

THE NEXUS OF MICROFINANCE INTERVENTION AND BORROWERS' WELLBEING: DOES RELIGION MATTER?

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Abstract

This paper examines the relationship between microfinance intervention and clients' wellbeing as well as the moderating role of religiosity in the relationship. To test the proposed hypotheses, primary data were collected from 192 clients from the Chittagong district of Bangladesh through a face-to-face interview. A quota sampling method was used to select the respondents. The questionnaire design includes a five-point Likert scale used to explore the client's perception of their improvements under the RDS and MAB microfinance program. Multiple linear regression was employed to analyze the data. The findings show that religious motivation provided by microfinance institutes accelerates the impact of financial support on borrowers' wellbeing. The study suggests that besides financial assistance, microfinance institutions, the government, and policymakers should promote religious motivation to accelerate the borrower's wellbeing.

Keywords: Microcredit, Microfinance Institutions, Borrowers' wellbeing, Religiosity, Bangladesh.

1. Introduction

Microfinance is a socio-economic development approach to improve the borrower's wellbeing. To ensure the wellbeing, microfinance provides financial services through institutions to low-income clients where the market fails to provide appropriate services (Ahmad et al., 2020). According to the Microcredit Summit (2004), microfinance is a "program that extends small loans to very poor people for self-employment projects that generate income, allowing them to take care of themselves and their families". The services provided by Microfinance Institutions (MFIs) include credit saving and insurance services. Several MFIs also provide social intermediation services such as training and education, health and skills in line with their development objectives.

According to the Credit and Development Forum (2014), there are seven hundred MFIs at present working in Bangladesh. The Rural Development Scheme (RDS) of Islami Bank Bangladesh Ltd (IBBL) is one of the prominent microfinance programs of them. Based on *Shariah* (Islamic rules and regulations) and an interest-free mode of finance, RDS works for poor people to reduce poverty and ensure the poor's wellbeing through small and micro-investments.

However, the literature shows that compared to conventional microfinance, interest-free Islamic microfinance has an extremely limited presence in Bangladesh along with the RDS program (Obaidullah and Khan, 2008, Bhuiyan et al., 2011). Until recently, only 1 million of the poor have received Islamic microfinance when conventional microfinance reaches more than 20 million. This situation leads to the question of why Islamic microfinance lag behind. Does Islamic microfinance provide credit not enough to increase the borrower's wellbeing? Therefore, in Muslim countries, most people are conservative Muslims and exhibit resistance to conventional microfinance (Hassan, 2010). In this case, it is important to see how their religious beliefs contribute to their wellbeing while using Islamic microfinance. Besides, as the foundation of Islamic microfinance based on Islamic *Shariah*, they set Islamic ethics and moral motivation as objectives in their program. Thus, these ethics and motivation may have a greater impact on wellbeing, which was not explored by previous studies. To address these questions and issues, the present study sets the objective to explore the views of borrowers towards the interest-free microfinance program in order to see their welfare improvement. Particularly, it focuses on the impact of the borrowers' welfare through their improvement in monthly income, expenditure on consumption and assets over income-generating activities. Further, in line with the aim of Islamic microfinance institutions, this study predicted that religiosity practice might moderate the relationship between microfinance financial support and the borrower's overall welfare. Therefore, the multiple linear regression method was used to assess the relationship and find a positive and significant result.

The rest of the paper is outlined as follows: section 2 described briefly previous studies and sets hypotheses linked with this study. Section 3 explains research methods, Section 4 results and discussion, and finally, Section 5 concludes.

2. Literature Review and Hypotheses

2.1 Microfinance and Borrowers' Welfare

Many poverty alleviation programs have been implemented in developing countries. Evaluations of such programs have traditionally looked at their success in increasing the income levels of participants but less at the wider goals of human wellbeing (Chowdhury and Bhuiya, 2004). Microfinance has an extensive socio-economic aspect. Improvement on consumption expenditure ability is an important part of considering the borrower's socioeconomic wellbeing. Ullah et al. (2011) and Khan and Usman (2010) found that Islamic Relief Pakistan microfinance programs have been able to increase the borrower's family expenditures. Kondo et al. (2008) conducted research on the impact of microfinance on rural households in the Philippines. That was a case study from the special evaluation study on the

effects of microfinance operations on poor rural households. The findings of this research showed that microfinance loans positively increase consumption capability. Ahamad et al. (2016) also found that microfinance loans have increased borrowers' income and consumption expenditure capacity. Nghiem (2007) examined the efficiency and effectiveness of microfinance and found that access to microfinance loans effectively increases the main consumption items, such as food, education, and entertainment.

