

**RESEARCH PAPER****Impact Assessment of Micro Finance Bank on Poverty Reduction in Kano State: A Case of Garko Local Government Area****¹Agbir Mzungweg, ²Ishaya John Mailamba and ³Titus Wuyah Yunana**

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Corresponding Author titusyunana@polac.edu.ng**ABSTRACT**

The study examined the impact of microfinance banks on poverty reduction in Kano State, with particular focus on Garko Local Government Area. Microfinance and poverty has been a critical topic in the field of academic research. In recent years, microfinance institutions have gained significant attention as an effective tool for poverty alleviation. The study used primary data generated from questionnaire administered to 290 sample size. The study uses logit regression model and examined the impact of microfinance banks on poverty reduction in Kano State. The findings show that all the variables (sex, educational level, income level, interest rate and loan size) are statistically significant in influencing poverty reduction in Garko Local Government of Kano State while age is negatively related to poverty reduction and statistically insignificant. The study therefore recommends that, microfinance banks should expand the size of their loan to businesses, which will significantly improved the lives of the poor in the area. Micro finance banks should have a moderate interest rate that will encourage the poor and businesses to loan more fund for investment, increase income and reduce poverty.

Keywords: Bank, Micro Finance, Poverty**Introduction**

Every society adopts different strategies in solving the financial problems of vulnerable people. In Nigeria, the thrift or *Esusu* system is well known. It provides instruments for small savings, revolving loans and credit facilities. However, the pioneering work of Yunus has opened a new dimension to micro credit financing. He introduced the practice that has come to be known as microfinance in which small scale loans are made available mainly to women with little or no access to traditional sources of financial capital, (Taiwo, 2012).

According to Hennessey (2006), Yunus founded the Grameen Bank in 1983, now widely popular and seen as a model being replicated by many including leaders, Nongovernmental organizations (NGOs), and advocacy groups in dozens of countries. By challenging traditional banking system about the credit worthiness of borrowers and often giving uncollateralized loans, Microfinance has unlocked the entrepreneurial ambitions of some of the world's poorest people. In addition, it is responsible for creating and sustaining new income-generating activities in poor areas traditionally dependent on subsistence farming. Over the last three decades, the popularity of microfinance has steadily increased. Many in the West saw microfinance as a pivotal innovation in the fight against poverty in the developing world.

Microfinance deals with the provision of financial services, such as loans, savings, insurance, money transfers, and payments facilities to income groups in the lower cadre, (Awojobi, 2014). It could also be used for productive purposes such as investments, additional working capital for micro enterprises. On the other hand, it could be a source of

finance for immediate family expenditure. Microfinance is an effective tool for reduction of poverty and economic empowerment for poor people (Ayoade & Agwu, 2015).

According to the World Bank statistics (2005), there is almost 3 billion of world population living under US\$2.5 per day. Within the group, around 1 billion live under \$1 per day. Government and International organizations have been cooperating to fight poverty in different parts of the world. Poverty can be absolute or relative. Absolute poverty can be reduced but hardly eradicated. In the recent years, microfinance has been recognized as an effective tool to alleviate poverty (Rubana, 2008, Daley- Harris, 2002, Lalitha, 2008).

Microfinance offers the poor the chance to access financial services such as credit and saving. Microfinance programmes in countries such as Bangladesh, Bolivia and Peru have yielded positive results on the poor, first, to smoothen their daily expenses, stabilize their income flow and in the process enhance their overall welfare (Rubana, 2008).

In Nigeria however, Acha and Acha (2012) documented that despite decades of public provision and direction of provision of microcredit, policy reorientation, and the entry of new players, the supply of microfinance in Nigeria is still inadequate in relation to demand. This suggests that there is some inefficiency in microfinance operations in Nigeria due to some institutional inadequacies such as undercapitalization, inefficient management and regulatory. In view of this, the study seeks to analyze the impact of microfinance bank on poverty reduction in Kano State, Nigeria. The main objective of this study is to assess the impact of Microfinance banks on poverty reduction in Kano State, with evidence from Garko Local Government Area (L.G.A.).

