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The Role of Microfinance in Poverty Alleviation: Empirical Evidence from North Central Nigeria

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Abstract

Despite the success of microfinance in including the poor people in the financial sector, critics claim that this anti-poverty tool lacks enough evidence to prove its positive impact on reducing poverty levels. Hence, this study sought to examine the effect of microfinance on poverty alleviation in North central Nigeria, most especially the poor women, and investigate the extent to which microfinance alleviate poverty. Quantitative data were collected from a sample of 100 households through structured close-ended questionnaire interview. Data analysis was conducted using Probit regression model. This study found out that credit and loan cycle significantly and positively affects poverty alleviation. Whereas occupation and village type were discovered to be significant and negatively affect poverty alleviation. Meanwhile, age, family size and educational background are insignificant in poverty alleviation. The study recommended that government should create avenue for the literacy and educational level of the women to be improved generally. Moreover, government and microfinance institutions should devise ways of increasing the size of the loans of women beneficiaries with good credit history. This will encourage the women to work hard in their business to earn more income.

Keywords:
Microfinance, Poverty alleviation, Nigeria, Socioeconomic factors, Tobit regression

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Background to the Study

In Nigeria, people are predominantly confined in the fierce or ferocious cycle of poverty. Small earnings or income gave way to small savings because of the huge amount of income spent in expenses on consumption. Thus, provision of micro-credit is essential and important to set the poor people free from the confines of poverty. Thus, in order to give prominence or importance to reduction/eradication of hunger and poverty, the Nigerian government has initiated a number of programs aimed at providing financial services to support the poor households, via credit programs. One of the notable programs that the government used to eradicate poverty is micro-credit provision. This is done through programs initiated at various times like Nigerian Agricultural Cooperative Bank now Bank of Agriculture, the Community Banks of Nigeria, the Peoples Bank, Family Economic and Advancement Program, Better Life Program for Rural Women, Family Support Program, National Directorate of Employment and Microfinance Banks. Presently, the Central Bank of Nigeria under the microfinance policy, regulatory and supervisory role for Nigeria sets as its target; to give services to low income earners and the poor groups, raise the microfinance share of the economy to 20% from 0.9% by the year 2020, raise the share of micro-credit to Gross Domestic Product (GDP) to 5% from 0.2% by the year 2020.Increase and enhance access to funds for women by 5% yearly, encourage local and state government to participate fully in the business of micro-financing by the year 2015 (Onoja & Emodi, 2012).

Microfinance is seen as the provision of small scale financial services to low income or unbanked people (Hartarska, 2005). It is about provision of a broad range of financial services such as deposits, loans, payment services, money transfers and insurance to the poor and low income households and micro-enterprises (Mwenda & Muuka, 2004; ADB, 2000). By implication, the objective of micro financing is to address the financial needs of businesses that have no access to capital market and reduce poverty. Hence, government world over (South Africa, China, Japan, and USA) launched various micro finance programmes in meeting up with these objectives. The initial success of microfinance programmes in the 1970s in most parts of the world led pioneers to think that many essential problems of the poor might be resolved by access to credit (Karim, 2008).

Micro-credit has been used severally for poverty eradication. Thus, micro-credit can be defined as the provision of small loans, money transfer and insurance to the poor (Zafar, Afzal & Khan, 2009). While, Asian Development Bank (2000) opined that microfinance is the provision of various services like money transfer, credit or loan, savings and insurance to the households with small or low income. The definition of low income can be determined differently on the basis of the area or country the study is being undertaken. Therefore micro-credit is conceded to the poor households so that they can carry out productive activities to generate income. But the question remains how effective is micro-credit in alleviating poverty in North- Central Nigeria. Many of these programmes failed to achieve the objectives for which they were established and were scrapped. The most recent failure is that of community banks in meeting up with the micro financing objectives of government (Acha, 2012).In view of this, the Federal Government of Nigeria through the Central Bank of Nigeria (CBN) abolished the community banking system, replacing it with micro finance institutions. They were licensed to begin operations in 2007 and existing community banks and NGO microfinance institutions that met the conditions spelt out by CBN for licencing were allowed to transmute into microfinance banks (Acha, 2012). Specifically, CBN emphasized the need for the MFIs to reach out to the poor, attain financial sustainability and impact quality of life (Ogunleye & Akanbi, 2014)

