**Understanding the Factors influencing Loan Repayment Performance of Nigerian Microfinance Banks**

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**Abstract**

This research investigated the factors affecting loan repayment rate among Microfinance Banks(MFBs) in South West Nigeria. Specifically, the effect of socio-economic factors on loan repayment rate was examined and the effect of MFBs characteristics on loan repayment performance was analysed.

Purposive sampling method was used to select 20 credit officers and 124 respondents who are customers of the four selected MFBs for more than five years. Data were obtained through well- structured questionnaires and analysis was done using descriptive statistics and regression analysis technique. Findings showed that three of the socio-economic variables which are age, educational level and average monthly income of the respondents significantly influence loan repayment rate. However, the coefficients of gender and household type, though positive did not exert significant effect on loan repayment rate. Furthermore, results revealed that MFBs characteristics in terms of loan size, interest rates, repayment mode and period have significant effect on loan repayment performance. Therefore, it is recommended that interest rates should be reduced drastically so as to reduce loan default among borrowers. Also, loan repayment period should be made longer so that borrowers would be able to use the loans judiciously in order to enhance loan repayment performance.

**Key words**: loan repayment, loan size, interest rate, household type. Microfinance banks

**1.0 Introduction**

Microfinance has been globally accepted as one of the credible tools to alleviating poverty and enhancing financial inclusion in developing nations (Chmelíková & Redlichová, 2020; Sun et al., 2020) Further, it plays an essential role in the provision of “micro” financial services to the financially excluded population, particularly the poor and the informal sector located at the Base of Pyramid (BoP) (Kasenge, 2011).Microfinance is the form of financial development that has its primary aim to alleviate the poverty of the poor who are generally un-served or offered improper financial services (CBN, 2005)

Mutambanadzo, Bhiri, & Makunike (2013) also described microfinance as the supply of financial services to an impoverished population who traditionally lack permission to financial services from conventional financial institutions. The World Bank report of 2012 asserted that more than 75% of the poor populations globally who earn less than $2 per day are unbanked or do not use a formal financial institution due to their lack of stable income and absence of collateral (Kasenge, 2011).Thus, microfinance banks (MFBs) are established to fill the gap created by the formal financial sector thereby improving the socio-economic condition of the poor income generation.

Despite the fact that MFBs are very helpful to the less privileged population, many of these institutions face challenges that affect their operations and productivity (Ousoombangi, 2018). Sustainability is one of the key factors affecting the performance of MFBs (Muhammad, 2010). Financial sustainability is a prerequisite for making microfinance services permanent as well as widely available (ICC, 2001). However, for MFBs to be financially sustainable, repayment performance cannot be overemphasized. It is the most important performance indicators of microfinance institution.Repayment performance refers to the total loans paid on time as stated in the loan agreement contract. Attaining a high rate of loan collection (repayment rate) is a necessary condition for MFBs to become self-sustainable in the long run.

High loan repayment rates benefits both MFBs and the borrowers (Godquin, 2004) Also it is argued that high repayment rates reflect the adequacy of MFBsʼ services to clients’ needs. It also helps to obtain the next higher amount of loan (Bond & Rai, 2009). Contrary to this, if there is low repayment rate, both the borrower and the MFBs will be affected. In this case the borrowers will not be able to obtain the next higher loan and the lender will also lose their customers. Thus, affecting the profitability of the MFBs and resulting in failure to sustain and maintain themselves over the period of time (Zeller & Sharma, 2000). It therefore becomes imperative to determine the factors influencing loan repayment performance of MFBs in Nigeria.

**1.1 Statement of the Problem**

MFBs as lending institutions face risky situations because repayment of loans can seldom be fully guaranteed. . Despite all the arrangements put in place to ensure the sustainability of MFBs in Nigeria, the high failure rate occasioned by loan defaults among these institutions calls for concern.. The failure of a large number of MFBs in many developing countries among others is traceable to their inability to ensure good repayment rates. Loan repayment is determined by willingness, ability and other characteristics of the borrowers; businesses characteristics and characteristics of the lending institutions including product designs, training, credit rationing and suitability of their products to borrowers. Though, several researches has been conducted on factors affecting loan repayment performance of Deposit Money Banks in Nigeria, however, researches on factors influencing loan repayment performance of MFBs is very scarce. This study therefore seeks to fill the gap by examining factors influencing loan repayment performance of MFBs in South West, Nigeria.

