FINANCIAL SERVICES ASSESSMENT

Microsavings Programs: Assessing Demand and Impact, A Critical Review of the Literature

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Financial Services Assessment project can be found on the web at
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ABOUT THE PROJECT

The *Assessing the Impact of Innovation Grants in Financial Services* project is designed to examine the impact of financial services on the lives of poor people across the developing world. This project is funded by the Bill & Melinda Gates Foundation, which is committed to building a deep base of knowledge in the microfinance field. The IRIS Center at the University of Maryland, College Park, together with its partner Microfinance Opportunities, will assess a diverse range of innovations in financial services. The results of this project will shed light on the design and delivery of appropriate financial products and services for the poor, and the potential to scale up successful innovations to reach larger numbers of low-income households.

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This report is part of a series that will be generated by the *Assessing the Impact of Innovation Grants in Financial Services* project. The reports are disseminated to a broad audience including microfinance institutions and practitioners, donors, commercial and private-sector partners, policymakers, and researchers.

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ABSTRACT

This paper provides a critical literature review of the quantitative and qualitative studies exploring the demand for and impact of savings services for the poor. The review reveals a limited number of quantitative microsavings impact studies of varying scope and quality.

The review identifies and analyzes two types of microsavings demand studies: proprietary market research studies conducted by MFIs and studies conducted by microfinance researchers aimed at proving that the poor do save and that better-designed savings services are needed. We then identify and evaluate two types of high quality savings impact studies: randomized experiments and natural experiments.

The dearth of empirical microsavings studies reflects the lack of both savings and impact literature within the broader microfinance field. However, donors and researchers have recently realized the importance of rigorous studies to quantify the demand for and impact of savings services for the poor. Based upon new and better quality studies that have become available in just the past several years, practitioners can design more appropriate savings products and begin to monitor their effectiveness in improving the lives of the poor.

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I. Introduction

While credit has been the traditional focus of microfinance institutions (MFIs) and donors, the importance of microsavings programs for the poor is gaining recognition within the microfinance literature. Traditional savings schemes – Rotating Savings and Credit Associations (ROSCAs), Accumulating Savings and Credit Associations (ASCAs), deposit collectors, cash hidden in the home – have been granularly explored by development practitioners (e.g., Rutherford, 1999; Gugerty, 2003). The many traditional examples combined with the developed world's understanding of formal savings services – secured accounts at well-established banks – have prompted most savings research to be focused on product design, management, delivery systems, and other MFI capacity needs to create commercial savings products for the poor (e.g., Hirschland, 2005).

> "The growing microfinance movement has adopted many of the principles of roscas in developing group lending programs, yet there is little empirical evidence on the effectiveness of these principles in sustaining these programs. Moreover, many microfinance institutions are expanding to provide a wider range of banking and savings services to the poor; understanding how lower income individuals save will be critical to designing appropriate and effective banking products for the poor."
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> - Mary Kay Gugerty. 2003. "You Can't Save Alone."

There is limited quantitative evidence, however, about the demand for savings services and the relative preference of the poor between savings and loans. Furthermore, there exists a noticeable gap in the microfinance literature on the impact of savings on clients, microenterprises, households, communities, and financial institutions.

This paper attempts to answer the following questions based on a review of the empirical literature[1] focused on savings products and services for the poor:

1. What information exists about the demand for savings services among the poor?

2. What studies exist that evaluate the impact of savings products and services on the lives of the poor?

3. How robust are these studies (critical review)?

4. How have empirical studies addressed savings products relative to loan products?

5. Which are the most appropriate indicators and statistical analyses used to assess the impact of savings products?

Section II of this paper discusses the two types of demand studies found in the microsavings literature. The first are MFI-commissioned studies which rely on market research to estimate client demand for savings services in their particular markets. The second type are studies

[1] The studies reviewed in this paper were identified by querying microsavings and impact experts including Jeffrey Ashe, Monica Brand, Rani Deshpande, Brigit Helms, Madeline Hirschland, Dean Karlan, Nino Mesarina, Lisa Parrott and Stuart Rutherford.

conducted by microfinance researchers that describe (either quantitatively or qualitatively) the existing use of microsavings services by the poor. These studies then conclude that this use is evidence of demand for additional savings services. Several empirical demand studies of this type are summarized.

In Section III, we review studies that quantitatively assess the impact of savings services for the poor. Because of the limited literature about both microfinance impact and microsavings (relative to microcredit), there are few studies that address this important issue. Those impact studies that do exist tend to measure the effect of certain product or client characteristics on the savings rates of the poor. Few studies provide social measurements to determine how savings affect the quality of life of clients.

Section IV provides an assessment of the types of impact studies that were reviewed in Section III and discusses the most useful and relevant impact indicators for future evaluations. Section V offers a summary and some final lessons learned.

II. Client Demand for Savings

Our literature review reveals that there are two types of demand studies common in microfinance. The first – which are generally not publicly available – are proprietary market research studies conducted by MFIs to understand the needs and profiles of potential savings clients within particular markets. The second – and more commonly available – are studies conducted by microfinance researchers aimed at proving that the poor do save and that formal, better-designed (convenient, secure and reliable) savings services are needed.

For the first type of demand study, MFIs conduct focus groups, surveys and quantitative analysis to determine the level of demand for savings services among potential clients. Such studies, central to savings product development, use participatory rapid appraisal, focus group discussions, competitive analysis, drop-out questionnaires, monitoring reports, and staff discussions to identify client needs and develop appropriate products to fulfill these needs (see Brand, 2003 and Wright, 2005). While these demand studies are common, they vary in quality and are generally not available publicly. For the remainder of this section, we will therefore focus on the second type of demand study, with the understanding that in-depth market research is a critical step in the development of any successful savings product.

This second type of study looks to the existing savings services used by the poor as evidence for demand. These studies tend to provide in-depth assessments of formal and informal savings methods, describing the services, frequency of their use and their relationship to other financial services used by the household. The Financial Diaries (Collins, 2005; Rutherford, 2002; and Ruthven et al, 2002) are strong and empirical examples of such demand studies. Through detailed household profiles, they chronicle the complex financial lives of the poor, including an itemization of every financial transaction and savings product used by sample households.

Because we are particularly interested in studies that quantify demand, the following are highlighted below. For a complete list of the demand studies reviewed for this paper, please see the "Demand Studies" section of the bibliography.