Following the launching of the Microfinance Policy Regulatory and Supervisory Framework for Nigeria in 2005, more than eight hundred and sixty six microfinance banks were licensed to operate by the Central Bank of Nigeria (CBN, 2005). However, since the license of such MFIs in 2005, a number of them are no longer operating. One of the key factors identified by scholars (NDIC, 2011; Ovia, 2007)as responsible for their failure is financial sustainability. Several studies have applied or used micro-credit program as a medium or channel for the provision of credit as a tool for poverty eradication on the households. However, there are conflicting views or opinions about the effect of micro-credit on poverty reduction. Studies (e.g. Boateng, Boateng & Bampoe, 2015;Thanh, Phu & Hoang, 2015)discovered a significant effect of micro-credit on household poverty reduction. On the order hand, some authors opined that there is no significant effect of micro-credit on household poverty reduction (e.g. Al-mamun, Hassan & Rana, 2013;Karlan&Zinman, 2010). These mixed results give room for more studies. Therefore, the goal of this study is to investigate the effect of micro-finance in poverty reduction in this study area in Nigeria. The significant effect is going to be assessed in comparison between the micro-credit borrower and non-borrowers. This study will add to the literature since not much has been done to study the effect of micro-credit on poverty eradication in the area of the study. In addition, the study gives some policy implications to the stakeholders. Lastly, this study is classified in five sections namely; introduction, literature review, methodology, results and discussion and conclusion.

Literature Review

Conceptual Framework

Concept of Micro-finance

Micro-finance came into being as an economic development tool. The means of financing is intended to benefit those at the bottom of the pyramid or low income earners (poor) who are not credit worthy to access loans in the commercial banks. The commercial banks refused doing business with the poor because of the associated costs and risks (non-availability of collaterals) involved which is said to be very high. However, micro-credit has become an alternative source of finance for the poor in Nigeria and other developing nations.

Therefore, micro-credit can be referred to as the provision of credit, savings and other financial services to the poor who do not have the needed security to obtain such services in commercial banks (Kasali, Ahmad & Lim, 2015; Olasupo & Hamed, 2013). It is pertinent to note that Grameen Bank in Bangladesh first introduced banking for the poor and proved or demonstrated that the poor are bankable in 1974, and microfinance bank can also be profitable in the informal sector (Brandsma & Rafika, 1998). Currently, over 7,000 of microfinance institutions are found all over the globe. Providing micro-credit to more than 80 million poor people in the world mostly women (Olasupo & Hamed, 2013). In Nigeria, 160 registered microfinance institution were identified in 2001, and the figure increased to 700 in 2008 (Olusopo & Hamed, 2013), presently, the country has over 724 microfinance institutions.

Financial Sustainability of Microfinance Institutions

Financial sustainability of microfinance institutions is probably the key dimension of microfinance sustainability. It refers to the ability of MFIs to cover all its costs from its own generated income from operations (Thapa, Chalmers, Taylor & Conroy, 1992) without depending on external support or subsidy. Dunford (2003) also defines financial sustainability as the ability to keep ongoing towards microfinance objective without continued donor support. These definitions centre on one point, that is, the ability to depend on self-operation. The definitions also imply the possibility of making profit out of the microfinance operations.

Financial sustainability can be measured in two stages namely operational sustainability and financial self-sufficiency. According to Meyer (2002) operational sustainability refers to the ability of the MFI to cover its operational costs from it so perating income regardless of whether it is subsidized or not. On the other hand, MFIs are financially self- sufficient when they are able to cover from their own generated income, both operating and financing costs and other forms of subsidy valued at market prices. The above definitions of financial sustainability imply that a loss making MFI (MFI with poor financial performance) will not be classified as financially sustainable. Again a profit making MFI, whose profitability is determined after covering some of the operating costs by subsidized resources or funds, will also not be considered as financially sustainable.

The Nigerian Microfinance

Microfinance is often advocated as a solution to multiple social problems in Nigeria. Poor persons with access to credit can make investments in enterprises that could bring them out of poverty. By the understanding of the level of poverty in Nigeria, most especially the North Central geo- political zone, Government came up with several micro-credit programs to alleviate poverty. These include the Agricultural Development Programs (ADPs), National Directorate of Employment (NDE), Better Life for Rural Dwellers (Later named Family Support Programme), the Directorate of Food, Roads and Rural Infrastructure (DFRRI), which were pursued during 1986 to 1999. Other institutions that have also attempted purveying micro-credit were the rural banking scheme (1977-1990); People's Bank (1987-1990); Community Bank (1990-2007). It would be good to note that, according to the Microfinance Policy Framework that was launched in 2005, the erstwhile community banks that met the requirement of increasing their capital base to N20 million by the end of the year 2007, were converted into microfinance banks.

