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Household Savings in Developing Countries: An Annotated Reading List

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with the Financial Access Initiative Team*

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Spanning literatures

The literature on household savings can be placed in three bins. First, writing by academic economists. Second, essays with practical advice by and for practitioners. And, third, perspectives from historians, anthropologists, sociologists, and unaffiliated development scholars.

The literatures proceed independently. The academics rarely engage with the practitioners, and most have little to say about how to translate ideas into action. The practitioners, for their part, seldom step back to truly question key assumptions and amass rigorous evidence. Economists tend to be particularly insular within the academy, and the "non-economists" are insular in their own ways.

This reading list draws on the three literatures. In keeping with *The Economics of Microfinance*, the economic framework is the starting point. The economics literature sustains the sharpest focus on saving, and it is also, importantly, the place where the motivation to save is taken most seriously as something to interrogate. Practitioners mainly take demand for granted and worry, understandably, about improving the supply side.

While economists look at demand, they do so narrowly, focusing on individual motivations to accumulate. Economists, though, have not been wholly blind to lessons from outside the discipline. Important new work integrates lessons from psychology (as translated into "behavioral economics"). The psychological lens puts a focus on the roles of self-discipline, commitment, and aversion to loss. The historians, sociologists, and

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others provide critical reminders of how much even that misses: they argue that saving is often very much a social activity, sometimes promoted by governments and quite often undertaken jointly with neighbors.

The list is necessarily idiosyncratic. One under-emphasized element is a sustained and rigorous look at the business side of "micro-saving" mobilization. The scant attention below does not stem from its unimportance but from our inability to turn up readings of sufficient interest.

Taken together, the list aims to provide foundations for next steps in thinking about expanding possibilities for saving, especially in poor and low-income communities.

Overview

Armendáriz and Morduch provide the most compact and comprehensive overview of the micro-saving literature. They describe old puzzles and new opportunities.

Armendáriz, Beatriz and Jonathan Morduch. 2005. "Saving and Insurance." (extract) Chapter 6 of *The Economics of Microfinance*. Cambridge, MA: MIT Press. pp. 147-166.
The chapter examines the role of savings (and insurance) in impoverished households. The authors examine the saving behaviors and constraints in poor, multi-generational households. Two types of savings behavior are low frequency savings, which refers to the steady, long-term accumulation in assets; and high-frequency savings, which refers to short-term investments aimed at smoothing consumption. The authors challenge assumptions that poor households are uninterested in saving or that they are too impatient to save. Instead, the poor face significant constraints that prevent them from saving, such as the lack of safe, secure, convenient institutions and effective risk management tools. The authors suggest that institutional design issues such as moral hazard and high costs structures need to be addressed in order to build successful savings banks. Armendáriz and Morduch draw a link between low saving rates and new work in psychology and economics. That work reinforces the larger message that mechanisms matter: low saving rates partly stem from a lack of appropriate saving devices, not a lack of desire to save.

Saving in Development

Gersovitz gives a broad view of the literature in development economics through the 1980s. Though dated, it remains an excellent introduction, particularly on national savings rates. He argues that saving ultimately matters because of its importance in household life, not because of eventual impacts on national-level economic growth.

Gersovitz, Mark. 1988. "Saving and Development." In Hollis Chenery and T. N. Srinivasan, eds *Handbook of Development Economics*, Volume 2. Amsterdam: Elsevier. pp. 381-424.
Choices individuals and families make about their savings form one set of fundamental determinants of national savings. These saving decisions are intimately related to the

nature and extent of the uncertainty and the borrowing constraints faced by individuals. National savings can be aggregated using individual savings by age and income level and then adding the different sectors such as government and corporate. The author argues that government policy towards savings should be guided by efficiency and equity concerns rather than an economic growth concern. Savings is a difficult variable to measure and most of theories remain untested due to insufficient empirical evidence.

Global Evidence

This short piece in the Economist focuses on the OECD, but it highlights arguments that can apply elsewhere – like thinking about constructive roles for governments and paying attention to the psychology of saving.

The Economist. "The Economics of Savings." ***The Economist*****. London: Apr 9, 2005. Vol. 375, Iss. 8421; pg. 61**
This article examines the shift away from saving that is taking place in OECD countries, and the questions that this shift raises: Are people saving too little? What are the consequences of saving rates? Should governments try to encourage people to save more, and if so, how? Americans now save less than 1% of after-tax income, compared with 7% in the early 1990s. Even the Japanese—known for their culture of savings—now save only 5%, down from 15% in the early 1990s. The article examines contrasting schools of though on whether falling saving rates indicate economic health or imminent economic danger. It also addresses the complexity of measuring saving rates, and the difficulty in determining what is an "adequate" saving rate. The article concludes by looking at the ways in which governments can encourage people to save, and points out the role that behavioral economics can play in formulating these plans.

Thinking on saving by US-based writers is inevitably colored by the American experience. That experience contrasts sharply with the high-saving culture of another rich country, Japan. Horioka argues that in many ways it is the US that is the exception, not Japan.

Horioka, Charles Yuji. "Are the Japanese Unique? An Analysis of Consumption and Saving Behavior in Japan." Chapter 5 in Sheldon Garon and Patricia L. Maclachlan, eds. ***The Ambivalent Consumer. Questioning Consumption in East Asia and the West*****. Ithaca, N.Y.: Cornell University Press. pp. 113-136.**
The Japanese are known to be big savers who dislike borrowing and hold conservative financial portfolios. Their saving habits are considered unique and distinct from citizens in western industrialized countries. This chapter explores the savings, borrowing and consumption behavior in Japan comparing it to other industrialized countries. Horioka finds that saving and borrowing habits have in fact varied over time – the Japanese used to be big savers, but they no longer are. They used to rely relatively little on borrowing, but they now borrow at high levels. On the flip side, the Japanese do possess high levels of assets and hold conservative positions. Japanese consumption levels have also increased since the 1950s. Japanese consumption levels increased from 54% of U.S. savings levels in 1970 to 63% in 2003, from 74% of the G7 average in 1970 to 84% in 2003

and from 79% of the OECD average in 1970 to 92% in 2003. They are now roughly comparable to other G7 countries, but much lower than the United States.

World Savings Bank Institute. "Access to finance: What does it mean and how do savings banks foster access." 2006 WSBI Perspectives 49. pp. 1-137.
Savings banks account for three quarters of the 1.4 billion accessible accounts provided across developing and transition economies. This paper, part advocacy and part synthesis of evidence, argues that an economy with a strong savings bank sector has a better chance of achieving widespread access to finance. It gives an overview of the nature and dimensions of access, and of the obstacles to access in different regions of the world. It creates a framework for analyzing available data on access and links this analysis to indicators of wider economic development. Of the 130 developing and transition economies, 26 are approaching or already have full access. In 30 countries, up to half of households have access. 74 countries display signs of repressed access. The paper argues that banking systems cannot be examined in isolation from the systems of political economy in which they operate, and that governments can achieve wider access through improving the foundations of civil society than by trying to mandate access and interfere with product design.

Early Advocacy of Micro-Saving

McKinnon and Shaw argued strongly against the "financial repression" of the 1960s and 1970s. They criticized policies including interest rate caps, tolerance of high inflation rates, various quotas, and other measures that undermined the performance of the financial sector. Their concerns were echoed strongly by writers associated with the Ohio State Rural Finance Program. The Ohio State faculty focused sharply and persistently on rural finance—and on poorly-functioning state-owned rural banks in particular. One main thrust has been to highlight the importance of collecting savings. The two writings here give a sense of the arguments and their continuing relevance.

Adams, Dale. "Mobilizing Household Savings Through Rural Financial Markets.' 1978. *Economic Development and Cultural Change* 26 (3), April. Pp. 547-60. Extracted as chapter 48 of J.D. Von Pischke, Dale Adams, and Gordon Donald, eds. 1983. *Rural Financial Markets in Developing Countries: Their Use and Abuse*. Baltimore and London: The Johns Hopkins University Press. pp. 399-407.
Adams decries the lack of focus on understanding agricultural savings capacity and savings mobilization in rural finance literature. Adams argues that only a handful of countries stress mobilization of voluntary household savings through rural financial markets. Policy makers assume that rural households are too poor to save, and that those that do acquire additional income spend it on consumption or ceremonial sprees. Adams disagrees and presents findings on average propensities to save of rural households and information on rural savings behavior from various economies. The average propensity to save in 1973-74 increased to 0.31 in Taiwan (compared to 0.19 in 1960), 0.22 in Japan (compared to 0.10 in 1950), and 0.33 in Korea (compared to 0.04 in 1965). While rural households have a substantial capacity for voluntary saving, their capacity is adversely influenced by rural financial markets that tend to discourage savers.

Von Pischke, J.D. 1978. "Towards an Operational Approach to Savings for Rural Developers. *Savings and Development* 2(1), pp. 43-55. Extracted as chapter 50 of J.D. Von Pischke, Dale Adams, and Gordon Donald, eds. 1983. *Rural Financial Markets in Developing Countries: Their Use and Abuse*.
Von Pischke argues that the rural poor can save, but that they have specific needs due to low account balances, seasonal income, remote location, non-cash assets, and high transaction operations. The development challenge in encouraging savings lies in the design of financial technology to serve these specific needs. The rural poor also present a marketing challenge in providing the target group a better means of handling their working balances while reducing the costs of enabling such liquidity.

Motivations – why do people save?

The paper by Browning and Lusardi is written for an audience familiar with mathematical modeling. At the same time, it is one of the clearest, most compact statements of the state of economic research on household saving (with a strong slant toward research on OECD countries). It is the quickest way to get a sense of how economists think about household saving, although an updated version would give more space to behavioral perspectives. In contrast, Deaton's overview chapter (below) and that of Armendáriz and Morduch (above) are both more accessible and more heavily weighted to developing economies.

Overview
Browning, Martin and Annamaria Lusardi. 1996. "Household Saving: Micro Theories and Micro Facts." Journal of Economic Literature. 34(4). (December). pp. 1797-1855.
People have many reasons to save. The authors start by identifying nine motives: precaution, life-cycle (to provide for anticipated needs), intertemporal substitution (to enjoy interest), improvement (to enjoy increasing expenditure), independence, enterprise, bequest, avarice, and downpayment. The authors then review the major economic theories of savings, before reviewing empirical evidence on these theories. Data provides a valuable description of who saves and how saving rates have changed over time, but no unique theory explains why people save.

Life-cycle motive
Modigliani, Franco. 1986. "Life Cycle, individual thrift, and the Wealth of Nations." [Nobel Address]. American Economic Review 76. pp. 297-313.
This paper provides a review of the theory of the determinants of individual and national thrift that is known as the Life Cycle Hypothesis (LCH) of savings, the subject of Modigliani's Nobel Prize. The LCH is a framework that articulates the relationship between consumption, income, wealth, and savings, over the life of individuals. Its central insight is that households have a finite life and a long-term view of their income and consumption needs. They therefore increase their wealth during their working life and use it to smooth consumption during retirement. Wealth itself can come from the accumulation of savings (the difference between "permanent" and "transitory" income) or from bequests. The life

cycle hypothesis was one of the first models used to explain savings; it is supported by many empirical analyses in rich countries and is robust to varying assumptions.

<u>Precautionary motives</u>

Deaton, Angus. 1997. "Saving and Consumption Smoothing." Chapter 6 in The Analysis of Household Surveys: A Microeconometric Approach to Development Policy. Washington, DC: The World Bank. pp. 335-400.

Poor people need to save so that they are not driven to extremes when their incomes are temporarily low. To better serve the poor it is important for microfinance institutions to understand how poor households deal with fluctuations in their income. This book chapter presents evidence from household surveys to help us understand the macroeconomics of savings, the link between saving and growth, and between saving and economic development. The analysis is done following two models of household consumption: the life-cycle model and the short term consumption smoothing model. The former is seen as less germane in developing countries than the latter.

<u>Financial management</u>

Rutherford, Stuart. "The Need to Save." Chapter 1 of The Poor and Their Money. Delhi: Oxford University Press. pp. 1-12.

This essay aims to better understand financial services in order to provide improved services to the poor. The idea is that poor people can save and that they want to save in order to meet life cycle needs, cope with emergencies, acquire assets and develop businesses. Therefore, it is necessary that financial service organizations provide them with products that suit their savings capacity using efficient product delivery systems. The author aims to deepen the understanding of microfinance practitioners and their backers and encourage the innovation of products that are most convenient and affordable for the poor.

Savings Constraints – why don't people save more?

Low savings rates in poor communities have been explained in 5 main ways:

1. *The poor don't want to save. Subsistence constraints loom too large.*

2. *The poor can't save for cultural and institutional reasons (see Platteau, Anderson and Baland).*

3. *The poor really do want to save but desperately need safer, more convenient ways to do so (see Wright and Mutesasira on lack of security).*

4. *Safe and convenient accounts are necessary but not sufficient. Psychology matters. The design and marketing of savings accounts makes a big difference to their use. (see Gugerty and the behavioral economics cites below).*

5. *Cultural norms don't send messages that saving matters. As in East Asia and in much of the OECD, the state and other actors can play major roles in fostering*

appropriate attitudes toward saving and consumption. (see Garon's chapter, a set of ideas that is presently being developed as a book on international saving experiences).

<u>Not enough surplus after taking care of subsistence needs</u>

Banerjee, Abhijit and Esther Duflo. 2007 "The Economic Lives of the Poor." The Journal of Economic Perspectives. 21(1) (Winter). pp. 141–167.

How do people actually live on less than $1 or $2 per day poverty lines used by many countries? Looking at household surveys from 13 countries the authors look at various characteristics of their lives: how the poor spend their money, their ownership of assets, their pursuit of health and well-being, and their investment in education. They also examine how the poor earn their money through entrepreneurship, multiple occupations, and temporary migration. Finally, they look at infrastructure and the markets available to the poor, specifically for credit, savings, insurance, and land. In reflecting on the savings of the poor, the authors note that the poor find it difficult to save because of vulnerability of their savings and poor returns. There are few reliable savings accounts available to the poor and saving at home is difficult. In 12 out of the 13 countries surveyed by the authors, less than 14% of poor households had a savings account. At times, the poor have come up with strategies to get around this such as ROSCAS and self help groups. But participation in these groups remains low. In India, despite the high visibility of self help groups, less than 10% of the surveyed households were part of a ROSCA or self help group. The authors present evidence that the poor can likely save more if they wish, as seen by the relatively high budget shares devoted to social and ceremonial expenses.

<u>Lack of a savings culture</u>

Garon, Sheldon. 2004. "The Transnational Promotion of Saving in Asia. "Asian Values" or the "Japanese Model"." Chapter 7 in Sheldon Garon and Patricia L. Maclachlan, eds. *The Ambivalent Consumer. Questioning Consumption in East Asia and the West*. Ithaca, N.Y.: Cornell University Press. pp. 163-187

East Asian states played a key role in inculcating savings habits and thrift amongst their citizens. Asian values of savings and consumption were created by a regionally adopted model of state promotion of savings, with Japan's colonial presence in these countries acting as one of the major catalysts to these state efforts. The history of the "Japanese Model" includes national campaigns to promote savings, postal savings banks, and a Central Council for Savings Promotion. This model was exported to varying degrees to South Korea, Singapore, and Malaysia. Garon concludes that though thrift and savings are not timeless or unique Asian values, many Asian people have come to embrace these as part of their national identities.

<u>Returns too low, security risks too great</u>

Wright, Graham and Leonard Mutesasira. 2001. "The relative risks of savings to poor people." MicroSave Briefing Note # 6.

Very often all the savings mechanisms available to poor people are risky. Through a study of MicroSave data this paper indicates that people with access to the formal sector reported much higher savings than those without access. The percent of reported losses from formal mechanisms (15%) was much lower than reported losses in the semi formal (26%) and informal (99%) sectors. On average, clients in the informal sector lost

22% of their savings. In this light, the issue of allowing microfinance institutions to offer savings products should be considered on terms of relative risk as savings are relatively safer at microfinance institutions than in the informal methods available to the poor. Rather than dictate the decision of where the poor save, it is key to help them make an informed choice by helping them understand the relative risk of semi formal institutions.

<u>Neighbors interfere</u>

Platteau, Jean-Philippe. 2004. "Egalitarian Norms and Economic Growth." In *Institutions, Social Norms and Economic Development*. Chur, Switzerland: Harwood Academic Publishers.

Platteau looks at the way in which egalitarian norms may inhibit growth. In some societies successful individuals are called upon to transfer some of their own wealth (directly and indirectly through transfers and favors) to benefit poorer community members and kin. In cases where the wealthy do not consider these legitimate contributions, this serves as a disincentive to work hard. These individuals may also resort to a number of alternate strategies to hold their wealth that involve high transaction costs, in an effort to reduce demands on their income and wealth. These behaviors result in inefficiency that inhibits economic progress and reduces saving levels.

<u>Spouses interfere</u>

Anderson, Siwan and Jean-Marie Baland. 2002. "The Economics of Roscas and Intrahousehold Resource Allocation." *Quarterly Journal of Economics*. 117(3) (August). pp. 963-995.

This paper investigates individual motives to participate in rotating savings and credit associations (ROSCAs). The evidence from ROSCAs in a Kenyan slum (Nairobi) suggests that most ROSCAs are predominantly composed of women, particularly those living in a couple and earning an independent income. The authors propose that this mechanism is adopted because of conflictual interactions within the household. Participation in a ROSCA is a strategy a wife employs to protect her savings against claims by her husband for immediate spending. The empirical implications of the model are then tested using the data collected in Kenya.

<u>Temptation interferes</u>

Gugerty, Mary-Kay. 2007. "You Can't Save Alone: Commitment in Rotating Savings and Credit Associations in Kenya." *Economic Development and Cultural Change*. 55(2) (January). pp. 251-282.

This article argues that the participation and design of ROSCAs (locally organized groups that meet at regular intervals and pool members' contribution funds and loan them out in turn to one or more of the members) can be attributed to the household need for a commitment savings product in the face of savings self control problems. The evidence provided on 70 ROSCAs in rural Kenya is consistent with a commitment story - ROSCAs are able to meet a simultaneous need for safe savings as well as protection of savings from family demands. The popularity and durability of ROSCAs can be explained by their ability to satisfy these and other savings needs at the same time.

A "Bottom-Up" View

Most of the practitioner literature focuses on the supply side. The economics literature takes the demand side seriously, using regression analyses to investigate general tendencies. The writings below focus on the demand side, but instead of regressions offer close-up views of the financial lives of poor households.

Collins, Daryl, Stuart Rutherford, Orlanda Ruthven, David Hulme, and Jonathan Morduch. 2008. "Introduction" (Extract) and "Building Blocks." Chapters 1 and 4 of *Portfolios of the Poor*. Book manuscript in progress.

Chapter 1: The Portfolios of the Poor
How poor people manage their money is a fundamental question for the microfinance movement—and one that is hard to answer due to the limitations of existing data. In this book chapter, the authors discuss studies in which they created financial diaries of poor households in Bangladesh, India and South Africa. They give an overview of the findings and insights these studies shed on the financial behaviors of the very poor, and share in-depth information about what it takes the poor, day by day, to live on their meager income.

Chap 4: Building Blocks
Like richer households, poor households face financial challenges and opportunities, such as getting a job, setting up and furnishing a home, and sending children to school. How they build up large savings to achieve these goals is the main focus of this book chapter. The authors explore how poor households accumulate large lump sums for these major expenditures. They discuss two main mechanisms ("accumulators" and "accelerators") through which poor households save, and the advantages and shortcomings of the various instruments they use to build up their savings. The authors conclude that, in general, poor households look for devices that combine the economic, psychological and social elements they need to facilitate the hard task of saving large sums.

Rutherford, Stuart. 2000. "Three Ways to Save." Chapter 2 of *The Poor and Their Money*. Delhi: Oxford University Press. pp. 13-30.
Throughout their lives, poor people are in frequent need of large lump sums of money. Currently, there are several mechanisms that allow poor people to save and turn their savings into large lump sums. As an introduction to this range of mechanisms, this book chapter looks at three devices poor people use for savings: deposit collectors, money lenders, and ROSCAs. These are informal mechanisms that allow the poor to save according to timelines and commitments that meet their preference. Rutherford argues that elements from these three distinct systems can be combined to design better financial services to the poor. The chapter is a natural fit with the behavioral economics literature, though the links are not explicit.

Lessons from Behavioral Economics

Behavioral economics has been booming within academia, fueled by lab experiments and evidence of "anomalous" behavior in financial markets. Thaler provides an early overview, and Laibson shows (in a technical paper) implications for saving. Mullainathan and Shafir give a more recent overview, written for a US audience. Duflo and Saez write about the US, but their result on the "social" aspects of financial choices likely holds broadly. Insights are of more than an academic interest: products based on behavioral insights are being piloted in the US (see Thaler and Benartzi below) and elsewhere (see Ashraf et al, and Tufano and Schneider).

Thaler, Richard. 1990. "Anomalies: Saving, Fungibility, and Mental Accounts." ***Journal of Economic Perspectives*****. 4(1) (Winter). pp. 193-205.**
An empirical result qualifies as an anomaly if it is difficult to "rationalize". This column provides a short review of empirical savings literature and presents a series of anomalies that do not adhere to the rational choice theory. The author examines consumption and savings anomalies that contradict assumptions within the life-cycle theory of savings. Two types of liquidity constraints exist - those imposed by capital markets and those imposed by the individuals themselves. Violations of fungibility (the notion that money has no labels) and role of self-control, strongly influences saving behavior.

Laibson, David. 1997. "Golden Eggs and Hyperbolic Discounting." Quarterly Journal of Economics. 112(2) (May). pp. 443-477.
This is the seminal paper on this concept of inconsistency between preferences today and preferences in the future—the idea that consumers are inconsistent in how they value assets over time periods, which makes savings difficult. This model is known as "hyperbolic discounting". This paper looks at decisions made by a consumer with access to illiquid assets – these are assets that generate substantial benefits in the long run, but no immediate benefits ("golden eggs"). The results suggest that financial innovation, which increases liquidity and reduces implicit commitment opportunities, could have led to the lower savings rates in the US. The model implies that financial market innovation may reduce welfare by providing "too much" liquidity.

Mullainathan, Sendhil and Eldar Shafir. 2007. "Savings Policy & Decision-making in Low-income Households." Revised version will be forthcoming in Michael Barr and Rebecca Blank, ***Insufficient Funds: Savings, Assets, Credit and Banking Among Low-Income Households*****. New York: Russell Sage.**
Two views dominate thinking around financial behavior of the poor. One view positions the poor as rational individuals who are methodical and calculating in their financial decisions; the other positions them as impulsive and misguided. The authors present an alternative and more realistic perspective, claiming that the poor are not perfectly calculating or misguided but instead demonstrate fundamental attitudes (including weaknesses and biases) which are similar to people in other income brackets. The main difference is that these behaviors have a more profound effect on the poor because of their narrower margins of error due to their adverse financial condition. Mullainathan and Shafir use this insight to propose guidelines for future design and regulation of financial services.

Duflo, Esther, and Emmanuel Saez. 2002. "Participation and Investment Decisions in a Retirement Plan: The Influence of Colleagues' Choices." ***Journal of Public Economics*** **85. pp. 121-148.**
This paper investigates whether peer effects play an important role in retirement savings decisions in the US. At the time the paper was written, there were no previous studies on peer effects on saving decisions. Two theoretical reasons for peer influence are: plans are subtle enough that their advantages are not obvious to someone who has not thought carefully about it; and savings decisions may be influenced by social norms or beliefs about social norms. The authors study investment decisions in Tax Deferred Accounts by employees of a large university to gather empirical evidence on the above theories. Theirs results suggest that peer effects may, in fact, be an important determinant of savings decisions.

Savings Innovations and Financial Literacy

Mechanisms matter

Tufano, Peter and Daniel Schneider. 2007. "Using Financial Innovation to Support Savers: From Coercion to Excitement." Revised version will be forthcoming in Michael Barr and Rebecca Blank, ***Insufficient Funds: Savings, Assets, Credit and Banking Among Low-Income Households*****. New York: Russell Sage.**
This paper reviews a wide variety of programs used to support savings by families - in particular by low and moderate-income families. These programs range from ones that literally compel families to save, to those that make it hard not to save, make it easier to save, provide financial incentives to induce savings, leverage social networks to support savers, and finally, to programs that excite people to save. These programs involve a number of different stakeholders. They embody different assumptions about incentives, drawing from rational economics, psychology, and sociology. Examples of each program are provided along with some information on their economics and effectiveness. The goal is to underscore the range of possibilities that exists to meet the needs of heterogeneous savers.

Behavioral Insights: Commitment Saving Accounts (Contractual Savings)

Ashraf, Nava, Dean Karlan and Wesley Yin. 2006. "Tying Odysseus To The Mast: Evidence From A Commitment Savings Product In The Philippines." ***Quarterly Journal of Economics*****. 121(2) (May). pp. 635-672.**
Commitment savings products limit individuals' access to their funds for a defined period of time or until a target savings amount has been reached. A randomized controlled experiment was used to understand the characteristics of people most likely to take up a commitment savings product (called SEED), and to find the difference in savings levels for those who took it up and those who did not. Women with higher education levels and better self-control were the most likely to take up the product. After 12 months, average savings balances increased by 81% for those who were offered and took up SEED. An implication is that product design influences the amount of savings and the type of clients that take up a product significantly. Policy-makers and financial institutions should take these factors into consideration when developing best savings practices.

Behavioral Insights: Framing choices, Testing innovation
Karlan, Dean. FAI Framing Note on Saving. 2008
Several observations suggest that opportunities are lost from not pursuing innovative ways to spur savings. Building on these observations, this framing note addresses the broad questions: Why is measuring the impact of savings hard? What rigorous evidence do we have to date about the impact of savings and specific savings products? How can insights on impact help us understand the potential gains to innovation? The core idea is that although choice is good, how one frames choices and designs the decision-making process can have just as much an effect on saving outcomes as the choices themselves. Only proper impact evaluations can help donors decide where to best focus attention.

Behavioral Insights: Committing to future choices
Thaler, Richard, and Shlomo Benartzi. 2004. "Save More Tomorrow™: Using Behavioral Economics to Increase Employee Savings." ***Journal of Political Economy*** **112(1) (February). pp. S164-S187.**
This paper proposes a new prescriptive savings program, called Save More Tomorrow (SMarT). The essence of the program is straightforward: people commit a portion of their future salary increases toward retirement savings. The authors report findings based on evidence from the first implementation of the SMarT program, through four raises. Key findings are (1) a high proportion (78 percent) of those offered the plan joined, (2) the majority (80 percent) remained in the program through the fourth raise and (3) the average savings rate increased from 3.5 to 13.6 percent over 40 months. The results suggest that behavioral economics can be used to design effective savings programs.

