA, that may minimize the effect of sample size, are utilized to assess the fit model.

## 4. Findings and discussion

### 4.1 Descriptive statistic

Table I shows the characteristics of the respondents involved in this study. Out of 246 SME owners as respondents, 120 are male and 126 are female. We did try to get balance respondents in terms of their gender and it is considered successful when we get 46 per cent of male and 54 per cent female. The distribution of the age is also interesting where we can observe that 5 per cent of the respondents are very young entrepreneurs with the age of 20 and below and 47 per cent are young entrepreneurs combining the age group of 21 to 25 and 26 to 30. The remaining 48 per cent respondents are the SME entrepreneurs with the age group between 31 to 35 and 36 and above.

The respondents' level of education shows that more than half have gone through the 12-year basic education programs required by the government of the Republic of Indonesia. It is shown in Table I that 58 per cent have completed the high school (40 per cent) and university (18 per cent). This implies that at least 58 per cent of the respondents have basic



knowledge in economics and financial management which should be enough to help them develop their businesses. However, the statistic shows that the majority (55 per cent) is full time traders and 16 per cent are full time farmers. The remaining respondents are running the enterprise in part-time basis since they are employee of private and government agencies (7 per cent), students (17 per cent) and others (5 per cent).

With regard to monthly income, the majority of respondent's income are less than IDR 1 million (52 per cent). Regarding the duration of connecting with Islamic microfinance, the majority of respondents (49 per cent) were already with Islamic microfinance between 1 and 2 years. In terms of loan category, the study analyzes the loans granted to individuals on five different scales, less than IDR 1 million, between IDR 1 to IDR 2 million, between IDR 2.1 to IDR 3 million, between IDR 3.1 to IDR 5 million and more than IDR 5 million. Around 25 per cent are less than IDR 1 million, 29 per cent respondents are between IDR 1 to IDR 2 million, 18 per cent are between IDR 2.1 million to IDR 3 million, 16 per cent are between IDR 3.1 to IDR 5 million, and 12 per cent for those with income more than IDR 5 million per month.

4.2 Structural equation model

Table II reports the goodness-of-fit indicators of the research model. The chi-square statistic shows the value of 1.921 which confirms for a good model. The other fit indices like GFI, TLI, and CFI show acceptable value of 0.940, 0.908 and 0.927 respectively and the standardized root mean square residual (RMSEA) is only 0.061 (less than 0.08). The fit indices are all within the acceptable ranges and show that a substantial amount of variance is accounted for by the model. Hence the model is a reasonable representation of the data.

Table III displays the result of the structural equations test of the composite variables which indicates that the theoretical model has achieved an acceptable fit to the data with the goodness-of-fit indices values for chi-square, GFI, TLI, CFI and RMSEA are 1.582, 0.970, 0.938, 0.959 and 0.054, respectively.

**Table II.**  
Results of  
confirmatory factor  
analysis

| Model                | $\chi^2/DF$ | GFI   | TLI   | CFI   | RMSEA |
|----------------------|-------------|-------|-------|-------|-------|
| Cutoff point         | < 3         | >0.90 | >0.90 | >0.90 | <0.08 |
| CFA of all variables | 1.921       | 0.940 | 0.908 | 0.927 | 0.061 |

| Hypothesis | Causal path | Estimate | Standard error | <i>p</i> | Remarks       |
|------------|-------------|----------|----------------|----------|---------------|
| H1         | COL → CS    | -0.574   | 0.229          | **       | Supported     |
| H2         | RL → CS     | 0.311    | 0.155          | **       | Supported     |
| H3         | LR → CS     | 0.856    | 0.204          | ***      | Supported     |
| H4         | FW → CS     | 0.105    | 0.090          | 0.242    | Not Supported |
| H5         | SI → CS     | 0.184    | 0.114          | 0.106    | Not Supported |
| H6         | CS → CL     | 0.509    | 0.082          | ***      | Supported     |

**Table III.**  
Results of structural  
model

**Notes:** \*\*\*is significant at *p* < 0.01. \*\*is significant at *p* < 0.05. COL: Cost of Loan, CS: Customer Satisfaction, FW: Family Welfare, LR: Loan Repayment, SI: Syariah Issues, RL: Risk of Loan, and CL: Customer Loyalty



*H1* investigates the effect of cost of loan upon the satisfaction level of the customers. The results from AMOS 7 show that the estimate for this path is  $-0.574$  and statistically significant at alpha 5 per cent. Therefore, there is enough evidence to say that *H1* is supported. Furthermore, *H2* tests the relationship between risk of loan and customer satisfaction. The results in Table III show that the path coefficients of 0.311 are statistically significant at alpha 5 per cent and thus the hypothesis is also supported.