Although all the programmes were directed at improving the productive base for sustainable growth, most of the efforts at purveying micro credit to alleviate poverty were largely irrelevant, urban-structured from the standpoint of the realities of (who is the poor?)- understanding the poor (Akanji, 2006). There are basically four formal and five informal models of purveying microcredit to the target group. The most successful had been the informal model because in Nigeria and several developing economies where poverty is high, some individuals, households and regions remain isolated from markets and from mechanisms for borrowing and lending or insuring against risk (Aryeety, 2005). Consequently, informal lenders tend to target the poor (including women), although not always successful; attempts by better financed innovative schemes to target the same poor people have not been more successful (Akanji, 2006). The issue there is no longer a simple one of targeting or not targeting, but of how to equip institutions that can reach the poor (that is, informal lenders) to extend their reach.

Most of the formal institutions that give credit to the poor had not been successful. Some of the reasons adduced for their failure had been limited knowledge of the poor and no closer relationship between the formal institutions and the informal institutions. The framework for linking informal savings collectors to the formal institutions is a welcomed development. The banks' readiness to acquire more information about the informal sector and making serious efforts at strengthening group schemes encouraged the successful turnaround of micro-credit programmes in Nigeria. An example is the merger of the Nigerian Agricultural and Cooperative Bank (NACB), Peoples Bank of Nigeria and Family Economic Advancement Program (FEAP), to form Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB) in 2001.

Income in Nigeria is closely linked to social and economic status: whilst the upper and middle classes inhabit the 'formal income from their formal ventures and employment, on the other hand, the poorest and low income status are largely 'informally' employed. Low income households are not usually involved in regular income occupations and therefore wait for job creation strategies to absorb them; they 'permanently inhabit' a dependent segment of the so- called developing Nigerian economy, in which opportunities for jobs, or for independent and self-sustaining entrepreneurial capital accumulation are minimal. Though poverty reduction has long been a high priority for the Government of Nigeria, microfinance is still an experimental tool in its overall strategies. The Federal Government of Nigeria has over the years demonstrated strong commitment to the provision of financial services and economic empowerment of the poor and low income groups. The critical role of finance in the realization of the goals motivated the government, in collaboration with the Central Bank of Nigeria, to formulate the Financial System Strategy (FSS) 2020 in 2007, as part of an overall National vision, which aims to make Nigeria one of the 20 largest economies in the world by 2020.

Outreach and Financial Sustainability

Outreach is an activity of providing services to populations who might not otherwise have access to those services (Hishigsurem, 2004; Ganka, 2010). A key component of outreach is that the groups providing it are not stationary, but mobile; in other words they are meeting those in need of outreach services at the locations where those in need are (Mersland & Strom, 2009). In addition to delivering services, outreach has an educational role, raising the awareness of existing services (Woller & Schreiner, 2002). Outreach is often meant to fill in the gap in the services provided by mainstream (often, governmental) services, and is often carried out by non-profit, non- governmental organizations. This is a major element differentiating outreach from public relations. Compared to staff providing traditional services, Dewson, Davis and Casebourne (2006), note that outreach staff may be less qualified, but is more highly motivated. Basically there are two dimensions of outreach identified in literature: The breadth and depth of outreach. The breadth of outreach refers to the number of poor served by a microfinance institution (Hishigsurem, 2004). On the other hand, the depth of outreach refers to how much was lend to the household. Studies have established a significant positive relationship between depth of outreach and financial sustainability in India, Latin America and Ethiopia (Zerai & Rani, 2012; Paxton, 2002; Kinde, 2012; Quayes, 2012; Woller & Schreiner, 2002). However, there seem to be scanty literature on such relationship in the Nigerian context.

Other scholars have also studied the relationship between breadth of outreach and financial sustainability. For example, Kinde (2012) documented a significant positive relationship between breadth of outreach and financial sustainability. However, Ganka (2010) documented a negative relationship in the Tanzanian microfinance institutions. While Tehulu (2013) found no effect in the relationship.

The Concept of Poverty

There is no general consensus on the definition of poverty largely because the phenomenon affects many spheres of human condition such as physical, moral and psychological. Because of this, there is no one-size-fits-all definition of poverty. This is obviously because the concept is multi-dimensional in nature and can be approached from different perspectives.