- "Tying Odysseus to the Mast" by Ashraf et al (July 2005): This study (presented in greater detail in Section III) evaluates the demand for and impact of a commitment savings product introduced through a microfinance bank in the Philippines. Through a randomized experiment and regression analysis, it finds the characteristics of people most likely to take up the savings product. For example, the study finds that women with hyperbolic preferences (those who exhibit impatience in the present, but are patient in the future) are most likely to take up the product; education level predicts product take-up in women (those with a higher education level are more likely to take up); gender predicts take-up (women are more likely to take up the product than men); and income predicts take-up (middle-income individuals are more likely to take up the product than low- and high- income individuals).

- "Deposit Collectors" by Ashraf et al (December 2005): This study (also reviewed in Section III) evaluates the impact of, and the demand for, a deposit collection service as an add-on to a customer's savings product. Take-up is predicted by a customer's distance to the bank (the further the participant is from a bank branch, the more likely they are to take up the service). It finds that married women are more likely to take up the service than single women, suggesting that household bargaining mechanisms are at play; to a certain level, higher household income positively predicts take-up (although the effect becomes negative at high levels of income); and less educated, younger women are significantly more likely to take up the product.

- "An Analysis of the Factors Affecting the Demand for Savings Services by Rural Savers in Uganda" by Bakeine (July 2001): This study on savings mobilization in Uganda is based upon surveys and focus groups. It examines savings products demanded by rural savers; the strength of the relationship between interest offered and the demand for savings; and the optimal distance to a savings service delivery point for rural savers. It finds that rural savers prefer illiquid products; that 99 percent of the rural savers surveyed prefer a proximate service delivery point; if affordable public transportation is available, the influence of physical proximity on demand diminishes; and an interest rate of ten percent (as opposed to the current five percent) would attract 75 percent of those who would otherwise decline the service.

- "Stocks and Flows – Quantifying the Savings Power of the Poor" by Collins (2005): This study is part of the Financial Diaries series. It tracks the detailed income and expenditure cash flows for a sample of South African households throughout a year, presenting data on the types of savings instruments (and other financial services) they use. The study observes how often the poor use financial instruments, how much of their income they set aside as savings, and how this helps to improve their long-term financial status. The analysis shows that the sample households consume about 75 percent of their income, and therefore are left with 25 percent to use for insurance, savings or debt service. The households show increases in their short-term net worth, although it is not clear that these increases can be sustained over the long-term. By chronicling the financial activities of the participating households, this study is meant to demonstrate demand for financial services by the poor to financial institutions wishing to provide savings and other services to this population.

- FinScope is an initiative of FinMark Trust, which was established in 2002 by the UK's Department for International Development (DFID). FinScope conducts household surveys to collect empirical data in order to "establish credible benchmarks and highlight opportunities for innovation in product and delivery."

FinScope's in-depth surveys, conducted throughout southern Africa, collect exhaustive data on household financial transactions and attitudes, as well as demographic characteristics and personal feelings and behaviors (e.g.,satisfaction with life, achievement of goals, use of alcohol). Analysts can access FinScope's data and market segmentation methodology at www.finscope.co.za. The data collected through the household surveys are particularly useful as we search for demand and market segmentation indicators.

- "Money Talks: Conversations with Poor Households in Bangladesh about Managing Money" by Rutherford (May 2002): This study is also part of the Financial Diaries series. It is based on financial records kept for one year with 42 households in Bangladesh. Researchers interviewed households twice per month and recorded demand for financial services through qualitative interviews. The study finds that the poor actively manage their financial resources through a variety of formal and informal financial instruments (the author found 33). Most households combine a number of these services, ranging from formal banks and insurance company services to local informal services. Households use a wide range of financial instruments to build "lump sums" of money for immediate expenditure, rather than to build up long-term large financial assets or to hold high-value long-term debt. The author finds that the poor demand a secure place to store money and access to overdraft facilities or other forms of small-scale household credit.

- "Fine-Grain Finance" by Ruthven (December 2002): Like other studies in the Financial Diaries collection, this study tracks a sample of households over the course of a year and records their income and expenditure cycles. Focused on poor, medium and better off families in two Indian villages, the study chronicles the financial service providers (e.g., family, friends, pawn brokers, MFIs, banks) used by these households. The study discusses how effectively households at different prosperity levels can access financial services. Savings services are found to be an important service for better off households, but are underutilized by poorer households due to irregular incomes and high number of financial shocks. Demand is assumed based upon the use (or non-use) of financial services and is supported by qualitative interviews with household members.

III. Impact of Savings

While the positive impact of microfinance services is frequently referenced, the majority of claims are based on anecdotal evidence. Of the limited impact work that has been conducted, most is focused on microcredit, not microsavings. The reasons are many: primarily, proving impact requires in-depth, technical and expensive studies and savings services for the poor have only recently appeared on many MFIs' radar screens.[2] Our literature review reveals a limited number of quantitative impact studies of varying scope and quality that focus on microsavings.[3] This section provides a summary and critical review of eight such studies. Two of the studies included in the following discussion (Studies 6 and 8) offer an analysis of the impact of savings relative to credit.

STUDY 1: "EFFECTS OF FINANCIAL ACCESS ON SAVINGS BY LOW-INCOME PEOPLE" (APORTELA, DECEMBER 1999).

Summary and purpose:

- This is a natural experiment based upon the expansion of a Mexican savings institute targeted to low-income people. The treatment group includes those towns that were included in the expansion (the bank increased its number of branches and developed new savings instruments); the control group includes those towns that were not included in the expansion.

- The study compares household data before the expansion with data after the expansion for both treatment and control groups. Because the savings program was only expanded in certain towns in Mexico, the study administrators can analyze the before and after effects using the difference-in-differences method of program evaluation.

- This study analyzes the impact of increasing access to financial services on the savings rate of poor.

- It also analyzes the effect of increasing poor people's access to financial services on the crowding out of informal savings services.

- It uses regression analysis to determine the characteristics most affecting savings rates.

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2 Notable exceptions exist. For example, Bank Rakyat Indonesia has been mobilizing high levels of poor people's savings since the mid-1980s. Credit unions are also successful at collecting deposits, at least in part due to their favorable cost structure (see www.woccu.org).

3 In addition to the literature search discussed in the introduction, the search for impact studies included articles from the "Impact" section of CGAP's Savings Information Resource Center (www.cgap.org/savings).

Findings:

- The expansion of a savings program increased the average savings rate of households by nearly five percentage points.
- For the poorest households, this effect was more than seven percentage points in some cases.
- The expansion had no effect on the savings rate of high income households.
- There is little evidence of crowding out; that is, a considerable part of the increase in household savings could have come from new savings.

Strengths:

- This study uses robust methodologies based on a natural experiment and difference-in-differences evaluation.
- High quality data from detailed household-level data from the Mexican National Surveys of Income and Expenditures is used to evaluate the changes in household savings and other indicators.

