Chapter 14

The Role of Credit Scoring in Micro Lending

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ABSTRACT

This chapter aims to present credit scoring as a technology meant to improve micro lending significantly. We consider that credit scoring is an advanced technology because statistical procedures, some sophisticated, are required to design powerful scorecards. In the same time, we want to show that scoring is not an elitist tool. It is not for every institution, as some prerequisites are required, but we are convinced that there is an enormous potential market for credit scoring in micro lending. Credit scoring can be efficient only in massive homogeneous markets. Microfinance usually addresses this kind of markets. This is the opportunity we want to exploit. On the other hand, quantitative measurements, required for statistical developments, suffer from the fact that micro-entrepreneurs operate mostly in the informal or semi-formal sectors. Some variables like the profit of the business or the turnover cannot be measured accurately because there is no reliable source. This is a challenge. Implementation of credit scoring and follow-up in an environment that has limited access to data infrastructure solutions could also be considered as a challenge. Here we describe in detail possible applications of credit scoring in micro lending. We explain main technical aspects and point expected benefits versus implementation and maintenance efforts. This chapter is written from the point of view of several scoring experts that develop credit scoring models for micro and SME lending on a commercial basis.

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INTRODUCTION

In microfinance there are two things that are supposed to be big: the impact on poor people and transaction costs. Micro credit accounts for the biggest share of the success of microfinance. In micro lending, a long-term impact on borrowers and their environment can be achieved only through self-sustainability. Not sustainable micro credit providers depend on external financial support – a fact that makes them vulnerable and their success fragile.

The fundamental sustainability equation states that own revenues should at least equal costs. The equation is simple, but it is not easy to apply this principle in practice as costs are high in microfinance while margins are small. The search for intensive growth of revenues is not always compatible with the common purposes of microfinance. Extensive growth and constant effort to lower transaction costs are seen by the authors as the perfect solution. Mainly these goals are pursued when microfinance institutions decide to introduce credit scoring.

We distinguish three stages of the cycle of the micro borrower where credit scoring can be used. The first, called evaluation stage, refers to the moment when the financial institution meets the potential micro borrower for the first time. Credit scoring is used to assess his credit risk.

The second stage, called renewal stage, refers to the moment when the client is renewing his micro loan. The microfinance institution has to take the decision whether to disburse a new loan or not. Credit scoring is used to assess the same risk of the client. The difference is that at this point, past credit behavior of the borrower with the institution is known, and by consequence, the forecast of the risk is more accurate.

A third stage, called collection, refers to the moment when the institution is dealing with delinquent clients. Credit scoring is used to forecast the behavior of the clients that are late with scheduled payments. The institution will give priority to cases with higher chances of default.

In this chapter we will focus on the first two stages, as we are more frequently confronted with demands from microfinance institutions to develop evaluation and renewal scoring. This does not mean that collection scoring has lower added value for clients, but since institutions choose to implement evaluation and renewal credit scoring first, a successful implementation will have strong positive impact on delinquency and by consequence the collection problem loses its important for the institution.

BACKGROUND

Scoring is a methodology that offers an objective way to assess risk. It estimates the probability that an event will occur, by giving grades to known characteristics that have impact on the event. In the case of credit scoring, the forecasted event is the bad credit behavior of the client that can lead him to default. This is one of the main risks in lending: Will the client be able to repay integrally the loan and due interest on time?

Bad credit behavior, called also negative credit behavior, is when the borrower registers delinquency. He fails to meet his obligations with respect to the due principal and interest. This fact has the following consequences: the institution cannot use the money it was expecting; penalties start to be calculated on the overdue amount; and the institution starts to take actions to recover the money. Short delinquencies are not dangerous for the client and for the institution, but long or frequent delinquencies are risky because they can lead the client to default. The institution risks losing the money, while the micro entrepreneur risks to lose the business that, in many cases, is the only source of income for his household.

At the moment of credit approval nobody can certify that the client will repay on time and integrally the loan and due interest. In fact, nobody