MicroSave
Market-led solutions for financial services

FAI financial access initiative

PoP Briefing Note # 8

Portfolios of the Poor: How the World's Poor Live on $2 a Day: Understanding Price

June 2010

The financial diaries provide insight into the prices poor households paid for financial instruments, and the logic behind their financial decisions. Researchers revealed that surviving on small, irregular, and unpredictable earnings often generates financial behaviors that at first seem counter-intuitive-such as paying or borrowing to save. Through the financial diaries approach, (see the "Research Methodology" Briefing Note) researchers were forced to confront assumptions and take a fresh look at understanding the price of microfinance-paying close attention to what price means to poor households, the *cost* financial institutions assume in lending to the poor, and the universal tension between the impatience to meet financial demands today, and the desire to save for the future.

Understanding Interest Rates as Fees

For the poor, the cost of financial services can be high. Informal moneylenders may charge very high interest rates, especially when they are expressed as *annual* rates. Microfinance institutions usually charge more for loans than formal banks do because of the high costs of lending to the poor, characterized by lots of small-sized transactions. One study quoted in the book found that MFIs that serve the poorest clients tend to charge the highest prices.

Comparing the annual percentage rate (APR) of different loan prices is a valuable tool for finance in developed countries where the value of time is essential to investment decision-making. Using this same metric to assess the value of loans for poor borrowers, however, fails to consider two common features of these loans: uncompounded interest and early repayment rate adjustments. For example, interest on loans from South African moneylenders is rarely compounded, making interest rates easier to understand and calculate, but implicitly favoring borrowers who pay slowly. Nor is the interest amount adjusted when repayment is early, in full or in part, meaning that, again, customers who pay early or on time pay higher rates than those who pay late.

Intermittent lenders-those who lend as a favor or out of a sense of obligation-also charge less than stated interest rates fairly often. In the Bangladeshi and Indian financial diaries, households with private interest-bearing loans ended up paying full interest less than half of the time, and in at least a third of all loans the interest was discounted, forgotten, forgiven, or ignored. In South Africa, the interest was forgiven entirely in only 5 of the 57 moneylender loans, but it was forgiven in 13 of the 45 ASCA (a kind of saving club) loans. This phenomenon prompted researchers to consider interest rates as flat fees, and helps us understand why households agree to such high prices relative to the loan amount.

Rescheduling moneylender loans in India

"At first glance, the *stated* interest rates charged by moneylenders (ranging between 61% and 700% when annualised) appear extremely high. However, the *actual* rate of interest comes down dramatically once the repayment period is considered. One branch manager of an informal moneylending business described his clients' behaviour. 'Half of the poor clients drag the repayments on a one-month term loan up to 90 to 100 days. Most delinquencies occur when the clients are away visiting their villages.' Of each 100 poor clients, five are likely to default completely, he told us. 'We follow up at the most for three months beyond the scheduled loan period. We try to renegotiate the instalment size [making it smaller], but in the end the whole business runs on trust and there's no other means to recover our money.'[1]

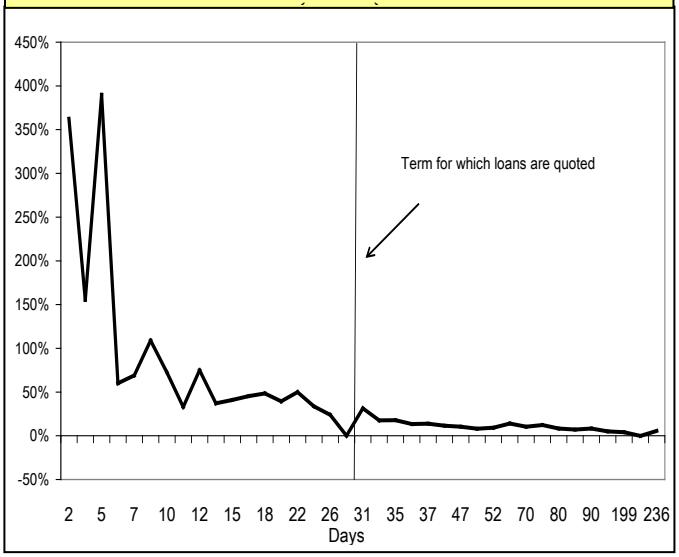
Differences Observed in Stated Prices and Actual Prices

Given the features of microcredit prices described above, nominal interest rates often do not reflect the actual price paid for credit. The authors looked at repayment data from moneylenders in South Africa and estimated the actual price paid by calculating the internal rate of return (IRR) for each loan in the sample. Although the loans had monthly interest rates, borrowers could repay whenever cash was available. The authors show that while the average stated interest rate on these loans was 30 percent per month, the IRR declined dramatically as the term of the loan increased.