Weaknesses:

- Not very replicable, as it relies on an exogenous expansion of a savings program. Orchestrating such an expansion for the purposes of an impact evaluation would be very costly.

Indicators:

- Dependent/ outcome variables:
    - Saving rates
    - Income (for difference-in-differences only)
    - Household size (for difference-in-differences only)
    - Age of household head (for difference-in-differences only)
    - Education (for difference-in-differences only)
    - Number of income recipients (for difference-in-differences only)
    - Number of children (for difference-in-differences only)
- Independent variables:
    - Level of household income
    - Gender of household head

- Age of household head
- Education level
- Type of employment (blue collar, self-employed, etc.)
- Employment stability
- Availability of medical service

STUDY 2: ASHE, JEFFREY. MARCH 2005. "BANKING ON THE POOR: SAVINGS AND LENDING GROUPS FOR THE POOR," OXFAM AMERICA, BOSTON, MA.

Summary and purpose:

- This paper describes Oxfam and Freedom from Hunger's "savings led" microfinance program, which is modeled after the traditional ROSCA. The program features pooled savings, lending at interest and simple record keeping in addition to the traditional ROSCA system. The program also teaches malaria prevention.
- In the future, the program will include a monitoring and evaluation system, described below, to measure long-term impact.

Findings:

- This study describes a program only recently underway. Therefore, no findings are available at this time.

Strengths:

- The indicators collected will be compared with counterfactual data from non-program villages. If done using a robust methodology, this will provide good insight into the impact of savings on the lives of the poor.
- The indicators (see "outcome variables" below) get at fundamental quality of life issues.

Weaknesses:

- It is not articulated how some of the more nebulous indicators (e.g., "change in empowerment" and "change in confidence level") will be measured.

Indicators:

- Dependent/ outcome variables:
    - Proportion of clients among the poorest, the emerging poor and the better off (based on wealth-ranking tool)
    - Change in household income

- Change in other indicators of poverty, including changes in assets (livestock, productive assets form business or agriculture and household items), housing, diet, health, and number of children in school

- Change in savings rate

- Change in number of members with a business

- Change in quality of businesses, including sales trends, diversity of activities and failure rates

- Change in the use of moneylenders

- Change in empowerment/ leadership of women, including changes in confidence level, decision-making, family relations, physical violence

- Change in health practices and the level of health knowledge

- Change in level of mutual assistance among group members

- Change in community involvement, including participation in community projects/ social justice campaigns, interaction with officials, civic participation

- Change in literacy

STUDY 3: "TYING ODYSSEUS TO THE MAST: EVIDENCE FROM A COMMITMENT SAVINGS PRODUCT IN THE PHILIPPINES" (ASHRAF ET AL, JULY 2005).

Summary and purpose:

- This study is a randomized control experiment aimed at determining the difference in savings levels for those who are offered a commitment savings product (the treatment group) and those who are not (the control group). The commitment savings account requires that clients commit to not withdraw their funds until they reach a goal date or amount.

- The study examines whether those with "hyperbolic preferences" (impatient now; patient later) are more likely to open such accounts.

- The study also tests whether such individuals save more as a result of opening the account.

- Regression analysis allows the authors to target the characteristics most affecting the outcome variables.

- This is a demand study in that it evaluates what types of people are most likely to take up this savings product (discussed in Section II).

- This is an impact study in that it looks at the changes in savings as a result of the product.

Findings:

- The demand (or "take-up") findings are described in Section II above.

- The commitment savings product generates a strong positive impact on savings levels. Those who were offered the savings product (including both those that took up the product and those that did not) increased their average savings balances by 81 percentage points after 12 months (relative to those who were not offered the product).

- Those who actually took up the savings product increased their average savings balances by 318 percentage points (relative to those who were not offered the savings product but would have taken it up had they been).

Strengths:

- Very strong methodology and analysis. Randomized control methodology is the "gold standard" of impact evaluation.

- Baseline survey data can be used in later impact studies (see Ashraf et al, 2005 and 2006 below).

Weaknesses:

- The study only looks at characteristics associated with take-up and the impact of offering the product on the savings rates of participants. It does not look at the social impact of the product on poverty levels or other measures of client well-being.

- Sample consists of adult bank clients who have savings accounts and identifiable addresses (may be biased toward richer clients).

Indicators:

- Dependent/ outcome variables:

    - Take-up of the commitment savings product

    - Change in total savings balances (after 6 months and after 12 months)

- Independent variables (used in take-up analysis):

    - Patience/ impatience now and in the future

    - Gender

- Marital status
- Education level
- Household size
- Employment status
- Age
- Bank status
- Household income

STUDY 4: "DEPOSIT COLLECTORS" (ASHRAF ET AL, DECEMBER 2005).

Summary and purpose:

- This study is a follow-on to "Tying Odysseus to the Mast" (Study 3). In "Deposit Collectors," the bank offers door-to-door deposit collection service to customers with savings accounts in five neighborhoods in the Philippines.
- The purpose of this study is to investigate determinants of participation in a deposit collection service and evaluate the impact of offering such a service to microsavers.
- Regression analysis allows the authors to target the characteristics most affecting the outcome variables.
- It is a demand study in that it looks at what types of people take up the service (see Section II).
- It is an impact study in that it evaluates the savings that participants accumulated and the impact of participation on borrowing rates.

Findings:

- The demand findings are described in Section II above.
- Those offered the collection service saved 188 pesos more than those not offered the service.
- Those offered the service were slightly less likely to borrow from a bank.
- The amount deposited through door-to-door collection service varied greatly: seven percent of clients saved over 3,000 pesos, while 40 percent of those who took up never used the service. On average, the impact is positive relative to savings changes of clients in the control neighborhoods.

Strengths:

- Methodologically strong (randomized control trial, the gold standard of impact evaluation).

Weaknesses:

- Similar to Study 3, this study only looks at the impact of the treatment on the amounts people save; it does not provide insight into the effect of the treatment on other measures of welfare.

Indicators:

- Dependent/ outcome variables:
    - Take up of savings product
    - Savings rates
- Independent variables:
    - Pre-intervention savings balances
    - Borrowing status
    - Household income
    - Gender
    - Age
    - Hyperbolic preferences obtained from hypothetical time preference questions
    - Level of education
    - Marital status
    - Household size
    - Employment status
    - Distance to bank

STUDY 5: "HOUSEHOLD DECISION MAKING AND SAVINGS IMPACTS: FURTHER EVIDENCE FROM A COMMITMENT SAVINGS PRODUCT IN THE PHILIPPINES" (ASHRAF ET AL, MAY 2006).

Summary and purpose:

- This study is a follow-on to "Tying Odysseus to the Mast" and "Deposit Collectors" (Studies 3 and 4, reviewed above). Here, the evaluators examine the impact of the commitment savings product on household decision making power and savings attitudes of the same clients in the Philippines.

