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The impact of a rural microcredit scheme on women's household vulnerability and empowerment: evidence from South West Nigeria

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In 2012, with support of the UK Department for international Development (DfID or UK Aid) and the International Development Research Centre (IDRC) of Canada, PEP launched a new program to support and build capacities in "Policy Analyses on Growth and Employment" (PAGE) in developing countries.

This brief summarizes the main features and outcomes of one of the projects supported under the 2nd round of the PAGE initiative (2014-2015).

In this study, a team of local researchers investigates the impact of a microcredit scheme on the vulnerability to poverty and the empowerment of women and their households in rural Nigeria. In collaboration with the Amoye Microfinance Bank in Ikere, southwest Nigeria, the team uses administrative data from the bank and a follow-up survey to compare the beneficiaries and the non-beneficiaries of the microcredit scheme for women. Their analysis shows that the female beneficiaries were significantly more empowered than the non-beneficiaries, and that household vulnerability was also reduced. Based on these results, and the further analysis of the microcredit scheme design, the team outlines several recommendations to improve the success of future microcredit schemes.

The promises of microcredit for poverty alleviation

Women represent approximately 50% of the Nigerian population, and yet they are considered to be one of the most vulnerable population groups as social norms and traditions render women subservient to men.

The majority (60% in 2012) of the Nigerian population lives in absolute poverty (i.e. unable to meet the daily needs of shelter, food, and clothing), with over half of the population living in rural areas where 55% live in absolute poverty. Female heads of households are the most chronically poor members of rural communities (IFAD, 2014).

Microcredit interventions are increasingly being used in developing countries to mitigate credit market failures, by providing access to credit at low interest rates to the poor and other financially excluded groups. The rapid growth in popularity of microcredit in recent years is due to the belief that removing constraints to credit access for those in poverty, particularly women, through microcredit, can not only improve the well-being of the recipient but also ultimately help them out of poverty.

Unfortunately, the initial attraction and promises of microcredit schemes have given way to controversy due to the largely inconclusive and limited evidence regarding any impact. This is because studies to date have varied according to the methodological approach, choice of datasets and choice of outcomes examined.

The importance of impact assessment

Despite microcredit increasingly reaching the poor and their families, relatively little is known about the impact on those families. Furthermore, most of the evidence relating to the impact of microcredit on vulnerability and empowerment is largely dependent on how the outcome indicators are measured and represented. It is important to consider the multidimensional nature of the outcomes when assessing the impact of microcredit. For example, household vulnerability refers to the susceptibility of the household to various shocks including social, economic, health, and environmental shocks. Female empowerment is affected on multiple dimensions including the social, economic, cultural, familial, and the political (Kulkani, 2011).

While the traditional "group-lending model" still dominates empirical literature, a government-funded individual-lending model has been growing in popularity in developing countries.

Microfinance in Nigeria

Microfinance in Nigeria has been driven largely by the Federal government's desire to improve the spread of financial services to rural areas, where there is a high proportion of the unbanked poor (Central Bank of Nigeria, 2005).

In 2011, the Central Bank of Nigeria (CBN) set aside funds to be lent to small and medium enterprises through microfinance banks, with the aim of significantly reducing the population of women excluded from the financial system by 2020. The Amoye Microfinance Bank Ltd. (AMFB) in Ikere, Ekiti State in southwest Nigeria is one of the 792 banks licensed to operate as a microfinance bank in the country, and has earned a reputation as a leading provider of credit for personal and business empowerment for the socioeconomic development of the community.

Granting women access to credit improves their social, economic and political empowerment, as well as their household well-being. Channeling microcredit to women can increase their role in household decision-making, while decreasing their own and household vulnerability. Children in the household benefit from expenditures on education, health and nutrition, while other (adult) members may be relieved of financial pressure.

This study aims to provide multidimensional empirical evidence to evaluate the impact of rural microcredit on the household vulnerability and the empowerment of the female beneficiaries. A second research question looks at the extent to which the families/members of the beneficiaries' households are also affected. The microcredit intervention examined in this study was specifically designed to reach women in the rural areas of Nigeria, who have limited access to financial services.

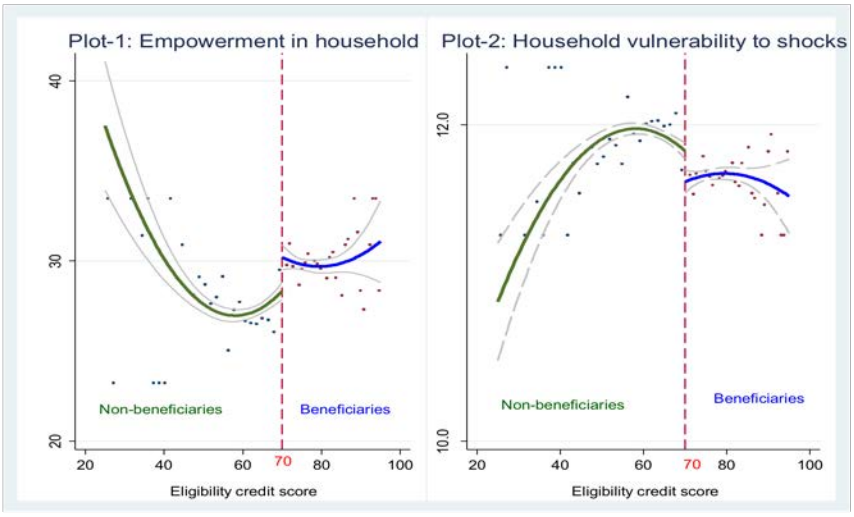
Data and methodology

This study was conducted in collaboration with the Amoye Microfinance Bank (AMFB), where 3,397 women applied for the rural microcredit scheme between March and June 2012. The data used in this study was collected from the bank's administrative data and a follow-up survey, from applicants with similar (baseline) characteristics – some of whom were deemed eligible to benefit from the program (treatment group) and some who were not (control group). After the data of non-respondents was removed, the researchers could compare the data from 1,555 women who had received the microcredit and 1,383 women who did not.

These data sources allowed the researchers to take a multidimensional approach to measuring household vulnerability and female empowerment, and the researchers used a regression discontinuity (RD) design to identify the impact of the program. Household vulnerability was measured as a composite score from five domains of coping strategies: the value of household assets, the frequency of child labour, food shortage in the household, the demand for health services, and the exposure to shocks. The lower the vulnerability score, the less vulnerable the household is. Economic empowerment was measured using the same method but taken from financial inclusion, ownership and control of productive assets, household decision-making, networking and community activities, the perception of self-confidence, and the contribution to household expenses. The higher the composite score, the more empowered the individual is.

The researchers used three groups of variables in this study: individual and household-level baseline characteristics, main outcome variables, and institutional-level variables.

Impact of microcredit on empowerment of women intra households, and on households' vulnerability to shocks



Notes : The vertical red dotted line is the eligibility credit score (70). The beneficiaries (of the microcredit program) are to the right of this line, and non-beneficiaries are to the left. The green/blue lines show the results of the analysis – the space between these two colored lines show the difference in the plot's specific outcome between the average beneficiaries and non-beneficiaries.

For example, in Plot 1, the empowerment of an average (female) beneficiary in her household is predicted to be higher than for the non-beneficiary. Meanwhile, Plot 2 shows that the average beneficiary household is predicted to be less vulnerable to shocks.

Key findings

The results show that the beneficiaries of the microcredit are significantly more empowered than the non-beneficiaries. Improvements in five measured outcome dimensions clearly demonstrate the positive impact of microcredit on female empowerment.

- The beneficiaries benefited from improved bargaining power and increased capacity for joint household decision making.
- The social capital of the beneficiaries increased due to their increased ability to network and undertake community activities, which also helped to build their self-confidence.
- Finally, increased used of financial services meant that the beneficiaries benefited from increased financial inclusion.

The results also show that the beneficiaries of the microcredit are significantly less vulnerable than non-beneficiaries.

- This result is based on the significant reductions in both the frequency of child labour and food shortage in the household.
- However, no significant difference was detected in the three remaining dimensions.

While there is mounting evidence as to the positive impact of microcredit on vulnerability, it is not yet sufficient to be considered conclusive, as results are sensitive to the outcome dimensions chosen for research.

The microcredit scheme also generated significant positive indirect effects on the household members of the beneficiaries.

- On average, household members of beneficiaries benefited in terms of per capita income, expenditure, and savings - compared to the household members of non-beneficiaries.
- Furthermore, there was a significant increase in the share of labour income as part of the total household income, an increased number of adults working and an increased number of hours worked per week in the households of the beneficiaries.

Further analysis also shows the association between the key outcomes and particular aspects of the microcredit design, including pricing, repayment method, loan duration, and the use of the loan.

- The analysis shows that a higher empowerment score is associated with the practice of bank staff visiting beneficiaries on a daily or weekly basis to collect repayment in small amounts.
- However, repayment through a cooperative association disempowered the beneficiaries as peer-pressure was reinforced.
- Beneficiaries who hold microcredit for a longer duration (in months) seem to be less vulnerable and more empowered as the possibility for longer-term investments becomes available.

- Reduced vulnerability is also associated with the use of microcredit in income-generating activities (e.g. establishing or supporting the beneficiary's own or family small business).
- However, using the microcredit to purchase assets such as land is significantly associated with reduced empowerment.

This latter result is attributed to the custom of the Ekiti people studied in the paper: whatever the wife owns belongs to the husband. An increase in assets that does not lead to a change in traditional beliefs and customs such as this cannot generate any real empowerment.

Finally, the empowerment effect of using microcredit in income generating versus non-income generating activities requires further investigation, as the results are inconclusive.

Implications for policy

Based on their findings, the researchers make the two following recommendations for policymaking:

1. Policy interventions that help to provide microcredit for the rural poor **need to take into account the multiple dimensions of poverty and vulnerability**. Any policy that leads to improvement in one dimension will not necessarily lead to improvement in the other dimensions. For example, the difference between policies for short-term and long-term improvement will need to effect change on different dimensions.
2. If microcredit is to help those in poverty reduce their vulnerability to shocks, become empowered and ultimately help themselves out of poverty, the contract negotiation between clients and **microcredit providers needs to consider how design factors** (pricing, repayment method, loan duration, etc.) **and potential use of the loan can influence the success of the scheme**. In particular, the research team recommends that supply side interventions (such as training programs on the use of the loan) should accompany the microcredit. Microcredit spent on income-generating activities will yield different effects than microcredit spent largely on non-income generating or social activities.

The rigorous empirical evidence provided in this study (and the RD design) provides an alternative but credible approach to support evidence-based policy making for microcredit interventions aimed at women in rural areas of developing countries. In the case of Nigeria, this study demonstrates the effectiveness of the rural microcredit scheme, thereby justifying the resources committed by the government.

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To find out more about the research methods and findings, read the working paper 2016-10