The Savings Gap
How Understanding the Financial Behaviors of Two Nicaraguan Villages Can Improve Microfinance

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Introduction

The microfinance boom has brought myriad financial services to poor households, but research has only begun to discover how well these tools actually meet poor households’ financial needs. Stuart Rutherford, one of the researchers who has addressed this question the most extensively, states that in order to provide better financial services to the poor, we must first understand what those services are and how poor households currently use them (Rutherford 2000, 2). To that end, this paper looks at seven rural families in Southern Nicaragua, examining what financial services are available to them and how they use and choose between them. Lastly, it explores what lessons can be learned for the primary NGO serving these families, as well as for MFIs and development NGOs elsewhere that wish to implement effective and culturally relevant financial services for their beneficiaries.

Study Context & Methodology

Context: Rivas, Nicaragua

The study was conducted in Nicaragua in the region of Rivas, in two rural villages of approximately 100 residents each. Rivas is a low-altitude, humid coastal region in the southwest of Nicaragua occupying the approximately 15-mile wide strip of land between the Lake of Nicaragua and the Pacific coast, and also between Managua, approximately 50 miles to the north, and the border with Costa Rica. Both villages participate in the rural development programs of Agros International, a US-based non-governmental organization (NGO) that helps rural communities in Central America and Mexico own and make the most of agricultural land to escape poverty.

Agriculture is the largest economic activity. Almost all rural households produce enough small plots of rice, corn, and beans annually for household consumption, plus a little to sell or trade. Industrial farms in the region produce sugar cane, banana, rice, and a few specialty crops like grenadine, papaya, and watermelon. These farms employ thousands of local men and women, especially during the harvest season.

Methodology: Modified Financial Diaries

Field research was conducted in July and August of 2009. Inspired by the Financial Diaries methodology which Daryl Collins, Jonathan Morduch, Stuart Rutherford, and Orlanda Ruthven, created for their book Portfolios of the Poor (D. Collins et al. 2009), I designed a modified financial diaries methodology through which to explore which financial tools households were using and for what purposes. The Financial Diaries methodology consists of participant households keeping a simple cash-based log of all household financial transactions over a set period of time. It is unique in that it tracks actual income, expenditures, and other financial activity, providing a more complete and accurate picture of household financial
behaviors than would one-time interviews or other traditional research methods. This study was modified such that participants only kept financial logs for one month, which excluded inter-temporal data and increased some study limitations such as attrition, participant errors, and lack of trust.

The study focused on two Agros villages, which were selected based on longevity with Agros and accessibility via public transportation. Particular households were selected through quota sampling, seeking diversity in family size, age of children, known economic activity, level of income, and length of membership with Agros. Each household participated in three 60-minute interviews and 2-3 short interviews per week, for 4 weeks, which explored their financial situation, members’ economic activity, current financial tools and their attitudes about financial tools in general. They also kept a rough cash-based record of household accounts throughout the study period.

Findings
Each of the seven poor families interviewed lived on less than $2 per person per day, and most lived on much less. The findings from their financial logs outline their reliance on credit over savings, and their strong preference for informal financial tools. The qualitative interviews help explain why these preferences exist, revealing that a combination of lack of access to the right tools as well as cultural constraints to savings may be responsible.

Participant Financial Objectives
Before discussing financial tool use and preference, it is important to keep in mind what families are trying to achieve with their money. Five of the seven households’ stated their primary objective was to salir adelante or, “to get ahead,” which, when probed, indicated food and shelter security. Most also would like their children to attend school, but not necessarily to complete a course of study or attain a career. Overall, households’ chief objective was to be able to reliably meet daily survival needs.

Focusing on immediate needs is not surprising, especially when the $2/day they earn is not a constant, but merely an average income over the course of a year. Actual incomes are not only small, but inconsistent (as shown in Figure 1) and unpredictable (Collins 2009), prompting households to avoid risk and pursue survival-based goals, as opposed to long-term or wealth-building goals (Meng 2003; Morduch 1995). It is towards achieving this goal of survival that the following financial tools are employed.
Borrowing Patterns & Preferences

Formal Loans: Most participants considered a formal loan the best source of funds for large, long-term needs, such as business and agricultural investments. However, they tended to avoid them for any smaller or shorter-term needs. Drawbacks include the involved application forms and processes, the difficulty of qualifying for a large enough loan, inflexible repayment plans and severe late payment penalties, and the requisite for collateral that participants either do not have or are unwilling to risk.

