FINANCIAL SERVICES ASSESSMENT

MANAGING VULNERABILITY: USING FINANCIAL DIARIES TO INFORM INNOVATIVE PRODUCTS FOR THE POOR

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A MICROFINANCE CLIENT ONCE TOLD US: "Life for the poor is one long risk." Daily incomes vary, and hard-won gains in income and assets can be quickly eroded by shocks such as illness or death of a loved one and a myriad of other problems. This vulnerability matters to the poor, because it exposes them to acute episodes of hardship, including hunger and pain, and it can result in the depletion of assets, from which they can find it hard to recover.

Understanding how low-income households manage their vulnerability remains a challenge for development experts. New research using data from "Financial Diaries" offers a window on this dimension of poverty. The Diaries document all the economic transactions of households and individuals on a weekly basis. They provide a detailed picture of the frequency and intensity of people's economic activities. Drilling down into the issue of vulnerability provides insights into what keeps people locked in the vicious cycle of poverty and suggests ways that they might use well-designed financial products to reduce their vulnerability. The findings below are drawn from an 18-month Financial Diaries study with Opportunity International Bank of Malawi (OIBM), in which OIBM clients were compared against non-clients, and provide a close look at some key aspects of vulnerability.[1]

KEY ASPECTS OF VULNERABILITY

Q. How often did participants go without income for a week, and what did this imply for their expenditures on food?

A. Focusing on the 120 microenterprise households in the sample, 85 percent experienced at least one week out of 73 weeks when they reported no revenue from their businesses or from other sources. The median number of zero-revenue weeks per household was nine. For half of these households, at least one of the zero-revenue weeks coincided with an unanticipated event such as an illness, a funeral, a crime, or an accident which forced them to not work. Failure to earn income in a week correlated with dramatic declines in both total household spending and spending on food (Table 1).

OVERVIEW OF THE MALAWI FINANCIAL DIARIES STUDY

Location: Central Malawi

Duration: July 2008-Dec 2009

Final Sample: 172 households

Banked Status: 1/2 OIBM households

Median Per Capita Daily: $2

Median Weekly HH Income: $55

Occupations:
Micro-entrepreneurs
Farmers
Salaried workers

Q. How do unexpected medical and funeral-related expenses contribute to household financial instability?[2]

A. Over the duration of the study half of the sample households paid at least one hospital bill. The median expenditure was $10. Three-quarters of the households had funeral-related expenditures, but the amounts were small: the median amount was $2, with an average of $7. While non-local funerals and hospital care added an average of $27 per event in travel costs, the number of such non-local events was relatively small. Given a weekly household income of US$55 among the sample population, these costs were not necessarily an insurmountable burden to those who incurred them, though more work is needed to understand the true costs of these episodes including lost work time and the possibility that some households avoided even larger expenses by not seeking medical help when sick.

TABLE 1 - HOUSEHOLD SPENDING IN WEEKS WITH REVENUE VS. WEEKS WITHOUT REVENUE

DIFFERENCE FROM HOUSEHOLD'S NORMAL WEEKLY EXPENDITURE	WEEKS WITH REVENUE	WEEKS WITHOUT REVENUE
All Household Spending	4% above average	13% below average
Food Only	3% above average	10% below average

[1] This study was conduced by Microfinance Opportunities, and funded by the Bill & Melinda Gates Foundation under a grant to the IRIS Center, University of Maryland.
[2] The study period was marked by a good agricultural season so no major agricultural shocks were experienct by the sample households.

Q. How often did participants need to accumulate larger-than-usual sums of money to pay for a household or business expense, such as business inventory or school fees?

A. The median household in our study made one lump sum purchase[3] approximately every four weeks. The median expenditure was $75 or 1.5 times the weekly income. Two-thirds of these unusually large payments were for business purposes; the median size for business was US$120, occurring every nine weeks.

Q. What financial services—formal and informal—did low-income households use to alleviate the pressures generated by revenue shortfalls or the need to accumulate lump-sums of cash?

A. The use of formal financial services, largely cash withdrawals from savings accounts, correlated with higher general household spending and food spending when households did not earn income (Table 2), though some of this higher expenditure may be related to the cause of the lack of income (e.g. medical expenses, or repairing farm equipment.)

But these uses of formal financial services were relatively rare (127 instances), and dwarfed by the use of informal finance (1,140 instances), such as cash gifts or informal loans, to cover expenses in non-revenue weeks.[4] For a number of households, these inflows were part of a general pattern of financial dependence. A third of zero-revenue weeks were covered by cash gifts to financially dependent households and 75% of those gifts went to women.

When there was insufficient weekly cash flow to cover unusually large lump sum expenses, the story was the same. Both formal and informal financial services played a role in offsetting these shortfalls, but formal services were used in a minority of cases. Moreover, both formal and informal services were used less often than money stored informally at home, which suggests a significant untapped opportunity for banks (Table 3).

IMPLICATIONS FOR FINANCIAL SERVICES INDUSTRY

The households in our study suffer periods when they don't earn any income, are faced with unexpected expenses, and often need to generate large sums of cash. Households that have bank savings they can withdraw appear to do better in tough times, but why don't more households avail themselves of bank-based savings when there are many potential benefits? Are distance/convenience factors in service delivery the critical issue? Are product designs not in synch with helping clients reach their goals or manage risk? One point is clear: the indigenous risk-pooling mechanisms in Malawian culture (e.g. on-demand exchanges of cash within families) and informal savings practices are meeting the needs of many in ways that formal financial services have yet to match.

TABLE 2 - HOUSEHOLDS USE DIFFERENT FORMS OF FINANCING TO BRIDGE WEEKS WITHOUT REVENUE

DIFFERENCE FROM HOUSEHOLD'S NORMAL WEEKLY EXPENDITURE	USED FORMAL FINANCE	USED INFORMAL FINANCE	NO FINANCE
All Household Spending	43% **above**	9% **below**	22% **below**
Food Only	16% **above**	6% **below**	17% **below**

TABLE 3 - PAYING FOR INDIVIDUAL LUMP-SUM EXPENSES WHEN HOUSEHOLD CASH FLOW WAS INSUFFICIENT

MICRO-ENTREPRENEUR HOUSEHOLDS	NUMBER	PERCENT	MEDIAN[5]
Formal Financial Services	196	9%	US$135
Informal Financial Services	981	44%	US$60
Money Stored Informally at Home	1,143	52%	US$120
Total (line items do not sum to total due to overlaps)	2,209		US$82

[3] Our analysis defined lump sums largely as statistical outliers. Working on an individual household basis, we took the average of non-financial, household expenditures per household and added three standard deviations. All currency amounts have been converted to PPP US dollars.

[4] Cash gifts are non-reciprocal payments of money and include remittances.

[5] Differences in median amounts in table 3 are driven in part by differences between banked and unbanked households. Differences in deviations from means between revenue and non-revenue week in Table 1 and between formal and informal/no financing in Table 2 are statistically significant at the 1% or 5% level and suggest that they are not driven by differences in which households experienced non-revenue weeks or had access to financial services.

This study is part of the **Financial Services Assessment** project, undertaken by the IRIS Center at the University of Maryland and its partner, Microfinance Opportunities. The goal is to assess the impact of grants provided by the Bill and Melinda Gates Foundation to microfinance organizations for the development of innovations in financial services.

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