*H3* examines the effect of loan repayment policy on customer satisfaction and the results evidence that the path coefficients of 0.856 are statistically significant at alpha 1 per cent. Hence, *H3* is supported. Unfortunately, *H4* and *H5* which test the relationship between customer satisfaction and family welfare and *Shariah* issues are not statistically significant. The result of the path coefficients for *H4* and *H5* are 0.105 and 0.184 respectively.

Finally, with regard to the relationship between customers satisfaction upon customers loyalty in Indonesia microfinance industry, the result shows the path coefficient is 0.509 and is statistically significant at alpha 1 per cent. Therefore, there is enough evidence to say that *H6* is supported.

#### 4.3 Discussions

The results from the SEM show that the cost of loan has a significant negative relationship with customers' satisfaction. Therefore, the lower the cost of loan the higher the satisfaction level of microfinance customers in Indonesia. This result indicates that microfinance customers are not expecting any financing which will give them more burdens on their shoulders. This is supported by another finding showing that the loan repayment positively influence the customers' satisfaction. Despite the needs for those funds, the basic emotion of human being plays a significant role on the decision of the customers of microfinance institutions to liberate themselves from any debt. Thus, the higher loan repayment will expedite the time to free themselves from debts which eventually improves the level of satisfaction of microfinance customers. These are in line with the prior findings from Ashraf (2010) and Ashraf and Noor (2010) which demonstrated the positive and significant effect of loan repayment upon microcredit customer's satisfaction. These findings suggest that microfinance institutions in Indonesia must adopt alternative approaches to price the loan or financing given to their customers. In addition, they should also provide coaching or intensive financial consultation programs for their customers in order to educate them and to gain success.

However, the results also indicate that there is not enough evidence to support family welfare and *Shariah* issues as significant factors to influence the customers' satisfaction of microfinance institutions in Indonesia. This is actually a serious issue in Islamic finance area. The former indicates that the financing provided and the programs run by the Islamic microfinance institutions in Central Java still could not improve the customers' socioeconomic status. This means no significant improvement toward their income and living standard. The latter shows that customers are not really able to distinguish between Islamic and conventional microfinance institutions, either from the contracts or the practice. Again, this is the challenge faced by Islamic finance educators and practitioners all around the world to not only focus on the surface but also go deep down to the people in many societies to educate them.

Finally, the study provides evidence that the customers' satisfaction will significantly and positively influence the customers' loyalty toward the patronized institution. Therefore, Islamic microfinance institutions in Indonesia must give serious attention on ways to improve the satisfaction of their existing customers in order to create loyalty among them.

## 5. Conclusion

This study is aimed at investigating the factors influence microfinance customers' satisfaction and loyalty in Central Java, Indonesia. Using SEM provided by AMOS program, this study found the statistically significant impact of cost of loan, loan repayment, and risk of loan upon microfinance customers' satisfaction and the significant positive effect of microfinance customers' satisfaction upon the loyalty toward their patronized Islamic microfinance institution in Central Java, Indonesia. The insignificant findings upon family welfare and *Shariah* issues indicate a big homework to be done by the Islamic finance educators and practitioners in Indonesia. Because it shows that the current Islamic microfinance programs still unable to improve the income and living standard of their customers and the customers are still unable to distinguish between conventional and Islamic microfinance products and services.

Finally, there are some aspects in this study which can be recommended for future researches. First, further study is suggested to use larger sample size and involve various industries in order to get better result. Second, an alternative model can be considered where all the exogenous variables (type of customer, place, physical aspects, product features, technological and security aspects) will be tested against the endogenous variables (customer satisfaction and customer loyalty). As strong positive relationship between customer satisfaction and customer loyalty was found, the alternative model is expected to bring interesting and useful insights to the microfinance managers. However, it can also be of interest to replicate the study in other nations.

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**Further reading**

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