Assets accumulation is also an important indicator for considering the wellbeing of borrowers (Ahamad et al., 2021). Asset accumulation focuses on improvements in various aspects of human wellbeing such as increasing personal and business assets etc. Murshid and Abdullah (2013) measured the effectiveness of Islamic microfinance by using the Size of the loan as the independent variable and found that JAPEM is highly effective in increasing the clients' number of business assets. On the other hand, Nader (2008) in Cairo and Saad and Duasa (2010) in Malaysia also assessed the impact on borrower's assets but found mixed results.

Regarding the socioeconomic aspect, microfinance institutions also provide some integrating services like primary education, child education, health awareness, hygiene, disease prevention and women empowerment (Khandker, 2005, Mehjabeen, 2008). In particular, in relation to the impact on children's education, Bhuyan (2013) found that 63.6% of RDS respondents and 57.6% of Grameen Bank respondents reported that they have improved in sending their children to school. In this study, Islamic microfinance is doing better than conventional microfinance. Therefore, it is mentionable that 36.4% and 42.4 respondents could not improve. However, Rahman and Khan (2013) found a positive effect on children's education. On the other hand, Indah (2013) found that in Indonesia, 67% of respondents reported that microfinance has no effect on children's education. Maldonado and Gonzalez-Vega (2008) assess the relationship between microfinance and child education in Bolivia. The authors found a negative impact of microfinance loans on children's schooling.

Regarding the impact on empowerment, microfinance empowers women by allowing them to earn income independently and contribute to their families (Cheston and Kuhn, 2002). Microfinance programs give priority to women because women's repayment rates are much higher than men and women are more concerned about the wellbeing of their families. Nader (2008) argued that microfinance plays an important role in women's empowerment and is positively linked to women's socio-economic and family wellbeing. On the other hand, Obaidullah (2008) states that the Islamic religion and culture prefers family empowerment rather than women empowerment. However, Indah (2013) conducted a comparative study between the Islamic financial cooperative (BMT) and *Shari'ahrural* bank (BPRS) on experiences, challenges, prospects, and roles in developing microenterprises in Indonesia. The author examined family empowerment with some other aspects. The result of this study did not find any improvement on family empowerment.

As for social improvement, Jahan and Rashid (2015) measured consciousness, family decision-making, communication skill, self-confidence and level of social status. The author found that

major improvement happened in family decision-making along with self-confidence and consciousness. In the case of social status, the result did not find any improvement.

Poor people have limited access to traditional credit facilities. However, it is very important to get enough money from the loan provider to run a project successfully (Rahman and Khan, 2013). Saad and Duasa (2010) and Hamdan et al. (2012) measured the performance of clients participating in the MFIs program of Amanah Ikhtiar Malaysia (AIM) in Malaysia. The authors found that a number of loan borrowings from AIM positively and significantly increased borrowers' per capita income and consumption. Rahman and Khan (2013) conducted a study to examine the effectiveness of the ASA microcredit programs. The study revealed that loan sufficiency is found to have a significant positive effect on beneficiaries' improvement. It means that those who are granted a sufficient loan are found to have a higher likelihood of improving their livelihood as compared to those who do not get sufficient ASA loans.

On the other hand, Atmadja (2016) found that financial capital may not necessarily influence the borrower's success. The author found a negative relationship between financial capital and performance though Ahamad et al. (2022) found positive impacts. Bradly et al. (2012) and Beck et al. (2015) did not find any significant influence between formal finance on performance. Though the previous study showed mixed results, Mawa (2008) mentioned that the loan size range varied depending on their needs. The researcher found in her study that a small amount of money creates many income opportunities in rural areas. Thus, it is hypnotized that:

H₁: Microfinance loan has a positive and significant effect on borrowers' wellbeing