- The methodology used here is based upon the randomized control experiment used in previous Ashraf studies. Additional data is also collected through a household survey with questions about decision making, savings attitudes, recent purchases, and assets.

- Regression analysis allows the authors to target the characteristics most affecting the outcome variables.

Findings:

- Commitment devices for savings could benefit those who have problems with self-control as well as familial or spousal control issues. The commitment product leads to more decision making power in the household for women, and likewise more purchases of female-oriented durable goods.

- The study finds that the product leads time inconsistent women to become disciplined savers.

- The 81 percent increase in savings after one year (reported in Ashraf et al, July 2005) did not crowd-out savings held outside of the participating bank.

- In the longer-term (2.5 years), the impact on bank savings dissipated to a 33 percent increase (which is no longer statistically significant).

Strengths:

- The new survey specific to "Household Decision Making and Savings Impact" study is conducted with 92 percent of the participants of the baseline survey. Respondents from the control and treatment groups participated equally in this second survey. This high rate of response and even participation across groups leads to credible results.

- This study builds upon robust data collected and analyzed in previous studies.

- The study measures the actual impact of the commitment savings product on several important quality of life indicators (household decision making power, savings attitudes and actual savings).

- The study focuses solely on impact (does not discuss issues of take-up).

Weaknesses:

- The reasons for the diminished impact on savings in the long-term are not clear; further research is needed to suggest ways to improve long-term savings rates.

Indicators:

- Dependent/ outcome variables:

    - Household decision making power (indexed to indicate if spouse/ respondent/ couple have the power to decide: what to buy at the market, expensive purchases, giving assistance to family members, family purchases, recreational use of the money, personal use of the money, number of children, schooling of children, and use of family planning).

    - Purchase of consumer durables (including house repair, female-oriented durables, other durables)

    - Self-reported savings attitudes

    - Savings amounts (12 months)

    - Savings amounts (32 months)

    - Total assets

    - Total debt

    - Applied for a loan

- Independent variables:

    - Decision-making power, baseline survey

    - Treatment or control group

- Qualitative survey questions:

    - Reasons for not withdrawing savings funds (for those who did not withdraw)

    - Items on which those individuals that did withdraw spent their money

STUDY 6: "MANAGING RESOURCES, ACTIVITIES, AND RISK IN URBAN INDIA: THE IMPACT OF SEWA BANK" (CHEN AND SNODGRASS, SEPTEMBER 2001).

Summary and purpose:

- This study, part of the Assessing the Impact of Microenterprise Services (AIMS) series, is based on panel data collected from 798 respondents (SEWA Bank's savings clients and credit clients, and a control group of non-clients) collected in 1998 (Round 1) and 2000 (Round 2).

- The purpose of this study is to measure the impact of credit and savings services on poor, urban Indian women.

- Comparisons of key indicators were made for each group over time (Rounds 1 and 2); statistical analyses were performed to determine the changes in key indicators over time using ANOVA (which tests differences in key indicators over time) and ANCOVA (which tests differences in impact variables over time while controlling for unrelated variables, thus reducing biases).

- In addition to quantitative data analysis, the study authors conduct interviews with a small sample of SEWA borrowers to understand how microfinance services help them cope with everyday challenges.

Findings:

- Savings may be more beneficial to poor households than credit, although credit is often necessary to overcome financial shocks.

- Borrowers are the most well-off group, followed by savers. Non-clients have the lowest incomes. Poverty rates for both savers and non-clients improved between the two rounds. Interestingly, the poverty rate worsened between Rounds 1 and 2 for borrowers, but repeat borrowers do show greater improvements than one-time borrowers.

- From Round 1 to Round 2, savers exhibited the highest increase in income (8.3 percent). Borrowers also increased their income, but to a smaller degree (7.8 percent) than savers. Non-clients exhibited the smallest increase in income (3.3 percent).

- Household level findings: SEWA's credit and savings services are found to affect several outcome variables, including household income, spending on housing improvements, spending on school enrollment, income diversification, expenditure on food, and the ability to cope with financial shocks. Furthermore, repeat borrowers exhibited greater increases in income, spending on household improvements and consumer durables, primary school enrollment rates for girls, and food expenditure than one-time borrowers.

- Enterprise level findings: The analysis reveals that the impact at the enterprise level is somewhat negative. Microenterprises raised their revenues between rounds, but the increase was not clearly linked to participation in financial services. No impact was detected on the microenterprise of the borrower herself or the fixed assets of the microenterprise. The authors suggest that these results may be due to external factors (e.g., high competition levels, regulatory problems and payment conflicts) within the microenteprise sector in the area the study was carried out.

- Individual level findings: Repeat borrowers benefit from SEWA's credit and savings services the most. Impacts include increased participation in household decision-making for borrowers, and higher use of personal savings accounts.

- The case studies indicate that women clients benefit from other programs of SEWA Bank and its sister institutions, such as increasing the prices of their goods through collective bargaining, securing scholarships for their children, and accessing subsidized housing.

Strengths:

- This study employs a strong methodology consisting of a longitudinal quantitative survey and statistical analysis combined with in-depth case study interviews to understand, qualitatively, the challenges and needs of SEWA borrowers. The detailed survey data collected and the statistical analyses performed (ANOVA and ANCOVA) on the data lead to a rigorous analysis with credible results.

- Unlike most of the impact studies reviewed, this study examines both savings and credit services.

- The authors assess impact at three levels: household, enterprise and individual. This provides a comprehensive picture of the effect of savings, credit or no services on the urban poor.

Weaknesses:

- The treatment groups (savers and borrowers) and control groups (non-clients) are self-selected and so there may be inherent differences between the three groups that will confound potential impacts. For example, savers and borrowers may be more ambitious than non-clients; or borrowers may be more risk-seeking than savers. These fundamental characteristics may effect the outcome variables beyond what can be attributed to use or non-use of SEWA's services.

- Qualitative study was only conducted with a sample of borrowers (no savers or non-clients were included).

- The study focuses on urban areas only; these results therefore do not apply to rural areas.

- Round 1 of the survey takes place years after the SEWA program has already begun. Therefore, the study may miss some of the effects of the program as changes may have occurred after the SEWA program started but before the evaluation began.

Indicators:

- Dependent/ outcome variables:

    - Household income

    - Household income sources

    - Housing quality

- Ownership of major household appliances and motor vehicles
- Educational participation by children
- Expenditure on food
- Effectiveness in coping with shocks
- Enterprise revenues
- Fixed assets of enterprise
- Number of employees of enterprise
- Quality of enterprise's transactional relationships
- Client's control over resources and income within the household economic portfolio
- Client's self-esteem
- Client's self-confidence
- Client's ability to deal with the future

STUDY 7: "EVALUATION OF THE ECONOMIC IMPACT OF THE SAVINGS CREDIT PROGRAM IN DINH QUÁN PROJECT" (KERVYN, 2000).