Individual Loans: Less-poor neighbors are usually willing to offer informal loans, which participants generally prefer over formal loans, especially when smaller lump sums are required. These loans are readily accessible, sufficient for most small emergencies and investments, and come with flexible repayment plans and less severe penalties, if any. In these cases, relationship and reputation serve as a kind of collateral, but one that borrowers were generally more willing to post than money or household goods. Especially since a neighbor is generally more understanding than a formal loan collector regarding late payments.

Retail Credit: Participants commonly reported buying goods on credit either from independent salespersons or from retail stores. Independent vendors sell transportable goods like bedding, shoes, clothing, medicines, and other small items, whereas retail stores sell mostly electronics, furniture and appliances. These arrangements are highly convenient, but can cost up to double the price of the retail good. In addition, late payments ensure the buyer skyrocketing fees and frequent and embarrassing collection visits.

While participants reported benefits to both formal and informal borrowing for large sums, they saw no benefit to borrowing small sums from formal lenders. Figure 2 summarizes study participants’ preferences for formal vs. informal lending for small and large sums.

Savings Patterns & Preferences

Savings at home: No study participants reported having savings during the study month, but some reported having tried to save in the past, or seasonally saving for predictable annual events like school fees. These savings are usually kept in the home, under a mattress, in a pot, or on a shelf where they are vulnerable to theft, temptation, family members, or “greedy neighbors placing claims on… surpluses” (Morduch 2007, 163). Two couples reported having
saved under cushions in the past, but that the money was usually “withdrawn” before it could be used for its intended purpose.

**Money guards:** Keeping cash with a friend or relative ranks can be a safer alternative than keeping it under the mattress. However, only two participants reported ever having used a money guard, and none were using one during the study month. One couple had considered storing money with a friend, but hadn’t because they feared not having access to the money in an emergency.

**ROSCAs and ASCAs:** While perhaps the most common informal savings mechanism among the poor worldwide, not one study household was using either a Rotating Savings and Credit Association (ROSCA) or an Accumulating Savings and Credit Association (ASCA). One couple had previously attempted to save through an ASCA that lent to outside members, only to lose all of their capital to a borrower who did not repay. Other participants reported never having used one.

**Formal Savings:** One participant couple had opened a savings account a few years earlier when a bank representative visited their village. They signed paperwork, accepted the terms, and deposited the minimum balance of $10 USD on the spot. Unfortunately, the costs to using the account soon outweighed the benefits. The bank representative never returned, and making deposits or withdrawals required a two-hour round trip by bus, at a cost of $3 per trip. Not surprisingly, the only trip they actually made was to withdraw the $10 they had deposited and close the account.

**Criteria for Financial Tools**

Through analysis of participant diaries and reported attitudes about financial tools, it becomes clear that participants evaluate financial tools according to the following fairly uniform set of criteria:

- **Accessibility:** How easily and quickly money can be withdrawn when needed. Loan approval processes or minimum savings balances decrease accessibility, even though they may keep savings from being spent prematurely.

- **Sufficiency:** How capable the tool is of providing enough money for its intended use.
Flexibility: How well payment schedules can adapt to unpredictable, inconsistent income flows; and

Collateral Risk: the extent to which the use of a financial tool puts at risk relationships (as with co-signer agreements, “friendly” loans, group banking) or physical property (as with physical collateral for formal loans). Overall, participants were reluctant to introduce formal financial agreements to their personal relationships.

The Savings Gap

Perhaps the most important finding from the Nicaragua research is which tools participants are not using. None of the households reported savings as a financial strategy at all, whether in formal savings accounts, ROSCAs, ASCAs, money guards, or even “under the mattress.” While these tools are ubiquitous in literature about poor households’ money management strategies, participants of this study do not consider them a part of their financial “toolbox.”

