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**Timeline**

2007-2009

**Sample Size**

1500 new and repeat clients of the Rural Bank of Mabitac

**Research Implemented by IPA**

Yes

# Determinants of Microcredit Delinquency in the Philippines

## Abstract

Intuition suggests that certain personality types are predisposed to loan default. Accurately identifying these personality types could have profound implications for consumer banking policy, and also important lessons for our understanding of why credit markets may fail. In partnership with the Rural Bank of Mabitac in the Philippines, researchers implemented two experiments and a survey to predict if prospective clients with various personality traits would pay back their loans. The study found that both individuals with higher moral costs and individuals who were the least naïve displayed lower default rates than other groups. The study also found that that survey-based social capital measures are not predictive of loan default for these individual loans, contrary to the results from a prior study with group loans. More general personality index measures were not good predictors of default, either.

## Policy Issue

In microfinance, lending institutions have come to rely on the knowledge of the group to identify and screen out less trustworthy borrowers. With more traditional, individual-liability lending programs, institutions rely on credit investigation and the subjective intuition of credit officers to screen clients. While intuition may tell us that certain personality types are predisposed to loan default, there is little evidence to indicate which personality types, if any, are predisposed to not pay back loans. Accurately identifying personality characteristics that make a person more likely to default could have profound implications for consumer banking policy, and also important lessons for our understanding of why credit markets may fail.

## Context of the Evaluation

The Rural Bank of Mabitac, the partner in this study, aims to provide sustainable financial assistance to microentrepreneurs in the areas of Laguna and Quezon in the Philippines. The bank, which has over 4,000 microfinance clients, has a very high default rate of 71 percent (default defined as not completing full payment on or before the maturity date of loan). This study took place from 2005 to 2006 in various locations across the island of Luzon in the Philippines.

Participants in the study were mostly female clients of the bank. The vast majority were entrepreneurs, and the most common form of business was corner stores. Most of the participants had secondary or post-secondary education and were relatively wealthy by national standards.

## Details of the Intervention

To find out if people with certain personality traits are more likely to default on their loans, researchers collected information about clients' personalities, then tracked their repayment behavior over a one-year period.

The Rural Bank of Mabitac provided researchers with the financial transaction data through one year for all of the subjects involved in the study. Bank staff conducted two experiments and a survey immediately after clients received approval for a new individual loan.

The first experiment was designed to identify subjects with high moral standards. Bank staff interviewed clients and in exchange for a small cash reward. However, when the survey was completed, clients received slightly more than they were owed, leading them to believe the bank made an error. Researchers recorded whether the client returned the excess amount of money while still in the bank, left and then came back to return it, or kept it.

The second experiment was designed to identify subjects who were not able to complete a future task and those who were naïve about the likelihood that they would complete the task. Bank staff administered a short survey to clients to measure their planning capability. Staff asked some clients to either complete the survey on the spot or text back the responses by a pre-specified date in order to receive monetary compensation. Others were told they would receive monetary compensation if they texted the answers back on a pre-specified date.

Researchers then administered a survey with the social capital questions from the General Social Survey (GSS) on trust, fairness and helpfulness. Finally, they examined the relationship between personality index measures and behavior in financial settings using the Big Five personality index model, which identifies five personality characteristics: openness, conscientiousness, extraversion, agreeableness, and emotional stability.

## Results and Policy Lessons

From the first experiment, researchers found that those with “high moral standards” –who voluntarily returned to the bank to return the excess money—were 15 percent less likely to default within the first year of the loan, and if they did default, they defaulted on a smaller amount.

In the second experiment, clients who chose to text-back were not more likely to actually text-back relative to those not given the choice, which suggested the presence of subjects with naïvely optimistic beliefs. Rationally aware subjects—those who did not choose the text-back option—were less likely to default relative to the other groups.

Researchers did not find evidence that survey-based personality index measures were good predictors of loan default. This could be either because default was driven circumstances out of the clients’ controls, and therefore not correlated with personality, or because the index used in this study did not successfully identify the clients’ personality traits.

From a policy perspective, these experiments suggest that financial institutions could benefit from further exploration of surveys and experiments to provide information on clients’ financial behavior, particularly given the growth of cell phone ownership and the introduction of mobile banking.

Read about a [related project in Peru](#).

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