2.2 Religiosity as Moderator

Religiosity refers to the moral and ethical development of a man. Rahman and Ahmad (2010) stated that ethically and morally good borrowers indirectly act as collateral to get back their investment. This kind of person also invests the borrowed money in the proper income-generating activities. The Islamic microfinance program has allowed clients to develop their ethics and morality. Islamic microfinance schemes have moral and ethical objectives and features that can effectively motivate clients to succeed (Rahman and Ahmad, 2010, Abdul Rahman, 2010). The Islamic microfinance program provided a better opportunity for their clients to perform their economic activities in a more organized way, helping them lead a higher quality of life and develop ethics and morality (Rahman and Ahmad, 2010). Rulindo and Pramanik (2013) advocated that the higher spiritual people are wealthier as they have greater possibilities to live over the poverty line, especially when the status is measured by household improvement as a poverty line benchmark. However, Islamic teachings and practices give values such as honesty, sincerity, discipline and hard work, resulting from worship such as *solat*, fasting etc. As one of the most important aims of Islamic microfinance institutions is to provide Islamic teaching to the borrowers, hence, religiosity may influence the borrower's overall welfare. Thus the following hypothesis is introduced for an empirical test.

H₂: The effect of Microfinance loans on borrower's wellbeing can be moderated by religiosity

3. Research Methods

3.1 Measurement

To test the stated hypotheses and to ensure the validity and reliability of the measurements, this study employed the scales constructed by authors with the help of the literature and revised them according to the study's purposes. The dependent variable for this study is the client's wellbeing. The twelve items include; buying food, clothes, medical treatment, repair & maintenance, children's education, housing condition, household appliances, household's farm, land, livestock, family empowerment, and social status adopted. All items were anchored on a five-point Likert-type scale ranging from 1 (decreased greatly) to 5 (increased greatly).

The independent variables for this study are microfinance loans. The microfinance loan variable was measured with direct measurement. The continuous and numerical values have been used to analyze the variable.

The moderating variable (or intervening variable) for this study is religiosity. The seven items used include; praying five times a day, reciting the holy Quran, fasting, maintaining hijab, involve with interest, misunderstanding with husband and invest money with honesty, which was adapted from Rahman and Ahamad (2010). All items are measured on a four-point Likert scale starting from 1 for "not at all" to 4 for "regular". Given this, the simple linear regression models used to test the proposed hypotheses and the model has given below:

$$Y_1 = \alpha + \beta_1 X_1 + u \quad (1)$$

$$Y_2 = \alpha + \beta_1 X_1 M + u \quad (2)$$

In model-1, Y_1 represents the dependent variable borrower's wellbeing, whereas X_1 denote the microfinance loan. In model-2, Y_2 also represent the dependent variable borrower's wellbeing where X_1 mean microfinance loan. Additionally, ' M ' denotes moderator variable religiosity. In both model, ' u ' represent the error term, ' α ' denote the constant and β_1 is the coefficient of the explanatory variable.

3.2 Data

NGOs, commercial banks, and some government agencies offer microfinance programs in Bangladesh. However, in terms of interest-free microfinance, Rural Development Scheme (RDS) and Muslim Aid Bangladesh (MAB) are the top two. Most of these institutes' borrowers stay in the rural area of the Chittagong district located in the southeast part of Bangladesh. Given such a backdrop, data was collected from Chittagong. Following Roscoe's (1975) rules of thumb, this study includes a sample size of 192 respondents. Respondents were selected using quota sampling in order to get information from RDS and MAB microfinance institutions. Ninety-seven respondents from RDS and ninety-five respondents from MAB were included. Data were collected through interviews. The interviews were face-to-face with beneficiaries who have been involved with RDS and MAB microfinance institute for at least 3 years and focused on improving their present status after joining this program. The questionnaire design includes a five-point Likert scale used to explore the borrowers' perception of their improvements under the RDS and MAB microfinance program.

4. Result and Discussion

A reliability test was carried out before the variables were used for further analysis. According to DeVellis (2012), ideally, Cronbach's alpha (α) coefficient of a scale should be more than 0.7. Consequently, Cronbach's alpha for the variable shown in Table 1, the values higher than 0.70. Thus, it can be decided that the measure has an unacceptable level of reliability.