Summary and purpose:

- This study evaluates a savings-credit program that took place in four communes in the Dong Nai province of Vietnam from 1995 through 2000.
- The savings-credit program is based on the Grameen model: only the poor are invited to join at the beginning (after 2 years, others may join); Women form groups of five; savings are compulsory, but the weekly deposit is decided by the group itself. After two months, loans are offered to participants. Amounts increase for subsequent borrowing cycles. Village workers, chosen by the groups and by the project administrators, oversee between 45 and 70 groups each.
- The project ended after five years due to conflicts with a district politician.

Findings:

- This study finds extraordinary improvements in participants' incomes, access to capital, housing, indebtedness and interest rates on their debt.

Strengths:

- The second round of data was collected using a detailed household survey methodology.

- The outcome variables examined in this study address several particularly interesting quality of life issues of the poor.

- While the evaluation itself is flawed (see below), the program itself seems to be decent – if not too ambitious. In addition to the savings-credit program, the project included programs for agriculture and livestock, health education, education theatre, community libraries, literacy and employment creation. Given that the authors find it is "impossible to measure the economic impact of such programs," the report only evaluates the economic impact of the savings-credit program.

Weaknesses:

- This study has many shortcomings. First and foremost, there is no counterfactual. That is, there is no mechanism in the study methodology that allows us to compare the results for those that participated in the credit-savings program with a feasible control group (a group that is similar in every way except for their participation in the credit-savings program). To explain their causation conclusions without a counterfactual, the study authors state: "We have discussed these results with the village workers to understand if exogenous factors were not responsible for this huge improvement. In conclusion, the village workers and we are convinced the project has been the key factor." Without a viable counterfactual, the conclusions are spurious.

- The data collection process is flawed. The baseline surveys yielded impossibly low income results ("insufficient to survive"). To remedy the low figures, the study administrators "arbitrarily corrected the data upwards, up to what we estimate is a reasonable minimum level." While the authors have confidence in the figures collected after the intervention, comparisons between the two datasets are unreliable because of the arbitrary adjustments to the baseline figures.

Indicators:

- Dependent/ outcome variables:

    - Number of family members

    - Quality of housing

    - Value of house

    - Capital

    - Cash savings

- Income from agriculture
- Income from livestock
- Family income
- Indebtedness
- Interest rates (on alternative credit sources)

STUDY 8: "THE IMPACT OF ACCESS TO CREDIT ON THE SAVING BEHAVIOR OF MICROENTREPRENEURS: EVIDENCE FROM 3 LATIN AMERICAN COUNTRIES" (ROGG, APRIL 2000).

Summary and purpose:

- The study compares household level data in three countries (Ecuador, El Salvador and Paraguay) for people with access to formal credit (from a commercial bank or a microfinance institution) and those without.
- The purpose of the study is to test whether increasing access to loans corresponds with an increase in the amount of savings that microentrepreneurs hold in deposit accounts.
- The study attempts to answer the question of whether credit deters saving among the poor, since credit mitigates the precautionary saving motive and the accumulation of savings for investment, household purchases or social events becomes less important.

Findings:

- The study finds that credit actually induces borrowers to save. Borrowers save more than non-borrowers in all three countries (that is, there is a positive correlation between access to credit and savings deposits).
- This may be because obtaining credit and making regular repayments introduces entrepreneurs to formal financial intermediaries and increases their confidence in and understanding of the institutions' operations and services.
- Findings were corroborated by econometric analysis, which also provided a more detailed look at the characteristics of savers vs. non-savers.
- The statistical analysis finds that age, education, the presence of an additional source of income (besides the microenterprise), and type of business significantly affect whether an individual saves in a deposit account of a formal institution.

Strengths:

- The statistical analysis performed is rigorous and includes a logical group of independent variables.

Weaknesses:

- Analysis is only performed on cross-sectional data (data collected for a sample of people in a single time period) instead of the more desirable longitudinal data (data collected for a sample of people where each person is observed over time).

- The study simply compares the savings rates of borrowers with non-borrowers; it is not proven that the counterfactual (non-borrowers) have the same characteristics to begin with as the borrowers. Therefore, the higher savings rates among borrowers may or may not be caused by their use of credit, as the paper argues (that is, borrowers may simply have been wealthier than non-borrowers from the beginning).

- The authors acknowledge that the savings data may be inaccurate or difficult to interpret due to reporting inaccuracies and the fact that savings are prone to being inconsistent over time.

- While this study examines how various household and enterprise characteristics affect savings, it does not examine how these savings affect the lives of the poor.

- Surveys were only conducted in capital cities or just outside the capital cities; it does not address rural poverty.

Indicators:

- Dependent/ outcome variables:

    - Savings deposits

- Independent variables:

    - Access to credit from commercial banks

    - Access to credit from MFIs

    - Gender

    - Number of children (also a proxy for household size)

    - Marital status

    - Level of education

    - Age

- Whether or not the household has additional sources of income (such as a pension) besides the microenterprise income

- Type of business (more capital-intensive enterprises require more investment, which should lead to more saving in the presence of borrowing constraints)

- Length of time the entrepreneur has been in business (investment dynamics change over the lifetime of a business)

- Value of the business

- Ownership of the premises (rent-payers have an additional expenditure item that reduces the share of income that can be saved)

IV. Analysis and Indicators

As noted, all of the studies reviewed in Section III have both strengths and weaknesses. As we look to pursue savings evaluation programs in the future, it is helpful to draw lessons from the types of studies conducted so far and to assess the indicators commonly – and not so commonly – used to measure impact.

TYPES OF IMPACT STUDIES:

In the savings impact literature, we encounter two types of high quality studies. The first, a randomized experiment, is used in the three studies by Ashraf et al (July 2005, December 2005 and May 2006). The second, a natural experiment, is discussed in Aportela (1999).

Randomized Experiment:

The three studies conducted by Ashraf et al are randomized experiments, which are considered the gold standard of impact evaluation. In a randomized experiment, the study administrators randomly assign participants into either a treatment group, designated to receive the "treatment" (in our cases, the savings interventions) or a control group, who do not receive the treatment. If the assignment is truly random (and the Ashraf studies prove statistically that they are), then we can confidently conclude that differences between the control groups and the treatment groups after the intervention are attributable to the treatment itself.

