

doi:10.1016/j.worlddev.2010.04.006

Microfinance and Household Poverty Reduction: New Evidence from India

KATSUSHI S. IMAI

*University of Manchester, United Kingdom
Kobe University, Japan*

THANKOM ARUN

*University of Central Lancashire, United Kingdom
University of Manchester, United Kingdom*

and

SAMUEL KOBINA ANNIM*

University of Manchester, United Kingdom

Summary. — The objective of the present study is to examine whether household access to microfinance reduces poverty. Using national household data from India, treatment effects model is employed to estimate the poverty-reducing effects of Micro Finance Institutions (MFIs) loans for productive purposes, such as investment in agriculture or non-farm businesses on household poverty levels. These models take into account the endogenous binary treatment effects and sample selection bias associated with access to MFIs. Despite some limitations, such as those arising from potential unobservable important determinants of access to MFIs, significant positive effect of MFI productive loans on multidimensional welfare indicator has been confirmed. The significance of “treatment effects” coefficients has been verified by both Tobit and Propensity Score Matching (PSM) models. In addition, we found that loans for productive purposes were more important for poverty reduction in rural than in urban areas. However in urban areas, simple access to MFIs has larger average poverty-reducing effects than the access to loans from MFIs for productive purposes. This leads to exploring service delivery opportunities that provide an additional avenue to monitor the usage of loans to enhance the outreach.

© 2010 Elsevier Ltd. All rights reserved.

Key words — microfinance, poverty, evaluation, India, Propensity Score Matching

1. INTRODUCTION

The expansion of microfinance sector is based on the concept that poor households are affected by lack of access to and inadequate provision of financial services. This attempt to reduce the rate of financial exclusion among the poor was seen as an alternative solution for the failures in agricultural lending and rural credit assistance practices marred by substantial subsidies, urban biased credit allocation, higher transaction costs, high default rates, corrupt practices and misaligned incentives (Arun, Hulme, Matin, & Rutherford, 2005, chap. 9). Despite the exceptional growth of the microfinance sector during the last three decades in serving around 40 million clients, most parts of the developing world would still remain characterised by the huge demand for micro financial services. There is a projection about the potential of this market to grow to \$250–\$300 billion in the near future from the existing loan portfolio of \$17 billion in mid-2006 (Ehrbeck, 2006). The concept and practice of microfinance have changed dramatically over the last decade and the microfinance sector is increasingly adopting a financial systems approach, either by operating on commercial lines or by systematically reducing reliance on interest rate subsidies and/or aid agency financial support (Hulme & Arun, 2009, chap. 14). The financial systems approach supports the argument that microfinance institutions should aim for sustainable financial services to low income people, which may risk undermining the potential of institutional innovation for poverty reduction and social empowerment. According to Cull, Demircug-Kunt, and

Murdoh (2009), the argument that microfinance institutions should seek profits has an appealing “win-win” resonance, admitting little trade-off between social and commercial objectives.

Irrespective of the renewed emphasis on the financial systems approach, over the years, many Micro Finance Institutions (MFIs) have developed a range of services to address the requirements of the poor, such as the Income Generation for Vulnerable Group Development (IGVD) programme of BRAC, Bangladesh. Despite the widely held belief among policy makers that microfinance has a relatively small impact on poverty at macro level, some recent studies have shown its significant effect on poverty using household survey data. Using the panel data at both participant and household levels in Bangladesh, Khandker (2005) confirms that microfinance programmes have a sustained impact in reducing poverty among the participants, especially for female participants and a

* This study is based on national level household data in India provided by the EDA research team in India (www.edarural.com) who coordinated and undertook a national level microfinance impact study for the SIDBI Foundation for Micro Credit. We are grateful to Frances Sinha who allowed us to share the data and her unpublished working papers. We have also benefited from comments from Raghav Gaiha, David Hulme, and participants in seminars at the University of Manchester. The first author appreciates research and financial support from RIEB, Kobe University. The reviews expressed are those of the authors and they bear full responsibility for any deficiencies that remain. Final revision accepted: April 23, 2010.

positive spill over effect at village level. This study suggests that microfinance programmes not only help the poor or redistribute income but also contribute to national economic growth. However, some studies have shown that MFIs have not reached the poorest of the poor in Asian countries (Weiss & Montgomery, 2005) or in Bolivia (Mosley, 2001). The challenge in serving the poorest of the poor is to identify who might benefit from stand-alone financial services or from non-financial services with or without finance, before participating in market-oriented finance (Meyer, 2002). In Bangladesh, Rutherford (2003) found that despite the widespread presence of MFIs, their share of total money management activities is relatively small. This indicates the need for microfinance institutions to move away from being product-based organizations to reflect the heterogeneity of the demand structure for financial services/products by poor.