Studies in Nigeria and other parts of the world have been carried out to assess the performance of micro-credit concerning their ability to eradicate poverty. However, many have shown some promising results, while, others did not. Studies that have disclosed significant and positive relationships between micro-credit and poverty eradication are; Boateng, Boateng and Bampoe (2015) who undertook a study in Ghana using survey research design, and discovered a positive relationship between micro-credit on income, household growth, education, housing, religion and social activities. Qaiser and Sohail (2013) in his comparison of the clients and non-clients, discovered that micro-credit clients were significantly efficient than the non-client in income generation. Thanh et al. (2015) considered majority ethnic group and that of the minority in Vietnam. The results showed an increase in income of the loan recipients in rural and remote areas. While, the effect on enhancement of income is influenced by household features like number of working adults, lending conditions of the loan size and experience of the households head. In addition, Imai, Arun and Annim (2010), Li, Gan& Hu, (2011), Hassan et al. (2015), Khandker (2005); Yasmine (2008), opined that micro-credit has positive effect on welfare of the poor households via increasing their income, consumption, and improving their children's education and assets.

On the contrary, some studies that have showed negative impact of micro-credit on poverty reduction (Al-mamun et al., 2013; Augsburg, De Hass, Harmgart & Meghir, 2012; Marr, 2004). Hence, credit does not always result in increased in income of the households below the poverty line (Mosley & Hulme, 1998). In conclusion, Karlan & Zinman (2010) concluded that the application of micro-credit to enhanced household consumption is not supported and credit leads to dependency of women on the micro-finance institutions. Duong and Thanh, Phu and Hoang (2015) concluded that there are different arguments over the advantages and disadvantages of micro-credit that can be summarized as follows: Advantages: Micro-credit is discovered to enhance the households' welfare as well as fight against poverty. In addition, micro-credit contributes a new channel of providing credit services to people with low income, mostly the poor. The disadvantages identified by these studies are that micro-credit is not regarded as a "one size fits all" program for the low income or poor household, micro-credit may not be fit or appropriate for the people with illness and nomads. Thus, the households participating program might not benefit from micro-credit due to misuse, and get into more or deeper debt. In some situations, other assistance programs should be considered to better support the poor households (Li, Gan & Hu., 2011).

Theoretical Framework

The Theory of Capital Investment and Financial Services

Hulme and Mosley (2011) propounded a theory that capital investment and other financial services constitute key determinants of economic growth and income improvement. According to Hulme and Mosley (2011), the proposition that capital investment and other financial services constitute key determinants of economic growth and income improvement continues to drive most development efforts including microfinance.

The Theory of Economic and Human Resources

The theory of Economic and human resource was propounded by El-solh (1999). Two theoretical propositions on the macro-level for supporting micro finance interventions were postulated. They are: The Economic and Human Resources.

Spinoff Theory of Empowerment

The spinoff theory of human empowerment was propounded by Hashemi, Schuler, Riley (1996); Chester and Kuhn (2002). The spinoff theory is about the empowerment of the poor. It states that the poor become empowered when they participate in micro finance activities. When the poor self-select themselves into groups and gain control over the means of making a living such as microfinance; they become empowered and independent. Empowerment has been particularly relevant to the economic poor and low income earners who are perceived as being marginalized in most developing countries.

Research Hypothesis
Based on the empirical studies, we set our hypothesis as thus:
H1: There is a Significant Relationship between outreach and Poverty Reduction in Nigeria

Methodology
The study adopted a survey research design. Quantitative data were collected from micro-credit beneficiaries and non-beneficiaries by the assistance of structured close-ended interview questionnaires. Samples of 100 respondents were selected using random sampling method. The sample respondents included 50 beneficiaries and 50 non-beneficiaries of micro-credit in the North Central region of Nigeria. Tobit regression model was used as the method of data analysis. The selection of this method is based on the fact that Tobit model has a strong consistency, ability to analyze small population sample and symptom normality of maximum likelihood estimator.

Results and Discussion
Model specification; the main hypothesis for the study is that depth of outreach significantly influence poverty reduction. In order to assess the relationship of depth of outreach and poverty reduction in this study area, the Tobit regression model was used. This is accordance with Qaiser and Sohail (2013). In this model, poverty reduction is considered as the dependent variable, while depth of outreach as independent. We also controlled for age, family size, education background; business type, loan cycle and village because they are likely to influence the dependent variable.