Why is such a staple of poor households’ financial management strategies elsewhere in the world absent in this study? The problems and risks associated with savings listed above certainly play a part, but these also exist in places where robust savings strategies are reported. Participants credited their own lack of savings to lack of money, frequent expenditure needs, and lack of liquid cash, also not unique to Nicaragua. However, one unique reason and that most often given was, “We Nicaraguans just don’t save.” Respondents told me that savings wasn’t part of their culture. One woman explained, “Maybe we trust in God a little too much. There’s a saying, ‘Dios no desampara a nadie,’ and we believe that, so we don’t worry about the future or plan for it.” Not saving, according to respondents, is simply part of being Nicaraguan.

Analysis

Cultural Constraints

Because of its use, the cultural explanation merits consideration. Culture has been defined as the set of beliefs, values, and attitudes that influence the behavior of individuals, organizations, and other institutions (Porter 2000, 15). Some of the values prevalent in Nicaraguan culture (paternalism, fatalism, familialism, and short-term time focus) are generally considered resistant to economic development (Montalvan in Harrison 2000, xxvii). Historical factors such as Nicaragua’s colonial roots, Catholic influence, and recent asset-stripping violent conflicts have been have been identified as promoting these progress-resistant values (Harrison 2000). Unfavorable geography (Sachs 2000) and poor financial education may also play a role in discouraging the entrepreneurial behavior that so often accompanies economic growth.

While cultural values certainly play a role in Nicaragua’s economic development, I am not as willing as the study participants to attribute their lack of savings to culture alone. Doing so
would require worldwide codification of culture and savings behaviors, in which there is no society without culture that we might study as a control, and no two societies with exactly the same culture that we might compare to test the influence of other factors on financial behavior. Instead, I am inclined to agree with Amartya Sen that “our behavior depends not only on our values and predispositions [i.e. culture], but also on the hard facts of the presence or absence of relevant institutions and on the incentives - prudential or moral - they generate” (Sen 2000, 43).

Access Constraints

In addition to cultural constraints, some study participants failed to save because they lacked access to savings vehicles that met the criteria listed above. In fact, each of the savings tools participants identified failed to fully meet their four criteria for financial tools, and the formal banking system has not been able to accommodate their small, irregular, and unpredictable incomes. Formal savings accounts require high minimum balances, strict deposit schedules, and/or withdrawal fees, and they are mostly physically inaccessible, located too far for regular visits. Undoubtedly due to the high cost of providing these features, under provision nevertheless results in extreme difficulty for poor households who wish save securely.

Providing financial services to the poor – especially savings – is difficult and costly. MFIs, NGOs, government banks, and multinational banks have found it cost-ineffective to provide the kind of costly financial services that the poor need, especially to the rural poor living in remote areas.

Economic Constraints

The condition and patterns of the economy also impede the poor’s ability to save effectively. Households’ goods may be at their lowest value precisely when most they need to turn them into cash, like after a natural disaster or poor crop yield. Inflation can also devalue physical and monetary assets no matter when they are liquidated (Armendariz, de Aghion, and J. Morduch 2007, 160).

Recommendations

While participants already know what they’re looking for in financial tools, they lack access to tools that meet their criteria. I propose here a few ways to provide the Rivas participants access to culturally appropriate tools that will meet their criteria. While these recommendations are tailored specifically for the households included in the study, application could extend to other communities where similar phenomena are observed.

Financial Education: Most study participants possessed good economic instincts, but they lacked planning strategies and tools. Like residents of most poor, rural communities around the world, formal education does not include money management strategies, and formal financial
service providers rarely provide this education either. Helpful topics in financial education would highlight the benefits of savings, savings strategies, and understanding and choosing between formal financial tools. Curricula should focus on money management skills and practical financial decision-making, and should be separate, where possible, from advertisement of particular financial services. Ideally, it would be developed in collaboration with local civil society groups. Education about good strategies and tools could increase demand for quality formal tools, as well as innovation around informal tools.

**Individual-responsibility Microenterprise:** In these particular villages, the vast majority of microfinance products are offered by Agros International in the form of “directed credit,” meaning that Agros designs and offers income generating projects that village members can choose to undertake, either as groups or individuals. Agros then deducts the majority of project revenue to pay start-up costs. At the time research was conducted, most microenterprise projects had stalled due to attrition, group disagreements, and mismanagement. Participants saw too few liquid earnings for the endeavor to be worth their time. For microenterprise loans to be successful, they should be 1) implemented only at the request of the *individual* entrepreneur or self-selected group of entrepreneurs, 2) begun only after completion of a financial education course, 3) structured such that individual participants are allowed to keep a majority of their earnings, understanding the terms of their debts and armed with strategies to quickly repay.

