

## **Authors**

Meredith Startz Dartmouth College

## Researchers

Dean Karlan Northwestern University

Jonathan Zinman

Dartmouth College

## **Measuring Creditworthiness**

Banks in the developed world know *a lot* about applicants before deciding whether or not to lend them money. The transactions take place within a massive flow of detailed financial information including tax returns, credit scores, loan applications, and bank statements. An ocean of personal data follows people throughout their lives and determines their access to credit.

In contrast, banks in poorer countries are starving for information about potential clients. Financial histories are next to non-existent in most places. Banks often rely on nothing more than self-reported income and a subjective character assessment when deciding whether or not to approve a small loan. As a result, solving information problems is key to expanding access to credit for the poor in much of the world. Several of IPA's research projects deal with questions of creditworthiness, client selection, and profit margins for microfinance institutions (MFIs).

Annie Duflo recently pointed out on this blog that banks often require clients to spend their loans on business investments even though it is nearly impossible for them to police compliance. One possible reason is that in the face of limited information, MFIs are using small business ownership or professed interest in investing in a small business as rough screen for creditworthiness. They don't care about how the loan is used for its own sake, but they do care what the client's intentions tell them about the client.

On the other hand, there is increasing evidence that many for-profit MFIs are unnecessarily conservative in their lending criteria. IPA researchers Dean Karlan and Jonathan Zinman show in <u>recent work</u> with a South African lender, that lending to clients below the current approval level can still be profitable. This suggests that indicators of creditworthiness that financial institutions currently rely on – including, perhaps, business ownership – are far from perfect.

<u>Several of IPA's current projects in the Philippines</u> will help MFIs develop more accurate and objective systems for identifying creditworthy clients. These projects are primarily aimed at measuring the sensitivity of microfinance clients to changes in interest rates, but along the way will involve the development of in-house credit scoring at partner banks. The advantage of a consistent formula over case-by-case judgment is that it can be revised and calibrated



for accuracy over time, as the MFIs use it in practice.

In one study, loan officers from several banks are given PDAs which they carry with them when marketing loans to potential clients. The PDA is programmed to take client information such as business cashflow, business tenure, age, household assets, and calculate a credit score on the spot. Based on the score, the loan officer will be able to provide a tentative approval decision, pending confirmation of the application details. This process could potentially save staff time, and speed the process of loan approval.

Such scores will be subject to some of the same problems that plague current loan approval systems, given that the available data is still limited and self-reported. Also, those scores can't codify the judgment-based decisions that bank staff make from their experience and familiarity with particular clients and communities. Ideally, banks will be able to experiment with different indicators of creditworthiness to make credit scores more reliable, while still allowing room for staff to override approval decisions when necessary.

All three credit scoring projects are still in the implementation and data gathering stages. Watch the website and blog for updates on how this idea is working in practice over the next few years.

April 09, 2009