In "Tying Odysseus to the Mast" and "Deposit Collectors," Ashraf et al perform a series of regressions (including OLS, probit and quantile regressions) to understand the influence of various demographic and economic characteristics, such as gender, marital status, education level, age and household income on savings rates. In "Tying Odysseus to the Mast," the authors perform regressions on the treatment, control and marketing (those who receive door-to-door marketing for the product) groups to understand the role of the intent-to-treat (ITT) – simply being offered the commitment savings product. The results of these regressions confirm that the increases to savings rates within the treatment group are due to the product itself, and increases cannot be attributed to the marketing campaign.

Randomized experiments are methodologically very strong and the results are reliable. The major shortcoming of studies based on this methodology are that they can be expensive, although MIT's Poverty Action Lab argues that they are able to conduct such experiments quite cost-effectively, particularly considering the high cost of instituting a poorly-researched and thus poorly-designed policy or program.

Natural Experiment:

"Effects of Financial Access on Savings by Low-Income People" (Aportela, December 1999) is a natural experiment that uses difference-in-differences and regression analyses to attribute the improvements in savings rates to the expansion of an institution's formal savings program.

A natural experiment is an excellent impact evaluation methodology. It occurs when one group is randomly assigned to the treatment group and one group is randomly assigned to the control group as a result of natural occurrence (i.e., not for the purposes of the experiment itself). In the Aportela study, the expansion of the savings program to certain towns does appear to be random; that is, towns in which the program was expanded do not seem to be fundamentally different from those that were not selected for expansion.

By comparing the means of key outcome (dependent) variables (e.g., savings rates, income, household size and education level) for non-expansion towns in 1992 and 1994, we can see the incremental changes that would have occurred in the expansion towns had they not been subjected to the expanded savings program. By comparing the before and after means of the outcome variables for the expansion towns versus the non-expansion towns, we are able to quantify the impact of the expanded savings programs (difference-in-differences methodology). Regression analysis (probit and OLS) provides greater detail on the characteristics that best predict savings rates in the sample.

OUTCOME VARIABLES:

The outcome variables in most of the savings impact studies focus on the savings rates of the target group (poor or low-income households). While it is important to see the effect of product features and client characteristics on savings rates, these offer few clues as to how savings affect the actual well-being of the poor. Unless we evaluate such indicators that get at quality of life issues – assets, debt levels, income, expenditures, quality of housing, education levels, poverty levels, decision-making capabilities – we do not observe the social impact that savings services can have on the lives of the poor.

Study 2 "Banking on the Poor: Savings and Lending Groups for the Poor" (Ashe, 2005) also a series of innovative impact indicators. Indicators such as changes in an individual's housing, diet, health, and number of children in school are proposed for future impact evaluations. Other non-traditional indicators include changes in quality of a client's business; change in the use of moneylenders; change in women's empowerment; changes in health practices and the level of health knowledge; changes in community involvement; and literacy improvement. While some of these indicators are difficult to measure, if collected and analyzed using the appropriate methodology, they will provide fascinating insights into quality of life issues of the poor.

In Study 5, "Household Decision Making and Savings Impacts: Further Evidence from a Commitment Savings Product in the Philippines" (May 2006), Ashraf et al uses a very interesting outcome indicator to measure women's well-being: household negotiation power. This is measured by changes in the types of household purchases that are made as a result of the savings intervention. This indicator gets at a fundamental quality of life issue that is not often explored.

Study 6, "Managing Resources, Activities, and Risk in Urban India" (Chen et al, September 2001) features a series of outcome indicators that assess the impact of savings and credit services at the individual, enterprise and household level. Individual indicators include self-esteem and self-confidence, ability to deal with the future, and control over household finances. Enterprise-level indicators include revenues, fixed assets of the business, and number of employees. Finally, household-level indicators include household income, number of household income sources, quality of the home, asset ownership and children's education levels. This approach effectively evaluates both quality of life indicators and financial indicators, providing a comprehensive depiction of the impact of financial services at three important levels.

Study 7, "Evaluation of the Economic Impact of the Savings-Credit Program in Dinh Quán Project, Vietnam" (Kervyn, 2001), while poor in quality, does evaluate some interesting outcome variables. Here the evaluators attempt to measure a wide variety of indicators related to quality of life – including family size, housing quality, home value, capital, cash savings, family income, indebtedness, access to capital and reduction in interest rates on loans.

As for internal measurements to determine the success of savings products, MFIs tend to look at savings from the standpoint of their corporate financial strategy. They measure volume of savings and evaluate how much savings mobilization reduces the cost of capital to the institution. At this point, we found no cases that measure it from the client welfare perspective. For example, in "How Should Microfinance Institutions Best Fund Themselves?" (Maisch et al, August 2005), the outcome variables discussed for savings programs – volume of savings, cost of savings programs, average account balances – deal with the ultimate cost and benefits to the institution, not the social impact on the microsaver.

V. Summary and Lessons Learned

The scarcity of empirical microsavings studies reflects the lack of both savings and impact literature within the microfinance field. However, donors and researchers are more recently realizing the importance of rigorous studies to quantify the demand for and impact of savings services for the poor. Based upon new and better quality studies that have become available in just the past several years (e.g., Ashraf et al, December 2005, July 2005, and May 2006; Collins, 2005; Hirschland, 2005; Rutherford, 2003; Ruthven, 2002), practitioners can design more appropriate savings products and begin to monitor their effectiveness in improving the lives of the poor.

In designing an impact evaluation for savings products, our analysis of the existing literature offers the following lessons:

1. When possible, evaluators should collect and analyze impact indicators (dependent variables) that provide insight into quality of life issues of the poor. While variables such as savings rates are worth assessing, to truly understand the impact of savings services, evaluators should attempt to measure lifestyle indicators such as: changes in income, poverty levels, household dynamics (e.g., decision-making power), schooling rates, key health indicators, debt levels, asset levels, and self-esteem. While some of these quality of life indicators may be difficult to measure, they capture important outcomes that are not always reflected in more traditional measures.

2. All experiments should be designed and carried out based on impact evaluation best practices. That is, any experiment design, must have a credible counterfactual, an unbiased data collection tool and a robust analytical methodology. When designing impact studies, there is a fine line between academic rigor and practicality, and so evaluators must be realistic about the trade-offs. Some bias will exist in nearly every impact evaluation, and it is up to the evaluator to clearly state any biases and describe how they have been mitigated. Using a robust methodology such as a randomized experiment can be expensive, but having access to high quality data and reliable results will save money, time and effort in the long run.

3. The results from one study are not necessarily applicable to all situations. Before assuming that the findings from one program apply to another, evaluators should consider how basic differences in the populations may change the outcome variables. For example, the impact of a savings program on the decision-making power of a female client may be significant in one country, but may make no difference in a country that is lacking in basic women's rights.