**Flexible, but Stable Payment Plans:** Participants should be encouraged to make periodic payments for small and large loans, with flexible payment schedules. Payment due dates should be avoided during the hungry season as described in Figure 1. Above all, payment deadlines, as well as consequences for late payments should be simple and clear.

**Seasonal Income-smoothing:** As indicated in Figure 1, incomes and consumption are lowest during the summer months. “Off-season” crops should be introduced that could be sold in April and May, to sustain households through the hungry season, during which their employable time is most occupied planting the November crop.

**Convenient Savings Options:** Options for encouraging formal savings should be explored. In Rivas, helping interested households link with formal banks may be a good starting point, although this might be most effective after a certain amount of financial education is completed. San Marcos is already experimenting with community banking and would benefit from both financial education and formal banking links.
Conclusion

Nicaraguans describe themselves as culturally poor savers. While they may be right to a degree, explaining their behavior in solely cultural terms glosses over the complex web of characteristics that make savings rare in these communities. The participants in this study, consistent with research on poor rural households around the world, manage small, irregular, and unpredictable incomes by focusing on immediate daily needs. However, they lack financial tools that would help them meet those needs. In particular, they lack access to financial tools that are accessible, sufficient, flexible, and that minimize both relational and financial collateral risk. As a result of these access constraints, together with certain cultural and economic constraints, participant households severely under-utilize savings as a financial tool. In order to increase the financial efficacy of these poor households and those like them, NGOs and MFIs are encouraged to implement culturally-appropriate financial education, microenterprise programs for which individuals are motivated and responsible, simplify repayment plans for all financial tools, help create opportunities for year-round earnings, and providing logistical support for households who are ready to begin using formal savings tools. In Nicaragua and around the world, the most effective financial services are those formulated through a deep understanding of the local culture and that respond to households’ rational criteria for quality financial products.

Endnotes

i For more information, see http://www.agros.org/ag/inside-agros/who-is-agros/.
ii The Collins study sample size was much larger and lasted one full year.
iii This idea of the poor focusing on daily survival needs is fleshed out in Meng 2003. This strategy is contrasted with the wealth accumulation and lifelong income-smoothing goals of wealthier households in Armendariz, et al. 2007.
iv Figure 1 represents study participants’ perceived income rankings; that is, in which months they generally have more liquid income relative to others. Ranks are relative (high to low), rather than absolute.
v Marguerite Robinson sets out a different list of criteria in her book, The Microfinance Revolution. Whereas Robinson’s criteria apply to poor households’ choices of formal financial tools, these criteria describe poor households’ choices amongst all available tools, formal and informal.
vi As in Rutherford (2007), Collins (2009).
vii This phrase has no direct translation in English, although the closest translation would be “God doesn’t abandon anyone.” Still, the connotation of the world desamparar is more than just abandoning, but to leave someone without support or sustenance, even to put someone into poverty. The phrase evokes an image of home eviction. A looser translation would be, “God won’t throw you out into the cold.”
viii Surprisingly NGO staff, wealthier Nicaraguans, and resident expats all confirmed in interviews that it is very “Nicaraguan”, across income and class lines, not to save. They reported lack of savings themselves.
ix See Montalvan in Harrison 2000, xxvii for a further discussion of the cultural factors underlying the lack of savings in Nicaragua.
x Here I refer to very small loans, such as those that would help a woman begin a small household enterprise.
x As gathered from male and female participants in agricultural, artisan, and food microenterprise
projects, both group and individual. The only project still underway of which I learned was one in San Marcos involving women making hammocks. However, these women reported no liquid earnings despite long hours of work. Perhaps it has continued because there is one clear leader with entrepreneurial skills in charge – the others also suffered from leadership disputes. Still, this project seems likely to stall as well, sharing the low income/work ratio perilous to similar projects.
xii In the case of Agros, this would apply to individual-responsibility microenterprise loans as well as land loans and seasonal agricultural loans.