Literature Review

Concept of Microfinance

Microfinance according to Otero (1999) is the provision of financial services to low income poor and very poor self-employed people. Schreiner, Mark and Gary (2003) defined microfinance as the attempt to improve access to small deposit and small loans for poor households neglected by formal banks. Therefore microfinance involves the provision of financial services such as savings, loans and insurance to the poor people living in both urban and rural settings who are unable to obtain such services from the formal financial sector (Wrenn, 2005).

Concept of Poverty

Yahaya et al., (2011) see poverty as either absolute or relative or both. Absolute poverty being that which could be applied at all time in all societies such as the level of income necessary for bare subsistence, while relative poverty relates to the living standard of the standards that prevail elsewhere in the society in which they live.

Theoretical Literature

Theories of Poverty

Bradshaw (2006) opined that theories of poverty may originate from five sources including 1) individual deficiencies, 2) cultural belief systems that support subcultures in poverty, 3) political-economic distortions 4) geographical disparities or 5) cumulative and circumstantial origins. However, this study examines another strand of poverty classification/theories. There are two poverty and two finance theories that are germane to this study. These are power theory of poverty, and financial liberalization or repression hypothesis, financial dualism demand following and supply leading hypothesis and vicious cycle theory of poverty. In the following paragraphs, the study looks into these theories.

Empirical Literature Review

Okafor, Hillary and Ugochukwu (2016) examined microcredit and poverty reduction, a case of Nigeria in their article from the period 1999 to 2014. The Error Correction Model [ECM] analytical technique was used to estimate their data. The findings showed that microcredit has negative and non-significant impact on poverty reduction in Nigeria.

Murad and Idewele (2017) examined the impact of microfinance institution in economic growth of a country: Nigeria in focus. The study employed the multiple regression analysis given that data are cross-sectional and time series in nature for the period of 1992 to 2012. The findings of the study showed that microfinance loan have a significant positive impact on the short run economic performance in Nigeria, but do not have a significant impact on economic growth in the long run, also micro finance investment however has a significant impact on economic performance in Nigeria in the long run.

Usifoh and Ezeanyeyi, (2017) examined the impact of microfinance banks on poverty alleviation and economic growth in Nigeria from 1992-2016. The study employed the time series data generated from the Central Bank of Nigeria Statistical Bulletin and used the Augmented Dickey-Fuller Unit Root test, Johansson Co integration test and Error Correction Model (ECM) for analysis. The findings showed that the asset of microfinance has significant effect on poverty alleviation and economic growth in Nigeria

Ugochukwu and Onochie, (2017) examined the impact of micro credit on poverty reduction in Nigeria from 1999 to 2008, using the ordinary least square regression (OLS) analysis, the result showed a negative relation between micro finance lending and poverty alleviation in Nigeria

Waziri and Tafida (2018) examined the impact of informal sector on poverty reduction in Chikun Local Government Area of Kaduna State, Nigeria. The study was analyzed using the descriptive statistics and the binary logistic regression was used to test the hypotheses. The evidence from study revealed that informal sector helps significantly in poverty reduction through employment generation and improved earnings of the operators.

Mustapha, Yusuf and Abdullahi (2018), examined micro financing and rural poverty reduction a case of Rima microfinance bank in Sokoto, Nigeria. The data were analyzed using Foster, Greer and Thorbecke (FGT) poverty index. The result revealed that Rima microfinance credit facility has a positive and significant impact on the customers of the bank.

Ehiabhi, (2019) in his study analyzed the effect of microfinance institutes on poverty reduction in Nigeria. The study employed a survey technique through the administration of questionnaires to two hundred (200) micro and small-scale business enterprises in Ikpoba Okha Local Government Area of Edo State and the study adopted Pearson correlation, multivariate regression techniques, Heteroskedasticity diagnostic test and Ramsey RESET test for data analysis, the result showed that microfinance institution and poverty alleviation were positively and significantly related.

Oyerinde, Aina, Onajite and Olaniyi (2019), examined the effectiveness of Microfinance banks in the delivery of credit to Entrepreneurs for poverty reduction in Ekiti State. The descriptive survey technique was used to study 381 owners of registered small and medium business in Ekiti State and the finding of the study revealed that microfinance banks are effective in the use of their credit to improve the living standard of entrepreneurs.