[1] Patole, Meenal, and Orlanda Ruthven. 2001. "Metro Moneylenders: Microcredit providers for Delhi's poor." *Small Enterprise Development* 13 (2): 36-45. p. 140.

Figure 1 illustrates the trend. The loans were implicitly priced as if they were on one-month terms: the interest rate paid was 30 percent of the principal whether the loan was outstanding for the entire month or just for a few days. When the loan was held for more than one month, the IRR fell from 30 percent to 17 percent; after three months, the IRR dropped to 8 percent. So while the stated interest rates charged by moneylenders (ranging between 61 percent and 700 percent when annualized) appeared extremely high, the *actual* rate of interest comes down dramatically once the repayment period is considered.

Figure 1. Monthly Internal Rate of Return in Days to Maturity



Mohammed Laiq's story illustrates this practice well. Mohammed, an Indian diarist from Uttar Pradesh, borrowed five interest-bearing loans over the research year. In March, he borrowed $32 from a moneylender, a sizable sum for a man whose average monthly income was just over $40. The agreed-upon repayment schedule was 75 cents per day for a period of 50 days, 11 cents of which was interest (an annual rate of 125 percent). The repayments did not occur according to schedule: in late September, four months after he was to have repaid the loan, he still had a balance of $8.50. It was not until mid-February, nine months after he was to have repaid in full, that he cleared this. However, he paid interest on 50 days, not 330. This translated into an annual interest rate of about 19 percent. Mohammed repaid the loan in "batches of days," generally giving $4-6 at a time, with long gaps in-between. He reported that the moneylenders expected and were "unconcerned" by the gaps in payment. This leniency is deceiving: in actuality, repayment delays are factored into the nominal price, with the effect that the customer who repays on time pays the highest price. This inverted pattern of incentives can be seen as one of the more unsatisfactory aspects of informal loan finance.

Paying and Borrowing to Save

The diaries revealed that even in the most limited budget, price was not the overriding determinant of financial choices among the poor: poor households placed a premium on convenience, flexibility, and reliability. Evidence of this was demonstrated in cases where diarists paid or borrowed to build up usefully large sums. The experiences of Jyothi[1], from India, and Khadeja, from Bangladesh, help to illustrate these behaviors, and uncover the psychology behind spending and borrowing to save. Jyothi provided a savings collection service. She made daily visits to her clients to collect deposits, made in equal and regular installments according to the savings agreement. When the savings period was over (220 days), Jyothi returned the value of the savings – *minus* 30 percent a year.[2] However, with husbands working and earning irregularly, this was often the only sure way for women to build up enough money each day to pay for large expenses. The poor may even borrow to save, as Khadeja did when she took out a microfinance loan to buy gold. The gold will serve as an insurance policy if her husband is ever unable to work. Khadeja reasoned that the weekly discipline of a microcredit provider will motivate her to repay the loan faster than if she were to save up for the large purchase all on her own. The "Borrowing to Save" Briefing Note offers a more detailed look at these issues.

Final Thoughts

Examining the economic challenges and behaviours of diarists brought the researchers to two important observations about price: 1) price is not the overriding determinant of financial choices among the poor, even in the most limited budgets; and 2) safe and reliable financial services for poor households are scarce. Formal institutions have the opportunity to fill this gap with convenient, flexible, and dependable financial tools that they can bring to scale.

[2] Jyothi was originally interviewed for Stuart Rutherford's book *The Poor and Their Money*.
[3] It is important to remember that this calculation is interest charged on an average balance that is growing over 220 days. So the average balance would be about 220 / 2 = 110. Therefore, the calculation would be ((20 / 110) * (365 / 220)) * 100 = 30 percent.