Table 1:
Results of Tobit regression on assessment of effect of micro-finance on poverty reduction

Explanatory variables	Coefficient	t-value	p-value
Depth of outreach	9.77	12.68	0.01
Age	-0.01	-0.29	0.77
Family size	0.03	0.52	0.60
Education background	0.19	1.64	0.11
Occupation	-0.01	-1.78	0.08
Loan cycle	0.22	14.28	0.01
Village type	-0.38	-9.79	0.01

Note: [xxx] = significant at 1% level; [xxx] = significant at 10% level.
Pseudo R2 = 1.45
Log likelihood = 40.76
Chi2 264.83
Degree of freedom 7
Pro>chi2 = 0.01

Table 1 disclosed the empirical results of micro-credit and poverty reduction through the Tobit regression analysis. In order to assess the effect of micro-credit on poverty alleviation, Tobit regression model was regressed on the poverty reduction, on the key variables in this study. These include depth of outreach, age, family size, education background, business type, loan cycle and village type. In this model, poverty reduction is considered as the dependent variable, while depth of outreach as independent variable. It is pertinent to know that the model with poverty eradication as a dependent variable has the goal of forecasting or projecting the explanatory variables that determine poverty reduction in the study area. In this study, micro-credit is the main variable of interest, meanwhile, specific demographic features of the respondents where included as part of the explanatory variables. These are age, family size, education background, business type, loan cycle and village type. The use of demographic features is in consonance with (for example, Duong & Thanh, 2015; Hassan, Hossain, Sultan & Ghosh, 2015; Kasali et al., 2015; Thanh et al. 2015), to explain or predict the dependent variable.

However, only four of the independent variables (credit, occupation, loan size and village type) are statistically significant and subscribe to forecast the level of poverty. The rest of the three (age, family size and education background) make insignificant contribution to the model. Therefore, credit significantly and positively forecast poverty alleviation at 1%. This result is similar to (Kasali et al., 2015; Thanh et al. 2015). Who discovered depth of outreach in terms of micro-credit given to the poor to be significant and positively affects poverty reduction. This shows that credits is significant and have the capability of reducing poverty in the study area. That is credit or loan is use for the purpose to which it is given, and borrowing households generate profit because they invest their credit on production activities that yield immediate benefits.

Loan cycle, also significantly predicts poverty reduction at 1% and the relationship is positive. This shows that the longer the beneficiary stays in micro-credit the chances of getting out of poverty becomes high. Similarly, village type significant at 1% and the effect is negative. This result is true because addition of number of village not the number of people accessing micro-credit does not led to poverty alleviation. This signifies that one additional increase in village type will decrease the level of poverty alleviation. Consequently, occupation is significant at 10%, but the direction of the relationship is negative, indicating that an addition of occupation leads to reduction of poverty level. This is true because logically, increase in the figure of occupation does not lead to poverty reduction.

Similarly, age did not contribute significantly to poverty. This shows that age is not a factor that leads to poverty reduction. Therefore, people living in poverty can be found in all the categories or age grades. Kasali et al. (2015) also discovered age not to be significant. Moreover, family size was not statistically significant. Signifying that the larger the size of the family, the difficult it becomes to reduce poverty. This is because there are too many mouths to feed. Lastly, educational background was also discovered to be insignificant in poverty alleviation. this study align with the result of Kasali et al. (2015) where the study found no significant contribution of education background to poverty alleviation of the households.

Conclusion

This study assessed poverty reduction in North Central Nigeria in line with the microfinance schemes deployed over the years. Tobit regression was used to analyze the model. Seven explanatory variables (e.g. depth of outreach of micro- credit given, age, education background, loan cycle, family size, business type and village type) were used to forecast poverty reduction. Out of the seven, four explanatory variables (micro-credit, loan cycle, occupation and village type) were discovered to be statistically significant in evaluating poverty reduction of the beneficiaries of micro-credit in Nigeria. Credit and loan cycle were found to affect poverty reduction positively. While, occupation and village type were significant but negatively affect poverty reduction. However, age, family size and education background were found to be statistically insignificant.

Recommendations

In order to make micro-credit institutions function effectively to achieve their goal of alleviating poverty, the government should create an avenue whereby the literacy and educational level of the rural poor should be improved generally by providing more emphasis to women education. The government and the micro-credit institutions should find ways to increase the size of loans to beneficiaries with good credit history. This will encourage them to work hard in their businesses to earn more income and get them out of poverty. Finally, public enlightenment campaign or programs should be initiated and carried out. This will create awareness to the "poorest of the poor" on their target about their roles and the benefits they will derive.

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