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Gender and ethnicity-related loan discrimination: A lab-in-the-field experiment in Bolivia

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Key messages

- Non-indigenous women and indigenous women of the Aymara nation are more likely to be accepted for a loan than men.
- No evidence of ethnic discrimination in accessing credit was found, but other types of loan discrimination may exist.
- As the decision to grant loans is based on the subjective judgment of loan officers, it is important to continue evaluating the existence of credit discrimination.

Credit market discrimination in Bolivia

Despite efforts by the Bolivian government to reduce discrimination and eliminate credit market barriers, women and ethnic minorities still face structural barriers to financial services.

People belonging to indigenous populations in rural areas of Bolivia are twice as likely as non-indigenous people to live in extreme poverty (World Bank, 2015). This is a significant problem for the country because more than half the population identifies as indigenous or as part of one of Bolivia's ten ethnic minority communities (2012 Bolivian Census).

Members of indigenous populations are often limited when applying for credit, particularly if their mother tongue is an indigenous language and they do not speak Spanish fluently. Furthermore, women face a structural barrier to financial access due to low literacy levels; in particular, women belonging to indigenous populations have lower education outcomes, such as literacy rate, than any other population group in the country (Lundvall et al., 2015).

World Bank data from 2014 shows that the percentages of account holders, of those with formal savings, and of those who have formal loans in Bolivia are significantly lower than the average financial inclusion rates for Latin America.

A team of local PEP researchers, therefore decided to further investigate whether gender and ethnicity could be a source of credit access discrimination in Bolivia.

While gender is recorded when applying for a loan, there are no records of ethnicity in credit scoring, as this would clearly be a discriminatory practice. As such, administrative information is not sufficient to assess the extent of discriminatory practices relating to loan provision.

Consequently, the team of PEP researchers designed a lab-in-the-field experiment to evaluate whether ethnic and gender discrimination are barriers limiting access to financial services for micro and small entrepreneurs in Bolivia.

Photo: Andrea Rojas-Hosse (2016)

Data and methodology

The research team set up a lab-in-the-field experiment in which similar credit files were delivered to 70 credit officers from six Bolivian microfinance institutions to test whether loan approval or rejection depended on the ethnicity and/or gender of the applicant. It is a lab-in-the-field experiment in that the treatment was controlled by the researchers but real credit officers decided whether to approve or reject the loan applications. Four application files – one each from an indigenous male, a non-indigenous male, an indigenous female, and a non-indigenous female – were delivered to each of the participants for loan evaluation. The information in the files was fictitious but based on real and representative credit profiles aimed to support the payment capacity of the potential borrower. The files included personal applicant data, household information, guarantor information, previous credit reports, applicant assets, and the proposed repayment plan. Pictures and indigenous-sounding names typical of the Aymara nation were used as the "treatment". Candidate names were selected based on the most frequent names from the official voter register in Bolivia. The research team used a Bayesian logistic mixed-effects model to analyze the experiment data.

Key findings

The results suggest that the combined gender and ethnic characteristics are important for credit approval, with gender being the most significant determinant.

The researchers found that:

- Non-indigenous women are twice as likely as non-indigenous men to be approved for credit.
- Indigenous women are 1.5 times more likely than non-indigenous men to receive credit.
- Indigenous and non-indigenous men have the same likelihood of receiving credit.

Photo: Andrea Rojas-Hosse (2016)

While these results were unexpected in that they differ from the international evidence, they are consistent with the microcredit lending model started by the Grameen Bank and the microfinance institutions of Bolivia that target female borrowers. If the experiment participants believed that the expected loan performance of women is better than that of men, this might explain a preference for approving female applicants for credit.