Table 1: Reliability Test result

Contract	Items	Cronbach's α
Religiosity	7	.711
Borrowers wellbeing	12	.820

4.1 Relationship between Microfinance loan and Borrowers' Wellbeing

The result (Table 2) shows that microfinance loan was associated positively and significantly with clients' wellbeing. These findings are consistent with the hypothesis H1 and it predicts that the microfinance loan positively affects the client's wellbeing. Table 2 below clarifies the relationship between microfinance and borrowers' wellbeing.

Table 2: Results of regression analysis on wellbeing

Variables	Beta	T – Ratio	Sig. t
Microfinance Loan	.411	5.386	.000
R Square = 43.6%, Adjusted R Square = 41.8 %, F = 23.864, Sig F = .000			
Durbin – Watson = 1.796			
Dependent Variable: Borrowers' Wellbeing			

It appears from Table 2 above that microfinance loans have accepted significance levels with positive beta value and hence affect wellbeing. The results signify that microfinance loans had the most significant effect on wellbeing with ($\beta = .411$) at a 1% significance level (sig t. = .000). Thus, hypothesis H1 was substantiated and supported. The R-square was 43.6% which means that the variables can explain 43.6% of the variance in consumption expenditure. The VIF (1 – 10) and tolerance (0.1 – 1) fell within an acceptable range. Hence, there was no multicollinearity problem in the regression model. The F-value was (23.864) and found to be significant (Sig F = .000). The 1.796 value for Durbin – Watson shows that this model is free of autocorrelation. This concludes that the regression model used in this study is adequate, or in other words, the model is fit.

4.2 The Moderating Effects of Religiosity in the Relationship between Microfinance and Borrowers' Wellbeing

Hypothesis H_2 predicts that religiosity moderates the relationship between microfinance loans and borrowers' wellbeing as shown in Table 3 below. First, the predictor variable was entered into the equation to test this hypothesis. Secondly, the moderating variable was entered into the equation to test its isolated effect on the dependent variable. In the third step, interaction terms were introduced into the equation to test the joint effect of predictor variables and the moderator

on the dependent variable. The interaction term was calculated by multiplying predictor variables with the moderating variable.

Table 3: Results of regression analysis for the moderating effects of religiosity

Variables	Beta	T - Ratio	Sig. t
Amount of Loan * Religiosity	.590	7.090	.000
R Square = 28.6%, Adjusted R Square = 26.7 %, F = 14.888, Sig F = .000 Durbin – Watson = 1.534 Dependent Variable: Borrowers' Wellbeing			

It is evident from the results presented in above Table 3 that religiosity moderates the relationship between the microfinance loan and borrowers' wellbeing ($\beta = .590$,) which is significant at a 1 % significance level (sig t. = .000). The result supports hypothesis H_2 and explain that the relationship between the microfinance loan and borrowers wellbeing is greater when religiosity is higher. The R-square was 28.6%, meaning that the variables can explain 28.6% of the variance. The VIF (1 – 10) and tolerance (0.1 – 1) fell within an acceptable range. Hence, there was no multicollinearity problem in the regression model. The F-value was 14.888 and was significant (Sig F = .000). The 1.534 value for Durbin – Watson revealed that this model is free of autocorrelation. This concludes that the regression model used in this study is adequate, or in other words, the model is fit.

5. Conclusion

The findings of the study show that microfinance loan has the strongest effect on wellbeing. The results revealed that microfinance loans had the most significant effect on borrowers' wellbeing and had a positive relationship. This result implies that sufficient loan for investing in income-generating activities improve their wellbeing.

Religiosity was adopted as a moderating variable in the relationship between microfinance and borrowers' wellbeing. Accordingly, the study predicted that religiosity acts as a moderator that enhances the effect of microfinance loans on wellbeing. The findings of the study implied that when religiosity or the level of religiousness is higher, the impact of microfinance loans on borrowers' wellbeing is greater. Based on these findings, this study recommends that microfinance organizations, governments and policymakers should provide religious motivation to the borrowers besides other activities. Along with improving borrowers' wellbeing, this religious motive may also lower loan default rates. As a result, microfinance institutions can easily collect loan payments in the long run. Future research might extend this study by concentrating on additional factors in addition to loans that can assure the better welfare of borrowers.

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