4. While none of the types of empirical studies discussed in this paper are abundant, there is a particular gap in MFI-level impact and demand studies. This is due primarily to the fact that these studies are generally used for product development and are therefore confidential. However, summaries or general findings could be

released which would benefit the broader industry while maintaining the proprietary details for the MFI. A valuable research project may be to collect these summaries, working with MFIs to summarize them, identifying the most informative and accessible indicators, and publishing the general findings for use by microfinance researchers and practitioners.

References

Aportela, Fernando. December 1999. “Effects of Financial Access on Savings by Low-Income People.” Banco de México Research Department, Mexico City, Mexico

Ashe, Jeffrey. March 2005. “Banking on the Poor: Savings and Lending Groups for the Poor,” Oxfam America, Boston, MA.

Ashraf, Nava, Dean S. Karlan and Wesley Yin. May 2006. “Household Decision Making and Savings Impacts: Further Evidence from a Commitment Savings Product in the Philippines.” Yale University, New Haven, CT.

Ashraf, Nava, Dean S. Karlan and Wesley Yin. December 2005. "Deposit Collectors." Yale University Economic Growth Center Discussion Paper No. 930. New Haven, CT.

Ashraf, Nava, Dean S. Karlan and Wesley Yin. July 2005. “Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines.” Economic Growth Center, Yale University, New Haven, CT.

Ashraf, Nava, Nathalie Gons, Dean S. Karlan and Wesley Yin. June 9, 2003. "A Review of Commitment Savings Products in Developing Countries.” Abdul Latif Jameel Poverty Action Lab, Massachusetts Institute of Technology, Cambridge, MA.

Bakeine, Amos S. N. July 2001. “An analysis of the factors affecting the demand for savings services by rural savers in Uganda: A Case Study of Kibaale District.” Alternative Finance, London UK.

Brand, Monica. 2003. “Market Intelligence: Making Market Research Work for Microfinance.” InSight #7, ACCION International, Boston, MA.

Chen, Martha and Donald Snodgrass. September 2001. “Managing Resources, Activities, and Risk in Urban India: The Impact of SEWA Bank.” Assessing the Impact of Microenterprise Services (AIMS), Management Systems International, Washington, D.C.

Collins, Daryl. 2005. “Stocks and Flows – Quantifying the Savings Power of the Poor.” Financial Diaries, Cape Town, South Africa.

Consultative Group to Assist the Poorest / The World Bank Group. February 2005. “Developing Deposit Services for the Poor.” Washington, D.C.

Consultative Group to Assist the Poorest. June 2002. “Savings are as Important as Credit: Deposit Services for the Poor.” CGAP Donor Brief No. 4, Washington, D.C.

Consultative Group to Assist the Poorest. Savings Information Resource Center: www.cgap.org/savings

de Montoya, Monica Lindh., Rani Deshpande, and Jasmina Glisovic-Mezieres. January 2006. “CGAP Country Level Savings Assessment: Bosnia.” CGAP, Washington, D.C.

Deshpande, Rani, Mark Pickens and Hermann Messan. April 2006. “Uganda Country-Level Savings Assessment.” CGAP Savings Initiative, CGAP, Washington, D.C.

Fiebig, Michael, Alfred Hannig and Sylvia Wisniwski. 1999. "Savings in the Context of Microfinance- State of Knowledge." CGAP, Washington, D.C.

FinScope. 2006. www.finscope.com, a program of FinMark Trust, South Africa.

Gardiol, Isabel Dauner, Brigit Helms and Rani Deshpande. August 2005. "Philippines: Country Level Savings Assessment." CGAP Savings Initiative, Washington, D.C.

Gugerty, Mary Kay. 2003. "You Can't Save Alone: Testing Theories of Rotating Savings and Credit Organizations." University of Washington, Seattle, WA.

Hannig, Alfred and Sylvia Wisniwski. "Microsavings: The Experience of Seven Deposit Taking Institutions." Office of Development Studies, Bureau for Development Policy, United Nations Development Programme, New York, NY.

Helms, Brigit, Rani Deshpande, Mark Pickens and Nazaire Sado. August 2005. "Benin: Country Level Savings Assessment." CGAP Savings Initiative, Washington, D.C.

Hirschland, Madeline, ed. 2006. Savings Services for the Poor: An Operational Guide. Kumarian Press, Hartford, CT.

Klaehn, Janette, Brigit Helms and Rani Deshpande. March 2006 (3rd edition). "CGAP Country Level Savings Assessments: Mexico." CGAP Savings Initiative, Washington, D.C.

Kervyn, Bernard. 2001. "Evaluation of the economic impact of the savings-credit program in Dinh Quán project, Vietnam." Commune Women's Unions, Vietnam Plus, CEC, Oxfam-Solidarité.

Maisch, Felipe Portocarrero, Álvaro Tarazona Soria and Glenn Westley. August 2005. "How Should Microfinance Institutions Best Fund Themselves?" Inter-American Development Bank, Washington, D.C.

Moyo, Sibusiso, David Musona, Wilfred T. Mbhele and Gerhard Coetzee. March 2002. "Use and Impact of Savings Services Among Low Income People in South Africa." MicroSave-Africa, Nairobi, Kenya.

Musoke, Isaac. 2004. "Knowledge, Attitudes and Practices of Consumers of MFI Services in the Districts of Masaka and Mbale." CDFU and DFID-FSDU. Kampala, Uganda.

Mutesasira, Leonard, Henry Sampangi, Harry Mugwanga, John Kashangaki, Florence Maximambali, Christopher Lwoga, David Hulme, Graham Wright and Stuart Rutherford. May 1999. "Savings and the Poor: The Methods, Use and Impact of Savings by the Poor of East Africa." MicroSave, Kampala, Uganda.

Pelrine, Richard and Olive Kabatalya. September 2005. "Savings Habits, Needs and Priorities in Rural Uganda." USAID Rural SPEED. Kampala, Uganda.

Richardson, David. February 2000. "Unorthodox Microfinance: The Seven Doctrines of Success." MicroBanking Bulletin, No 4: 3-7, Washington, D.C.

Robinson, Marguerite. 1995. "Paradigm Shift in Microfinance: A Perspective from HIID." Harvard Institute for International Development, Harvard University, Cambridge, MA.

Rogg, Christian S. April 2000. “The Impact of Access to Credit on the Saving Behavior of Microentrepreneurs: Evidence from 3 Latin American Countries.” University of Oxford, UK.

Rutherford, Stuart. May 2002. “Money Talks: Conversations with Poor Households in Bangladesh about Managing Money.” Finance and Development Research Programme Working Paper Series. Manchester, UK.

Rutherford, Stuart. 1999. The Poor and Their Money. DFID. Oxford University Press, New Delhi, India.

Ruthven, Orlanda. November 2001. “Money Mosaics: Financial Choice and Strategy in a West Delhi Squatter Settlement.” School of Environment and Development, The University of Manchester, UK.

Ruthven, Orlanda and Sushil Kumar. 2002. “Fine-Grain Finance: Financial Choice & Strategy Among the Poor in Rural North India.” Finance & Development Working Paper 57, IDPM, University of Manchester, UK.

Schreiner, Mark and Héctor Horacio Colombet. 2001. “From Urban to Rural: Lessons for Microfinance from Argentina.” Development Policy Review Vol. 19, No. 3, pp. 339-354, Overseas Development Institute, London, UK.

USAID’s Rural SPEED (www.speeduganda.org/), Kampala, Uganda.

Wright, Graham A.N. 2005. “Developing Products Based on Market Research” in Savings Services for the Poor. Edited by Madeline Hirschland. Kumarian Press, Hartford, CT.

Wright, Graham A.N. September 1999. “A Critical Review of Savings Services in Africa and Elsewhere.” MicroSave, Nairobi, Kenya.

Zeller, Manfred. 1995. “The Demand for Financial Services by Rural Households: Conceptual Framework and Empirical Findings.” IFPRI, Washington, D.C.

DEMAND STUDIES REVIEWED:

Bakeine, Amos S. N. July 2001. “An analysis of the factors affecting the demand for savings services by rural savers in Uganda: A Case Study of Kibaale District.” Alternative Finance, London UK.

Collins, Daryl. 2005. “Stocks and Flows – Quantifying the Savings Power of the Poor.” Financial Diaries, Cape Town, South Africa.

Consultative Group to Assist the Poorest / The World Bank Group. February 2005. “Developing Deposit Services for the Poor.” Washington, D.C.

Consultative Group to Assist the Poorest. June 2002. “Savings are as Important as Credit: Deposit Services for the Poor.” CGAP Donor Brief No. 4, Washington, D.C.

de Montoya, Monica Lindh., Rani Deshpande, and Jasmina Glisovic-Mezieres. January 2006. “CGAP Country Level Savings Assessment: Bosnia.” CGAP, Washington, D.C.

Deshpande, Rani, Mark Pickens and Hermann Messan. April 2006. “Uganda Country-Level Savings Assessment.” CGAP Savings Initiative, CGAP, Washington, D.C.

Fiebig, Michael, Alfred Hannig and Sylvia Wisniwski. 1999. "Savings in the Context of Microfinance- State of Knowledge." CGAP, Washington, D.C.

FinScope. 2006. www.finscope.com, a program of FinMark Trust, South Africa.

Gardiol, Isabel Dauner, Brigit Helms and Rani Deshpande. August 2005. "Philippines: Country Level Savings Assessment." CGAP Savings Initiative, Washington, D.C.

Hannig, Alfred and Sylvia Wisniwski. "Microsavings: The Experience of Seven Deposit Taking Institutions." Office of Development Studies, Bureau for Development Policy, United Nations Development Programme, New York, NY.

Helms, Brigit, Rani Deshpande, Mark Pickens and Nazaire Sado. August 2005. "Benin: Country Level Savings Assessment." CGAP Savings Initiative, Washington, D.C.

Klaehn, Janette, Brigit Helms and Rani Deshpande. March 2006 (3rd edition). "CGAP Country Level Savings Assessments: Mexico." CGAP Savings Initiative, Washington, D.C.

Maisch, Felipe Portocarrero, Álvaro Tarazona Soria and Glenn Westley. August 2005. "How Should Microfinance Institutions Best Fund Themselves?" Inter-American Development Bank, Washington, D.C.

Pelrine, Richard and Olive Kabatalya. September 2005. "Savings Habits, Needs and Priorities in Rural Uganda." USAID Rural SPEED. Kampala, Uganda.

Richardson, David. February 2000. "Unorthodox Microfinance: The Seven Doctrines of Success." MicroBanking Bulletin, No 4: 3-7, Washington, D.C.

Robinson, Marguerite. 1995. "Paradigm Shift in Microfinance: A Perspective from HIID." Harvard Institute for International Development, Harvard University, Cambridge, MA.

Rutherford, Stuart. May 2002. "Money Talks: Conversations with Poor Households in Bangladesh about Managing Money." Finance and Development Research Programme Working Paper Series. Manchester, UK.

Ruthven, Orlanda and Sushil Kumar. 2002. "Fine-Grain Finance: Financial Choice & Strategy Among the Poor in Rural North India." Finance & Development Working Paper 57, IDPM, University of Manchester, UK.

Schreiner, Mark and Héctor Horacio Colombet. 2001. "From Urban to Rural: Lessons for Microfinance from Argentina." Development Policy Review Vol. 19, No. 3, pp. 339-354, Overseas Development Institute, London, UK.

Zeller, Manfred. 1995. "The Demand for Financial Services by Rural Households: Conceptual Framework and Empirical Findings." IFPRI, Washington, D.C.

IMPACT STUDIES REVIEWED:

Aportela, Fernando. December 1999. "Effects of Financial Access on Savings by Low-Income People." Banco de México Research Department, Mexico City, Mexico.

Ashe, Jeffrey. March 2005. "Banking on the Poor: Savings and Lending Groups for the Poor," Oxfam America, Boston, MA.

Ashraf, Nava, Dean S. Karlan and Wesley Yin. May 2006. "Household Decision Making and Savings Impacts: Further Evidence from a Commitment Savings Product in the Philippines." Yale University, New Haven, CT.

Ashraf, Nava, Dean S. Karlan and Wesley Yin. December 2005. "Deposit Collectors." Yale University Economic Growth Center Discussion Paper No. 930. New Haven, CT.

Ashraf, Nava, Dean S. Karlan and Wesley Yin. July 2005. "Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines." Economic Growth Center, Yale University, New Haven, CT.

Chen, Martha and Donald Snodgrass. September 2001. "Managing Resources, Activities, and Risk in Urban India: The Impact of SEWA Bank." Assessing the Impact of Microenterprise Services (AIMS), Management Systems International, Washington, D.C.

Kervyn, Bernard. 2001. "Evaluation of the economic impact of the savings-credit program in Dinh Quán project, Vietnam." Commune Women's Unions, Vietnam Plus, CEC, Oxfam-Solidarité.

Rogg, Christian S. April 2000. "The Impact of Access to Credit on the Saving Behavior of Microentrepreneurs: Evidence from 3 Latin American Countries." University of Oxford, UK.