The relationship between microfinance and poverty is still in question and this paper provides some new empirical evidence on the poverty-reducing effects of MFIs. The existing studies on the impact of microfinance provide inconclusive results ranging from a substantial positive impact in Bangladesh to “zero” effect in northern Thailand (Cull et al., 2009). This study argues that the future innovations in the microfinance sector will be reflective to the fresh understandings of the financial lives of the poor households. To capture the multi-dimensional aspect of poverty, such as basic needs, wealth, type of housing, job security, sanitation and food security, the current study uses Index Based Ranking¹ (IBR) Indicators based on a national-level household survey to examine the role of microfinance in poverty reduction in India.

In India, despite recent economic growth at national level,² poverty remains a serious problem for policy-makers because the high economic growth is mainly driven by few sectors in urban areas, such as industry and service sectors.³ The incidence of poverty in India is estimated by quinquennial large sample surveys on household consumption and expenditure and, according to the Uniform Recall Period (URP) consumption distribution data, poverty stands at 28.3% in rural areas, 25.7% in urban areas and 27.5% for the country as a whole (Government of India, 2010). Although the proportion of persons below the poverty line has declined from around 36% of the population in 1993–94 to 28% in 2004–05, poverty reduction remains the country’s major challenge in the 21st century.

Until the early 1990s, financial services were provided through a variety of state sponsored institutions, which resulted in impressive achievements in expanding access to credit particularly among the rural poor (Mosley & Arun, 2003). Although many of these commercial bank branches in rural areas were unprofitable, they played a positive role in financial savings and reducing poverty. This is evident from the fact that during the period 1951–91 the financial institutions’ total share in rural household debt increased from 8.8% to 53.3% and the role of money lenders declined significantly (Basu & Srivastava, 2005; Mosley & Arun, 2003). However, despite the vast network of banking and cooperative finance institutions and strong micro components in various programmes, the performance of the formal financial sector still fails to adequately reach out to, or reflect and respond to the requirements of the poor.

In the 1990s, MFIs became increasingly important in India mainly due to their better access to local knowledge and information at community level and their use of peer group monitoring. For example, microfinance programmes involving Self-Help Groups (SHGs), which are based on the existing banking network in delivering financial services to the poor, have become increasingly important in India due to their flexible nature (Mosley & Arun, 2003). SHGs are built on the traditional

institution of Rotating Savings and Credit Associations (ROSCA) and provide access to both savings and credit for the asset-less poor. A recent study in Pune district in Maharashtra showed that while the targeting performance of microfinance through SHGs was unsatisfactory in terms of income, it was satisfactory in terms of caste (social division based on descent or birth), landlessness and illiteracy and thus facilitated the empowerment of women (Gaiha & Nandhi, 2007). This study also found that loans were used largely for children’s health and education and argued against restricting the impact assessment of microfinance to conventional economic criteria alone.

Despite MFIs’ increasing involvement in poverty reduction in India, there have been relatively few studies that empirically evaluate their impact at the national level. The present study aims to provide evidence on the relationship between role of MFIs and its impact on poverty in India using a large-scale household data set which was collected with the intention of assessing the impact of microfinance. In our study, poverty is defined by the “Indexed Based Ranking (IBR) Indicator,” a composite indicator that captures various aspects of wellbeing, including land holdings, salaried income sources, livestock, transport assets, housing, and access to sanitation facilities⁴. Our broad research question is—whether access to MFIs and loans for productive purposes reduces poverty. A simple comparison of the average of the IBR indicator for households with access to MFIs and those without access is not appropriate. Firstly, MFIs are not randomly distributed due to endogenous programme placement where MFIs target poor households or poor households tend to take loans from, or save at MFIs (EDA Rural Systems, 2005). Furthermore, there are self-selection problems associated with participation in microfinance programmes. That is, within the area where microfinance is available, individuals with similar characteristics (e.g., education or age) might have different levels of entrepreneurial spirit or ability, which may lead to different probabilities of their participating in the scheme. Hence it is necessary to take into account self-selection problems or the endogeneity associated with participation in microfinance programmes.

To address at least partly the sample selection problem, we apply treatment effects model, a version of the Heckman sample selection model (Heckman, 1979). We have carried out robustness test by using Propensity Score Matching (PSM).⁵ We also use Tobit estimation to estimate the effect of size of productive loan on poverty. Tobit model is meant to account for left censoring associated with an unobserved sample. Other robustness checks explored include (1) decomposition of the IBR index into perception of income level and food security⁶ and (2) examining whether poverty reducing effects of productive loan would be observed in the case where it is replaced by total loan. In all instances, we observe that microfinance has a significant positive effect on poverty reduction.

The treatment effects model estimates the probit model with the same specification as in the first stage of PSM. In the second stage, the IBR indicator, our proxy for poverty, is estimated by OLS while sample selection is corrected by using estimates of the probability of participation in microfinance programmes. The model is fitted by a full maximum likelihood (Maddala, 1983). The merits of the treatment effects model over PSM include that (i) the degree of sample selection bias is explicitly taken into account and (ii) the determinants of the dependent variable in the second stage are identified. However, the treatment effects model imposes strong distributional assumptions for the functions in both stages and the final results are highly sensitive to the choice of explanatory variables and the instrument. The presence of unobservable variables would also affect the results as in PSM. Given these limitations, applying

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات