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Does Gaining Access to Credit Make Underserved Borrowers Better or Worse Off? Evidence from Paraguay

- Accessing formal credit may pose a risk of over indebtedness for some borrowers, despite the overall development benefits of financial inclusion.
- A study conducted with Banco Familiar in Paraguay analyzed the positive and negative impacts of offering a loan to underserved clients based on an alternative credit scoring approach.
- Applicants deemed eligible by the new scoring system appeared to have more interaction with the formal credit market and lower credit costs two to three years later.
- Benefits were greatest for applicants with limited credit history, who did not experience lower credit scores or higher defaults.
- However, eligible applicants with deeper credit histories experienced more defaults and lower credit scores.
- Demographic-based scoring methods may work best when restricted to applicants with limited credit experience or when combined with traditional tools to better identify individuals with a history of poor loan repayment.

CONTEXT: FINANCIAL INCLUSION

Compared to other world regions, Latin America and the Caribbean has the most conducive regulatory and policy environment for financial inclusion.[1] And the rise of digital channels continues to shift the financial inclusion landscape. However, formal financial services – from deposit and savings accounts to loans and insurance- are still out of reach for millions of people across the region. Underlining its importance, financial inclusion is included as a target in 7 of the 17 Sustainable Development Goals (SDGs).

In Paraguay, only 31% of adults have an account with a formal financial institution, compared to a regional average of 54%. In addition, only 13% of Paraguayans report having obtained credit from a formal financial institution in the past year.[2] These figures are worse for individuals with lower incomes and without credit histories.

Credicedula client participating in survey.

Low access to finance is largely due to traditional credit screening approaches used by banks, which are based on qualifications that many low-income, informal workers do not have: credit histories, collateral, and verifiable income streams. Alternative credit screening methods that assess applicants' creditworthiness using more appropriate criteria can help open the door to formal finance for underserved populations.

However, evidence to date is mixed regarding whether targeted credit products serve as effective gateways to the formal financial market, either by helping people build a credit history or increasing their credibility as borrowers in the market, particularly in the eyes of top tier traditional banks. At the same time, gaining access to credit may pose a risk of over indebtedness for some borrowers. The overarching question remains: does greater access to formal credit for typically excluded individuals translate into more financial inclusion or distress?

AN ALTERNATIVE CREDIT SCREENING APPROACH

A study recently published by IDB Invest looks at the positive and negative impacts of offering a loan to underserved clients in Paraguay. The study took advantage of the fact that Banco Familiar, a formal financial institution active in the lower-income client segment, developed a credit product and scoring system (called *Credicedula*) specifically targeting the unbanked and informal sector population.

To assess applicants' creditworthiness, the bank's algorithm calculated a score based on demographic information, such as age, gender, and address, as well as earnings estimates and a short questionnaire. Credit scores from the credit bureau were not factored into the equation. Loans were offered automatically to individuals whose predicted probability of default (generated by the new scoring system) was equal or below a set threshold. This rule was strictly followed, and loan officers did not make lending decisions.

STUDY METHODOLOGY

The bank's strict scoring approach allowed for the impact of obtaining a formal loan offer on credit outcomes to be measured (irrespective of whether the offer was actually accepted) by comparing individuals who just met the eligibility threshold and were offered a loan, to those who were just

1. Economist Intelligence Unit. Global Microscope 2019: The enabling environment for financial inclusion.
2. World Bank Global Findex 2017.

Credicedula client participating in survey.

below the threshold and were denied access. By focusing on the range of scores marginally above and below the threshold, a sample of 1,060 individuals with very similar characteristics in terms of the bank's scoring system was identified. Eligible and ineligible applicants were also identical in terms of access to credit before they applied for *Credicedula* in 2014 to 2015.

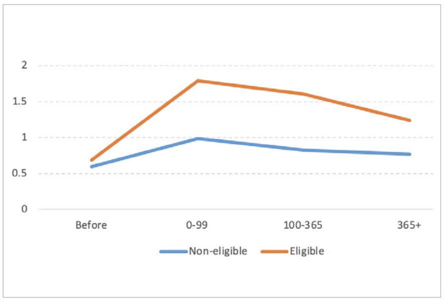
For this analysis, data from Paraguay's credit bureau (Equifax) provided by Banco Familiar was used to compare the 1,060 applicants' credit reports in March 2017, two to three years after their loan application. The credit reports included information about each credit check request received by the bureau - an activity usually associated with a credit application- as well as credit scores and any unpaid debt that had been reported.

KEY FINDINGS

As shown in Figure 1, applicants who scored just above the loan eligibility threshold had 73% more inquiries in their credit reports after they were offered the loan compared to applicants who just missed the cut-off. The positive impact on the number of requests continues even one year after the application to *Credicedula*. This suggests that this initial loan offer from Banco Familiar may have led to new opportunities with other formal lenders, particularly for individuals with limited or no prior credit history.

In terms of the quality of the institutions making these requests, most were from finance companies and cooperatives, both active local players. However, there was no change in the number of requests from the country's main banks, suggesting that the loan offer did not help increase access to the most valued institutions in the market.

Figure 1: Requests per 100 days, since application date



Similarly, eligible applicants with limited or no credit history prior to applying for this loan also fared better in terms of stable credit scores and fewer defaults two to three years later. In contrast, eligible applicants who had more experience in the credit market before applying for *Credicedula* were almost twice as likely to default than their less-experienced counterparts, and their credit scores were 35% lower, despite accepting the loan at similar rates. This negative impact on credit scores is concentrated among applicants who were likely locked out from other lenders based on bad credit behavior. Offering a loan to these individuals solely based on an algorithm-generated score likely increased their chances of default and lowered their credit scores.

Survey data reinforces the findings of this analysis. Using self-reported data from a subgroup of about 500 applicants, *Credicedula* loans appear to have had positive long-term effects on general economic outcomes. Loan eligible applicants reported lower credit costs in the long-term than those who were not eligible, suggesting that as their interactions with the market increased, they gained access to credit at better interest rates.

CONCLUSION

Overall, the findings signal that gaining access to formal credit is most beneficial for individuals who had little or no prior interaction with the credit market. More specifically, using alternative credit screening methods can help people with limited or no credit history gain access to formal loans without worsening their credit scores or increasing defaults. However, for applicants with a credit history, alternative screening approaches may be most beneficial – for both banks and borrowers – when combined with traditional methods that can better identify people with a history of poor loan repayment. The role of an active credit bureau, which collects positive and negative information about borrowers, is therefore essential.

As this experience with Banco Familiar shows, multilateral development banks working with the private sector, such as IDB Invest, can support increased financial inclusion through innovative approaches. To this end, piloting and carefully measuring the impacts of these new approaches is key to better understand how well they serve vulnerable populations and how to improve their design to maximize positive impacts for both financial institutions and their clients. ■

Additional Information

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This brief summarizes the findings of the study by Azevedo, Viviane, Jeanne Lafortune, Liliana Olarte, and José Tessada (2019), Does Formal Credit Lead to More Financial Inclusion or Distress? Results Using a Strict Scoring Rule among Underserved Clients in Paraguay, which is part of IDB Invest's Development through the Private Sector Series.

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