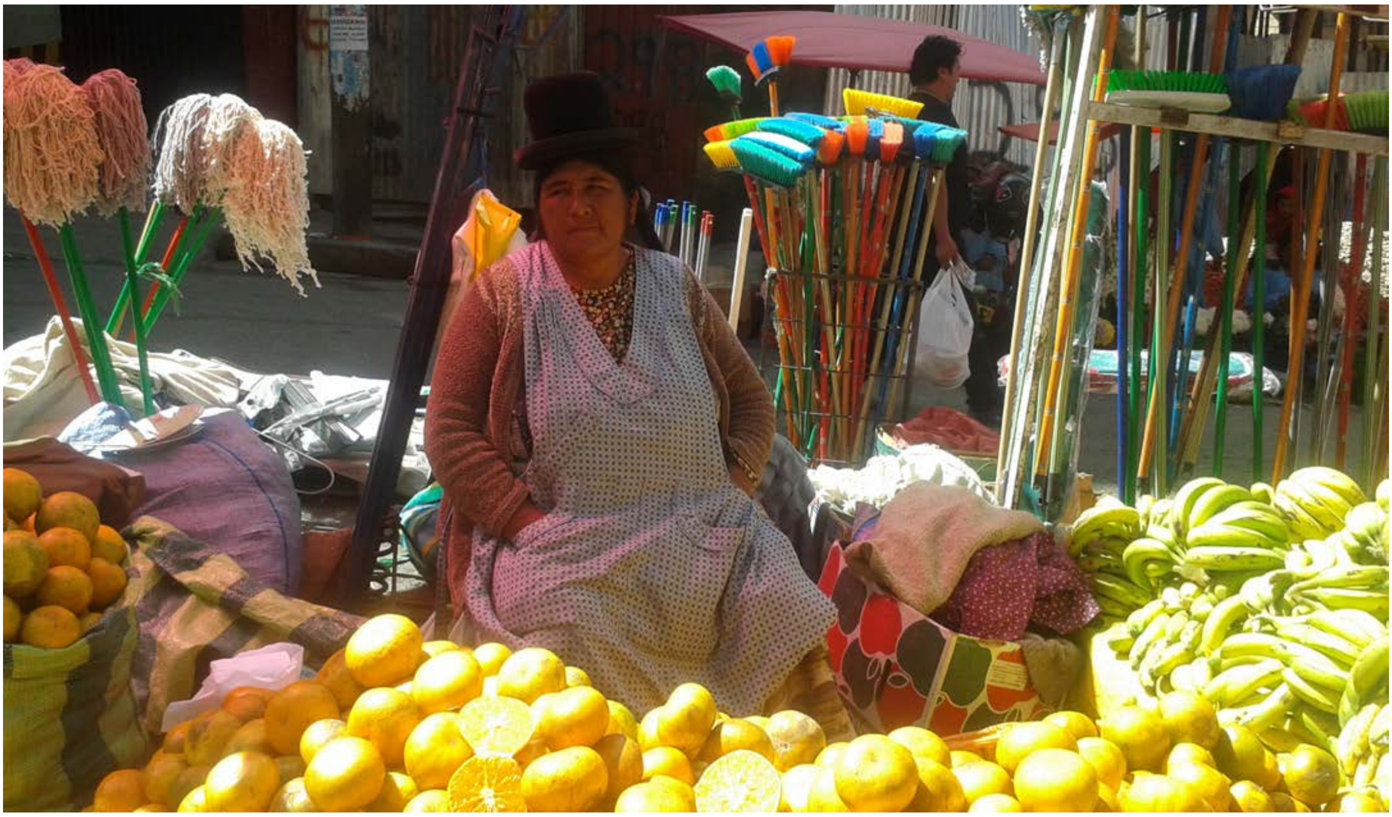
The findings also concur with those of Han (2004) who showed that taste-based discrimination arises if loans to minority borrowers have lower expected rates of default loss. As Maclean (2010) found, women in La Paz, Bolivia, use their social networks as a source of funding to repay their debts. This cultural collateral may be recognized by loan officers as an additional guarantee of loan repayment and favor approving loans to women.

In any case, **the findings show that the granting decision is based on the subjective judgment of the loan officers who draw on previous experience and non-quantifiable data.** This in turn creates room for discrimination and explains why different loan officers reached different conclusions regarding the same loan application.

Implications for policy

The experiment analyzed the potential for discrimination in terms of loan approval. Further research is therefore recommended to more fully analyze credit discrimination. Financial services discrimination may exist in ways other than loan approval or rejection, for example, further investigation is required to assess the existence of predatory lending practices in the non-regulated credit market (i.e. where indigenous and low-income borrowers are only approved for loans with high-interest rates and unfavorable terms). Additionally, geographic discrimination can arise if low-income and indigenous communities live in areas that are disproportionately lacking in financial services; this issue also requires further research.

As individuals without access to credit are denied the opportunity to become self-employed as well as the economic opportunities necessary for empowerment and breaking the cycle of inter-generational poverty, it is vital that credit discrimination evaluations continue. Furthermore, as financial access based on collective organization can reinforce women's empowerment and identity, it is particularly important that measures be taken to ensure indigenous women are offered the same opportunities as non-indigenous women with a comparable credit background.



In 2012, with support of the UK Department for international Development (DfID) **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 outcomes of PIERI-12883 supported under the 3rd round of the PAGE initiative (2015-2016). To find out more about the research methods and findings, read the PEP working paper 2016-24.