Diaka and Asenge (2019), examined the effect of Microfinance banks on the performance of selected women- owned enterprises in Makurdi, Benue State, Nigeria. Simple percentages, mean and standard deviation were used for data presentation and analysis while the OLS regression analysis was used to test the hypothesis. Findings of the study revealed that microfinance loans, saving and training services have significant effect on the performance of women- owned enterprises in Benue State.

Material and Methods

Research Design

The case study design was adopted in the study. This is because this method is mostly used for intensive study of individual units. By adopting this method, a single entity or phenomenon is explored, bounded by time and activity. Since multiple sources of evidence is required for the study, case study approach appeared more appropriate to address the objectives set.

Population and Sample Size

The population of the study consists of some clients in Garko Microfinance Bank and Microcred Microfinance Bank in Garko Local Government area of Kano State. The total number of clients are 3153, however, 290 clients were selected as the sample size. The sample size for the study was arrived at using Yamane (1967) sampling model as adjusted by Smith (1983).

$$\text{Thus } n = \frac{N}{3+N(e)^2} = 289.7 \sim 290$$

$$\text{Therefore, } n = \frac{3153}{3+3153(0.05)^2} = 289.7 \sim 290$$

Where n = the desired sample size, N = the population size, 3 =adjusted constant value, e = level of precision (significant level). This is usually set at 0.05 and occasionally at 0.01.

Data and Sources

The study obtained Data obtained mainly through primary sources. The major microfinance banks variables for this study are loan size, income level, poverty rate and interest rate.

Model Specification

In order to establish factors that influence the poverty status of the parameters of the model, the study used the multivariate logistic regression model for the study. The dependent variable employed in the analysis to be reported here concerns poverty reduction measured as increased capabilities at the business and household level. At the business level, poverty reduction will be captured in terms proven ability to increase business size, business asset, develop new business and introduce new products. At the household level, poverty reduction will be captured in terms of proven ability to increase contribution to household finance, emergencies, savings, assets, health and child or children's education.

For each of these variables, respondents will be asked how much they have been able to increase their capabilities since joining the institution. Responses will be ranged from 0 to 1, where 0 will be identified as 'not at all' and 1 will be very much. These scales will be interpreted as 'no increase' and 'significant increase' in capability respectively. In

order to examine the impact of microfinance banks' loans on poverty alleviation in Kano State using Garko local government as a case study, the study specified the model relationship as:

$$\text{Log}(P/1-P) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \mu \quad (1)$$

(P/1-P) = odd ratio (the ratio of the probability that cooperatives will reduce poverty to the probability that cooperatives will not reduce poverty)

Where $P = 1$, if cooperative will reduce poverty;; $P = 0$, if cooperative failing to reduce poverty (0); β_0 is the constant; $\beta_1 - \beta_9$ = Regression coefficients of the explanatory variables.

Table 1
Variables and symbols

Variables	Description
X1-AG	AGE
X2-SX	SEX
X3-IL	INCOME LEVEL
X4-EDU	EDUCATION LEVEL
X5-IR	INTEREST RATE
X6-LS	LOAN SIZE

Poverty (0); β_0 is the constant $\beta_1 = \beta_6$ = Regression coefficient of explanatory variables

The model that was used in this study is the binary Logistic regression model. This model was used because the dependent variable is dichotomous with SIX explanatory variables. The model is also suitable for survey, experimentation and observation studies and it correctly predicts the category of outcomes for individual cases when created to include predictor variables that are useful in predicting the response variable.

Logit Regression Model

The logit regression model estimates the probability that $Y = 1$ (very much) as a function of the control and explanatory variables. The advantage of the logit model is that it ensures that the resulting predicted probability lies between 0 and 1.

$$P = \text{pr}(y=1/x) = f(x' \beta) \quad (2)$$

Where $f(x' \beta)$ is the cumulative distribution function for the logit distribution and can be expressed as:

$$f(x' \beta) = \Lambda(x' \beta) = \frac{e^{x' \beta}}{1 + e^{x' \beta}} = \frac{\exp(x' \beta)}{1 + \exp(x' \beta)} \quad (3)$$

With the ordered logit model, the sign of the coefficient shows whether the likelihood $Y = 1$ increases or decreases with an increase in x . However, it is possible to estimate the marginal effect of a unit increase in the independent regressor x_j on the probability of $y = 1$. This can be written as:

$$\frac{\partial P}{\partial x_j} = \Lambda(x' \beta) [1 - \Lambda(x' \beta)] \beta_j = \frac{e^{x' \beta}}{(1 + e^{x' \beta})^2} \beta_j \quad (4)$$

This enables us to express the percentage increases or decrease in the probability that $y=1$ associated with a unit increase in the independent variable. Hence the marginal effects are also computed in the logit results. The estimates for the marginal effects will be

interpreted as: each unit of increase in the predictor variable increases or decreases the probability that $y=1$ by the marginal effect expressed as a percent (Katchova, 2013).

The logit regression is used as a more accurate and valid estimation technique because of its ability to deal with inherent binary nature of dependent variables. These variables measures whether a service user has experienced 'somewhat' or 'very much expansion' in capabilities with each variable expressed as

Y = 0 if somewhat

1 if very much

Method of Data Analysis

The study will used the multinomial logit regression analysis to analyse the data generated from the questionnaire administered in order to evaluate the impact of microfinance banks on poverty reduction in Garko Local Government area of kano State.

Results and Discussions

Table 2
Summary of Logit Regression Result

Variable	Coefficient	Std Error	t-statistics	Prob.
C	1.62729	0.00092	-4.15361	0.0007
AG	-0.02109	0.0012	-1.6742	0.9843
SX	0.1253	0.8549	-3.21838	0.03816
IL	0.9636	0.04267	-3.328156	0.02917
EDU	0.0842	0.0925	-2.156326	0.00312
IR	0.0015	0.6738	-3.52871	0.01617
LS	0.6773	0.00432	-2.39233	0.04709
R-squared	0.686528			
Adjusted R-Squared	0.602735			
F-Statistics	56.75245			
Prob.(F-statistics)	0.000316			

Table 2 above shows the summary of multinomial logit regression results of the effect of Micro finance bank on poverty reduction in Kano State. It could be observed from the result that the estimated coefficient of age (AG) is negative and not significant. This means that age is negatively related with poverty reduction in Kano State. Increase in age (AG) by 1% will lead to decrease in poverty reduction by 0.02%. While the estimated coefficient for sex (SX), income level (IL), educational level (EDU), interest rate (IR) and loan size (LS) are positively related with poverty reduction in the state. These results mean that an increase in sex, income level, educational level, interest rate and loan size by 1 % would results to increase in poverty reduction in the state by 0.125%, 0.96%, 0.084%, 0.0015% and 0.677% respectively. The results also show that all the variables are statistically significant in explaining. The adjusted R-squared of 0.6 means that, about 60% variation in poverty reduction in the state are explained by all the explanatory variables while the remaining 40% are captured outside the model. The study concludes that micro fiancé banks play a significant role in reducing poverty in kano state. The findings are in line with the study of Ehiabhi, (2019)

Conclusion

Loans from microfinance banks in Nigeria have a significant positive impact on poverty reduction in Nigeria. Poverty decreases significantly as a result of loans given out by microfinance banks in Nigeria. This conforms to the findings of Ehiabhi (2019) which states that access to microfinance banks leads poor people to access various facilities of microfinance banks which also leads to a decrease in poverty by the findings of the study. The study examined the impact of micro finance bank on poverty reduction in Kano State with focus on Garko Local Government Area. The findings revealed that access to microfinance facilitates such as the loan size, low interest rate contributing to poverty reduction in the study area. The findings also indicate that income level and educational level contributing in the reduction of poverty in the state. Age has been discovered to have no significant contribution in poverty reduction in the state. By promoting financial inclusion through loan and low interest rate, microfinance banks enable the citizens to engage in productive economic activities, breaking the cycle of poverty.

Recommendations

Based on the findings from the study, the study therefore recommends that Microfinance banks should collaborate with relevant stakeholders, including government agencies and non-profit organizations, to develop and implement educational initiatives, increase the size of loan giving to business entrepreneurs, and lower the borrowing rate of interest. Microfinance banks, in collaboration with regulatory bodies and research institutions, should regularly evaluate the socio-economic outcomes of their interventions. This includes tracking changes in income levels, entrepreneurial success, and overall well-being of clients.

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