**1.3 Objectives of the Study**

The main objective of the study is to analyze the major factors affecting loan repayment rate among MFBs in South west in Nigeria while the specific objectives are to:

* To examine the major socio-economic factors that influence loan repayment rate in Nigeria
* To investigate the effect of MFBs characteristics on loan repayment performance

**1.4Hypotheses of the Study**

**Ho1** : Socio economic factors have no significant effect on loan repayment rate

**Ho2 :** MFBs characteristics does not significantly affect loan repayment performance of MFBs in Nigeria

**2.0 Literature Review**

**2.1 Conceptual Review**

**2.1.1 Microfinance Banks**

Microfinance is perceived as an outstanding public policy agenda that has received ample attention and success for providing financial support and services to poor people for the improvement of their livelihoods. Microfinance proposals are accepted widely and a number of reputable organisations and banks around the globe sponsored such initiatives (Banerjee & Duflo 2009). These institutions include: the United Nations, World Bank, NGOs, and several government and non-government charitable organisations. The core aim of supporting this scheme was to promote small scale investments as well as to assist low income people and communities by providing them opportunities to generate incomes (Hartarska & Nadolnyak 2008b; Imai et al. 2010). The success or failure of MFIs depends upon several factors where some institutions failed and ceased already while others are serving million of people.

**2.1.2 Microfinance Lending**

Microfinance lending programs are not identical in every country. Generally, there are two types of microfinance lending: group lending and individual lending (Lehner 2009). The fundamental means of group lending scheme are the mutual responsibility for reimbursement of microcredit. The biggest advantage of the group lending program is to motivate the members of the group to screen and monitor each other. This consequently reduces the overall cost of MFIs so that they do not need to conduct extensive screening processes at the individual level. In contrast, the major disadvantage of group lending is that some individuals may take advantage of mutual responsibility and act as free-riders. This problem can be avoided by developing a direct link between the bank and the borrower. This intensifies the flexibility of the microfinance system (Giné et al. 2006). In individual lending, there is a strong need to screen and monitor individuals and as a result the firm will face higher transaction costs. This is the reason that most of the microfinance lenders today lend through group based schemes (Hermes & Lensink 2007).

**2.2 Theoretical Framework**

**2.2.1. Signaling Theory**The earliest forerunner of the signaling theory is Thorsten Veblen. In his theory, he observed that individuals give honest or dishonest signals about themselves. When signals are dishonest, the signaler has the intention to deceive the receiver of such signals for self-gain even though such benefits may be short-lived. This theory finds relevance in the study in that banks must appreciate the fact that potential borrowers will often send signals that the lender must put into sharp consideration in view of what lies at stake in the event of default.

**2.2.2 Pricing Theory**

This theory indicates that costs of processing a loan are transferred to the borrower. Such costs include regular search costs, background check and investigation into current financial status of borrower, establishment of authenticity of collateral, and all costs of filling out application forms among others. All these costs attract a fixed-up-front fee that is factored in the interest the borrower must pay. The biggest concern that the pricing theory poses to the microfinance institutions industry is the high interests that are occasioned by very high operational costs

**2.3 Empirical Review**

The study of Roslan and Abdkarim (2009) investigated the determinants of loan repayment among microcredit borrowers in Malaysia, used probit and logit model. The results showed that the probability for loan default was influenced by the gender of the borrowers, type of business activity, amount of loan repayment period and training.

Fikirte (2011) carried out a studied on the determinants of loan repayment performance in Addis Ababa credit and saving institutions Ethiopia. The results of binary logit model revealed that age, business types (baltina& petty market, kiosk & shop, services providing, weaving & tailoring and urban agriculture), sex and business experience of the respondents were found to be significant in determined loan repayment. Mokhtar, Nartea and Gan (2012) examined the loan repayment problems among Microfinance borrower’s in Tekum and Yum institutions in Malaysia. The logit regression model results found borrower’s age, gender, business type, mode of payment and repayment amount were among factors contributed to microcredit loan repayment.

Mensah (2013) investigated the relationship between loan default and repayment schedule in Sinapi Microfinance institution in Ghana. Ordinary least square regression results indicated that there were no significant relationships between loan default and repayment schedule.

