



Is it true that microfinance is useless in the pursuit of poverty reduction and female empowerment? The case of Bolivia

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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).

A team of local researchers in Bolivia investigates whether, due to spillover effects, microcredit initiatives lift communities out of poverty and improve female empowerment. Using municipal-level census information and household survey data, the team developed a new method to compare municipalities with and without access to microfinance. The researchers find a significant reduction of unsatisfied basic needs poverty in municipalities with access to microfinance, as well as improved female empowerment through decision-making at the household level. Based on these results, the team makes several recommendations for the Bolivian Economic and Social Development Plan 2016-2020 and new Law of Financial Services No. 393, which aim to reduce poverty and promote Bolivia's development.

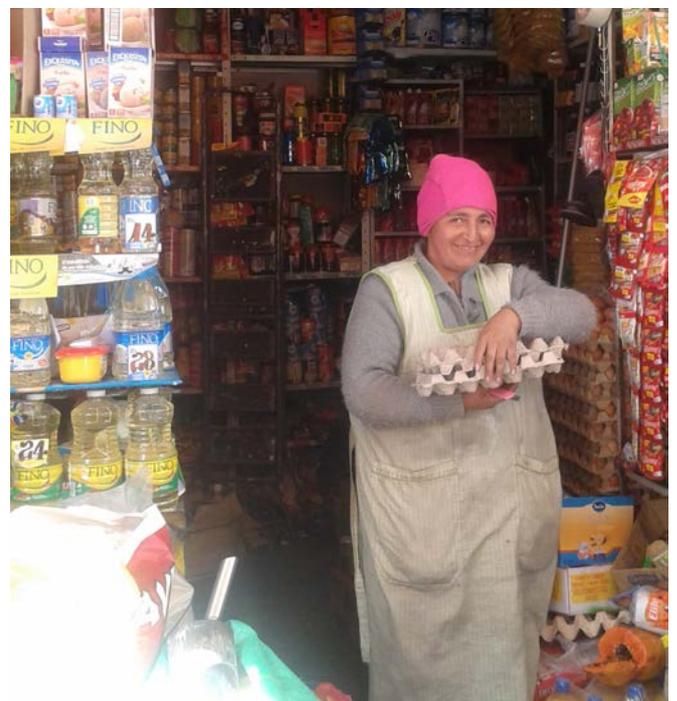
Bolivia – a model for microcredit

Microcredit has become one of the most important financial activities in Bolivia. The first small credit initiatives were carried out by NGOs in the 1980s. During the early 1990s, the NGOs transformed into regulated microfinance institutions, bringing rapid growth, high profits and attracting new players to the market.

By the end of 2015, following the remarkable growth of the sector since 1992, 34% of the credit portfolio of all financial intermediation in Bolivia was allocated through specialized microfinance entities; 59% of the loans in these entities were micro-credits.

Proponents of microfinance claim that these initiatives reduce poverty through higher employment and higher incomes, which in turn improve health and education. However, detractors question the validity of the poverty reduction claims and suggest that microfinance can even damage development, due to crowding-out effects (Bateman, 2013).

A recent study based on randomised evaluations from six countries across four continents concluded that microcredit does not lift people or communities out of poverty (no clear evidence of



substantial improvements in living standards) nor does it have a significant impact on female empowerment (Banerjee et al. 2015).

With this in mind, a team of local researchers in Bolivia set out to test whether, even if no effects from microfinance are found (in previous studies) at the individual or household level, microfinance has a positive effect at a regional level.

Regional effects arise when there is some interaction between the recipients of microfinance and the non-participant population. An example of this is women who use microcredit to start a business and employ their neighbours, thereby sharing some of their increased income with non-recipients of the microcredit (Glennerster and Takavarasha, 2013).

To further the discussion on the effects of microfinance, the team evaluated the impact of microcredit initiatives on female empowerment and poverty reduction at the municipal level in Bolivia.

Data and methodology

This study uses municipal-level census information and household survey data in a Bayesian Spatial-Propensity Score Matching algorithm to measure the regional effects of microcredit, by comparing municipalities with and without access to microfinance. This method takes into account the distance to financial institutions, which is a constraint to financial inclusion and regional growth.

The researchers match municipalities with similar characteristics and use the difference between matched municipalities to estimate the average regional effect of microfinance at a municipal level, i.e. the Spatial Average Treatment Effect (SATE). A quasi-continuous estimation of the SATE allows the researchers to measure differences to the impact on poverty, female empowerment, and labour informality related to the differing number of microfinance operations in a municipality.

Poverty was measured with the Unsatisfied Basic Needs method, taking into account variables including housing quality and access to drinking water, adequate sanitation, education and electricity. Female empowerment was defined as the proportion of female-headed households in a municipality that are not separated, divorced, or widowed. Not being registered in the pension system was used as a proxy for labour informality and was based on data from the 2012 household survey of Bolivia.

Key findings

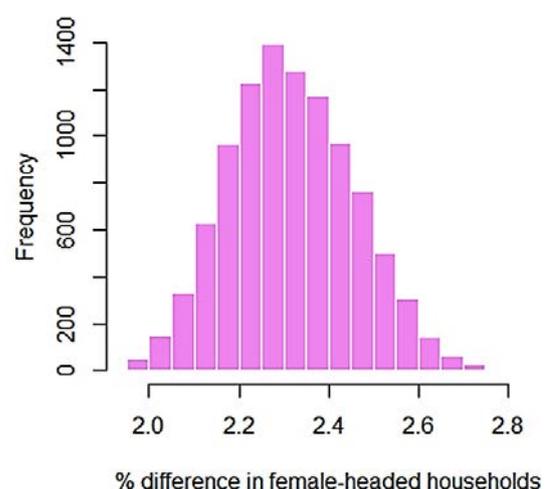
The results show that microfinance helps poverty reduction and female empowerment at the municipal level in Bolivia, but that these advantages come with the possible cost of increasing labour informality.

The team's data analysis showed that, compared to municipalities without access to microfinance:

- There is an 11% average reduction of Unsatisfied Basic Needs (UBN) poverty in municipalities with access to microfinance;
- After controlling for socio-economic similarities and the geographical distance between these municipalities, there is an increase in female empowerment through household decision-making between 2.1% and 2.6% in municipalities with access to microfinance (Figure 1);

The team also found that, as the number of regional microfinance operations in a municipality increases, the number of female-headed households tends to increase as well.

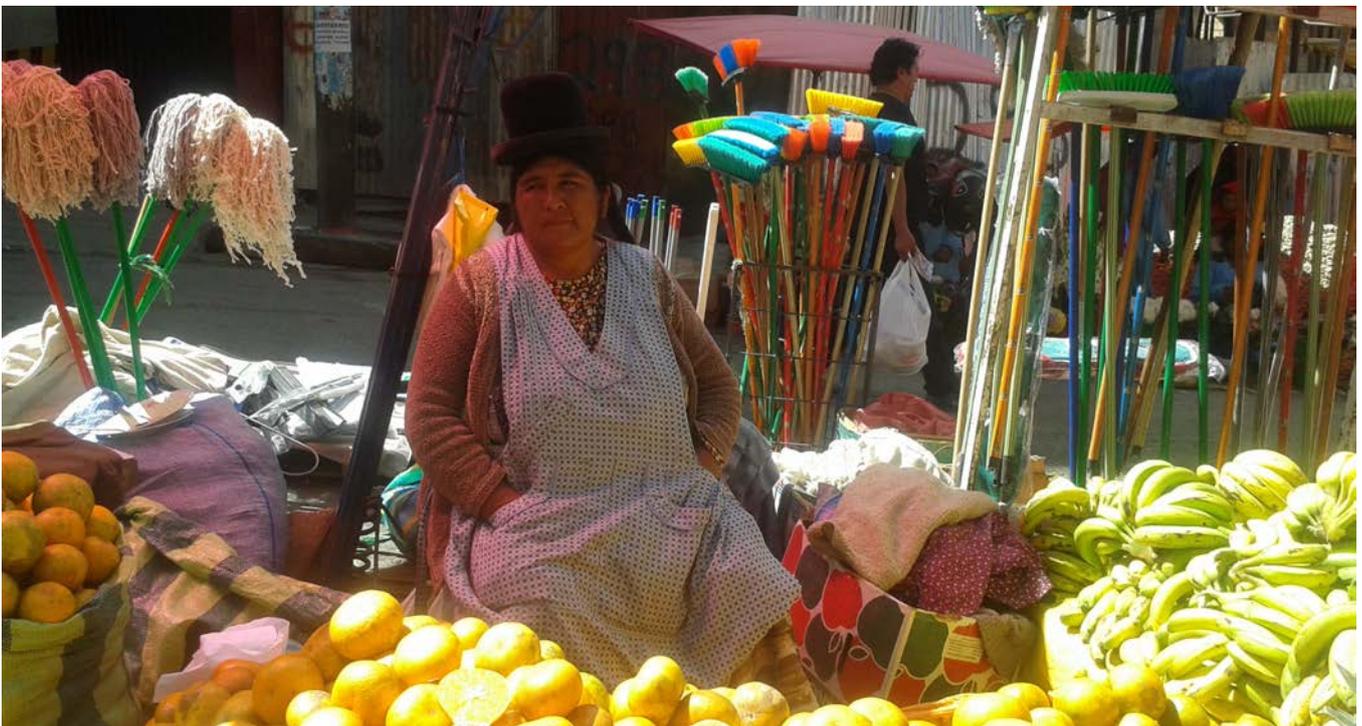
Figure 1: Regional impact of microfinance on female empowerment



Implications for policy

Considering that the objectives of the Bolivian government's Economic and Social Development Plan 2016-2020 and new Law of Financial Services No. 393 are to reduce poverty and promote the country's development through increased access to financial services at a municipal level, the research team makes the following conclusions and recommendations based on their findings:

- The strategy of the government's Economic and Social Development Plan 2016-2020 to encourage financial access and loan provision at the municipal level is well-advised, considering the potential development impact of the regional expansion of such services through spillover effects (i.e. beyond the direct effects on micro-credit beneficiaries).
- The possibility of increasing informal labour needs more research and may not be relevant compared with the primary objective of poverty reduction;
- Government banks can complement the services offered by private financial institutions through the design of products that promote regional development and through financial education for the population;
- More research is needed to properly identify the reasons for the lack of financial inclusion and the continuing existence of regions with little or no financial access.
- Assessing the effect of financial access through rigorous studies can help to fine-tune economic policy for social development, through the creation and improvement of innovative microfinance products.
- Bayesian Spatial-Propensity Score Matching can be used to measure the impact of financial policies on social indicators, within the framework of the social balance required to all financial institutions in the Article 113 of the new Law of Financial Services No. 393 in Bolivia.



This policy brief is based on the PEP project [PMMA-12583](#), carried out with scientific support from PEP and financial support from UK Aid and Canada's IDRC.

To find out more about the research methods and findings, read the [working paper 2016-06](#)