Nguta and Huka (2013) carried out a studied on factors influencing loan repayment default in Microfinance institutions of Imenti North district Kenya. Used a sample of400 respondents applied descriptive survey design. The findings revealed that there was significant relationship between the type of business, age of business, number of employees, business profit and loan repayment default.

In Nigeria, Asongo & Idama (2015) examined factors responsible for loan defaults in Nigerian MFBs and found out that ineffective supervision of loans advanced, client drop-out, staff turnover and lack of penalty on loan defaults are largely responsible for loan defaults in MFBs.

**3.0 Methodology**

The research was conducted in Oyo and Osun states, Nigeria. The states are integral part of South West, Nigeria. The choice of the two states is predicated upon their large population. Two MFBs were purposively selected from Oyo and Osun states making a total of four selected MFBs. The MFBs in Osun States are Legend MFBs and Ilobu MFBs while La Fayette MFBs and Lapo MFBs were selected from Oyo State.35 respondents who are customers of the banks for more than five years were purposively selected, making a total of 140 respondents. Moreover, 5 credit officers with more than five years banking experience were also purposively selected from each MFBs. Data were obtained from primary sources through well- structured questionnaires and distributed to the respondents; however, only 124 questionnaires were returned. Meanwhile analysis was done by using descriptive statistics and multiple regression analysis technique.

**3.1 Model Specification**

Multiple Regression analysis was used to analyse the effect of socio-economic factors on loan repayment rate

The model is explicitly specified as follows;

Y =α + β1X1+ β2 X2 + β3 X3 + ε

Where: α = intercept

Y = Loan repayment rate

The included variables X1-X3 represents age, gender, education, household type and average monthly income

β1 – β3 are the slope coefficients of the regressors, and ε represents the stochastic residual term designed to capture the effects of unspecified variables in the model which is normally distributed with a mean value of zero

**4.0 Results and Discussion**

The demographic information of the respondents are presented in Table 1 and the result indicates that 42.7 percent of the respondents were male while 57.3percent of the respondents were female. In terms of age, the majority fall between age group 35-44 years (45.2%), followed by those within age range of 45 -54 years (33.15). On education, the study shows that the majority of the respondents, 43.4% have degree obtained from different colleges and universities, followed by those having secondary school certificate (41.1%).On household type, findings revealed that 68.5% of the respondents are monogamous while 31.5 are Polygamous. Average monthly income of the respondents revealed that41.1% of the respondents earn belowN50, 000, 28.2% of the respondents reported that their income ranges fromN50, 000-N99, 000

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Freq** | **%** |  | **Freq** | **%** |
| **Gender** |  |  | **Education** |  |  |
| Male | 53 | 42.7 | None | 7 | 5.6 |
| Female | 71 | 57.3 | Primary Schl | 23 | 18.5 |
| Total | 124 | 100 | Secondary Schl | 51 | 41.1 |
| **Age** |  |  | Tertiary | 43 | 34.7 |
| Less than 25years | 6 | 4.8 | **Total** | 124 | 100 |
| 25-34 years | 13 | 10.5 | **Average monthly Income** |  |  |
| 35 – 44years | 56 | 45.2 | Below N50,000 | 51 | 41.1` |
| 45– 54 years | 41 | 33.1 | N50,000 -N99,000 | 35 | 28.2 |
| Above 55 years | 8 | 6.5 | N100,000 - N149,000 | 26 | 21 |
| Total | 124 | 100 | N150,000 above | 12 | 9.7 |
| **Household Type** |  |  | Total | 124 | 100 |
| Monogamous | 85 | 68.5 |  |  |  |
| Polygamous | 39 | 31.5 |  |  |  |
| Total | 124 | 100 |  |  |  |

Source: Author’s computation, 2021

To examine the effect of socio-economic factors on loan repayment rate, statistical analysis relied on multiple regression analysis’s p-value to demonstrate the relationship as indicated in Table 2.The model indicate that the coefficient of determination (R-square) was 0.812 meaning that at least 81.2% of all variations in the dependent variable can be explained by the independent variables while 18.8% are attributed to other factors. The value of adjusted coefficient of determination was 0.805 indicating that the all the explanatory variables in the estimated model are good predictors of the dependent variables.

The value of F-statistics (22.861) of regression model indicates that the overall model is significant (p=.000) and this means that the model has not been computed by chance, this made the result of the regression model credible. Furthermore, Durbin-Watson value of 1.500 lies within the acceptable interval of 1.5 to 2.5. The value of VIF for all the explanatory variables were found to be within the interval of 1-10 indicating that the independent variables are not highly correlated with each other.

The result shows that three out of five independent variables regressed affected loan repayment performance of the borrowers significantly in the study area. The three significant variables are age, educational level and average monthly income of the respondents. The age of the borrower is negatively and significantly related to loan repayment rate (t=-2.195 and p=.030). That is, a unit increase in age will reduce loan repayment rate in the study area. This implied that the higher the borrower’s age, the lower the probability of loan default. This result is consistent with findings of (Eyo et al., 2008; Hossain et al, 2019; Sangwan et al, 2020). This result contradict the works of Olagunju & Adeyemo (2007), Reta (2011), and Wongnaa &Awunyo-Vitor (2013) who reported that age affects loan repayment rate positively and significantly. The findings of the result may be due to the fact that older borrowers can better obey stated obligations than young people who have a high propensity to divert loan purposes to other uses.

Moreover, findings indicate that educational background of the borrower have positive and significant effect on loan repayment rate (t=4.606 and p=.000). That is, for a unit increase in educational background will improve loan repayment rate by 0.295. . This implied that a borrower will likely have greater loan repayment ability when he or she has a higher educational level and vice versa, ceteris paribus. This may be due to the understanding on the part of the educated respondents on the importance of prompt repayment of the loan obtained. This result is consistent with the findings of Sileshi et al.(2012) and Solomon (2013).who asserted that education plays crucial role in raising the level of awareness, exposure to technologies, and information to borrowers. Higher education level may, thus, signify lower repayment risk (Sangwan et al, 2020). This result is consistent with the findings by Enimu & Ohen (2017), Enimu et al. (2016), and Enimu et al. (2017). Thus, the clients with higher levels of education are more likely to have higher repayment rates (Werema & Opanga, 2016

The coefficient of average monthly income indicate that income of the borrowers exerts a positive and significant effect on loan repayment rate in the study area (t=9.738 and p=0.00). That is, a unit increase in the income of the borrowers will bring about 0.500 increase in loan repayment rate. This indicates that an increase in income increases loan repayment rate.This finding tally with reports of Amare (2005), Belay (2002) and Pasha & Negese (2014) who also reported that an increase in the income of the borrower increases the probability of being a non-defaulter.

However, the coefficients of gender and household type, though positive do not exert significant effect on loan repayment performance. This indicates that they do not affect loan repayment performance.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Model | R | R square | Adjusted R square | Standard Error | Durbin-Watson | F | Sig |
| 1 | .901 | .812 | .805 | .60753 | .500 | 22.861 | .000 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Model | Unstandardized Coefficient | | Standardized Coefficient | T | Sig | Collinearity  Statistics | |
| B | Std. Error | Beta |  |  | Tolerance | VIF |
| Constant | 2.050 | .390 |  | 52.52 | .000 |  |  |
| Gender | .028 | .113 | .017 | .252 | .802 | .952 | 1.051 |
| Age | -.135 | .061 | -.147 | 2.195 | .030\*\* | .964 | 1.037 |
| Education | .295 | .064 | .309 | 4.606 | .000\*\*\* | .957 | 1.045 |
| Household Type | .099 | .120 | .055 | .825 | .411 | .963 | 1.039 |
| Average Monthly Income | .500 | .051 | .648 | 9.738 | .000\*\*\* | .972 | 1.029 |

**\*\*\* Significant at 0.01 level; \*\* significant at 0.05**

Source: Author’s computation, 2021

The effect of MFBs characteristics on loan repayment performancewas analysed using multiple regression analysis. The result is as shown in Table 3. The multiple regression line was written as:

Loan repayment performance = 1.921 - 0.112x1 - 0.132 x2 + 0.293 x3 ++ 0.502x4

Adjusted R2 was 0.885 and this implied that 88.5 percent of changes in customers’ satisfaction were explained by the four variables considered in the model. The significance of this value was tested with the analysis of variance (ANOVA) and the calculated F- value was 28.423 which was significant at (P< 0.05). However,two predictors which are repayment mode and repayment period positively and significantly influenced loan repayment performance while loan size and interest rate exerted negative but significant effect on loan repayment performance. The coefficient of repayment mode adopted in MFBs indicates the frequency of loan repayment which may be daily, weekly, fortnightly or monthly. Findings show that repayment mode is positively related with loan repayment performance (t =4.575and p=.000). This is in line with the findings of Idowu & Salami (2010). Results further revealed that repayment period is positively and significantly related with loan repayment performance (t=9.827and p=.000). This shows that the longer the repayment period, the higher the loan repayment performance. This may be due to the fact that short repayment periods do not provide opportunity for loans to yield futuristic gains and allow the loans to be meaningfully utilized Ademola et al., (2020)

However, loan size have a negative but significant effect on loan repayment performance (t=-2.151and p=.033). This signifies that the bigger the loan size, the lower the loan repayment rate. That is, a unit changes in loan size will reduce loan repayment performance by .132in the study area. .This implies that as the amount of loan taken by the borrowers increases the probability of being non-defaulter decreases and vice versa. In other words, this means that the smaller the loan size of the borrowers, the higher the probability that they are able to repay their loans. This finding corroborate with the report of Ugbomeh et al. (2008)Findings further revealed that the coefficient of interest rate was negative but statistically significant. (t=-2.666 and p=.012) indicating that a unit increase in interest rate reduces loan repayment performance in the study area by 0.112. This means the higher the interest rate, the lower the loan repayment performance. Ademola et al., (2020) asserted that with high interest rates, borrowers find it difficult to run a profitable business and pay back the loan in time. Additionally, Okpugie (2009) also affirmed that exorbitant interest rate on credits by MFBs is the principal cause of outrageous loan default

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Model | R | R square | Adjusted R square | Standard Error | Durbin-Watson | F | Sig |
| 1 | .951 | .904 | .885 | .60671 | 1.671 | 28.423 | .000 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Model | Unstandardized Coefficient | | Standardized Coefficient | T | Sig | Collinearity  Statistics | |
| B | Std. Error | Beta |  |  | Tolerance | VIF |
| Constant | 1.921 | .357 |  | 5.382 | .000 |  |  |
| Interest rate | -.112 | .011 | .042 | .-2.666 | .012\*\* | .981 | 1.020 |
| Loan size | -.132 | .061 | .143 | -2.151 | .033\*\* | .968 | 1.033 |
| Repayment Mode | .293 | .064 | -.306 | 4.575 | .000\*\*\* | .960 | 1.042 |
| Repayment Period | .502 | .051 | .652 | 9.827 | .000\*\*\* | .976 | 1.024 |

**\*\*\* Significant at 0.01 level; \*\* significant at 0.05**

Source: Author’s computation, 2021

1. **Conclusion and Recommendation**

MFBs emerged as a major strategy to solve twin problems of poverty and unemployment which constitute a serious threat to the economic development of developing countries. It has no doubt furnished successful results in a few decades and fetched winning results with respect to poverty alleviation. Furthermore, it has been credited with improving other financial outcomes (including savings and accumulation of assets) as well as non-financial outcomes such as health, food security, nutrition, education and women empowerment, job creation and social cohesion. However, as lending institutions they face risky situations because repayment of loans by borrowers can seldom be fully guaranteed.Despite all the arrangements put in place to ensure the sustainability of MFBs in Nigeria, the high failure rate occasioned by loan defaults among these institutions calls for concern.

As a result, this research investigated the factors affecting loan repayment rate among MFBs in South West Nigeria. Specifically, the effect of socio-economic factors on loan repayment rate was examined and the effect of MFBs characteristics on loan repayment performance was analysed.Findings showed that three of the socio-economic variables which are age, educational level and average monthly income of the respondents significantly influence loan repayment rate. However, the coefficients of gender and household type, though positive did not exert significant effect on loan repayment rate.. Furthermore, results revealed that MFBs characteristics in terms of loan size, interest rates, repayment mode and period have significant effect on loan repayment performance. Therefore, it is recommended thatinterest rates should be reduced drastically so as to reduce loan default among borrowers. Also, loan repayment period should be made longer so that borrowers would be able to use the loans judiciously in order to enhance loan repayment performance

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