Using technology
Cracknell, David. 2004 "Electronic Banking for the Poor – Panacea, Potential and Pitfalls." ***Small Enterprise Development*****. 15(4) (December). pp. 8-24.**
This article examines what types of electronic banking technology are open to microfinance institutions, and how various electronic products might be attractive to poor clients in terms of improved accessibility, affordability and ease of use. Institutions need to consider several issues: the functionality of electronic cards, pricing of electronic solutions, the segmentation of different products for different client groups and possible partnerships. The evolution of the financial and retail sectors, the extent of financial literacy and the policy and regulatory environment should support these developments in specific ways. The author presents a range of options suitable for some microfinance programs. Finally, he suggests principles for donor involvement in this sector.

Beyond branches: piggybacking, going mobile, using technology
Hirschland, Madeline. 2005. "Beyond Full-Service Branches: Other Delivery Options." Chapter 8 in Madeline Hirschland, ed., ***Savings Services for the Poor: An Operational Guide*****. Bloomfield, CT : Kumarian Press, Inc. pp. 159-191.**
For the poor, convenience is critical. Many rely on formal or semi-formal services for only a fraction of their financial transactions. Instead they may use informal savings options such as ROSCAs or clay-pots – even when they are less lucrative – simply because they are nearby or have more flexible operating hours. For MFIs, providing the same

convenience can be costly, especially for poor clients who have smaller balances, more frequent transactions and often reside in more rural areas that require greater travel time. This chapter examines several service delivery alternatives that are being utilized by MFIs, such as establishing low-cost offices nearer clientele, mobile offices, "piggybacked" services, group services and management, and using e-technologies that lower costs. It discusses each option and summarizes which are most appropriate in different contexts.

Building community institutions

Ashe, Jeffrey, and Elisabeth Rhyne. "Point, Counterpoint - A Dialogue on Member-Owned Financial Institutions and Increasing Access to Savings Facilities." CGAP Savings Information Resource Center Ask the Experts No. 8. Retrieved from http://microfinancegateway.org/resource_centers/savings/experts/_asktheexpertsno8 on March 10, 2008.

The cost of reaching the rural poor with microfinance can be prohibitive for MFIs, credit unions, and banks. But MOFIs - small, savings-led, often informal Member-Owned Financial Institutions - have shown promise in reaching clients living in areas with poor infrastructure, low population density, and low levels of economic activity, especially in Africa and Asia. MOFIs include various forms of informal self-help groups, ROSCAs (rotating savings and credit associations), and small savings and credit cooperatives. To examine the potential role of MOFIs in mobilizing savings and scaling up rural access to finance, CGAP asked two leading practitioners - Jeffrey Ashe of Oxfam America and Elisabeth Rhyne of Acción International – to comment on the issues. (An important new variant are Village Savings-Led approaches – VSL, which have started with success in Nepal and, more recently, Africa).

Financial literacy

Financial literacy programs are gaining favor worldwide. Lusardi focuses on the US experience – showing that there is much illiteracy even in one of the world's most sophisticated economies.

Lusardi, Annamaria. 2007. "Household Saving Behavior: The Role of Literacy, Information and Financial Education Programs." NBER Working Paper No. 13824.

This paper shows that financial illiteracy is widespread among the US population and particularly acute among specific demographic groups, such as those with low education, women, African-Americans, and Hispanics. Moreover, close to half of older workers do not know which type of pensions they have and the large majority of workers know little about the rules governing Social Security benefits. Notwithstanding the low levels of literacy that many individuals display, very few rely on the help of experts or financial advisors to make saving and investment decisions. Financial education programs can help improve saving and financial decision-making, but much more can be done to improve the effectiveness of these programs.

Impacts

We can think of only one impact study from developing economies that focuses solely on spreading deposit accounts. Aportela takes advantage of a major policy change in Mexico to infer the impacts of access to postal savings accounts.

Aportela, Fernando. 1999. "Effects of Financial Access on Savings by Low-Income People." Retrieved from www.lacea.org/meeting2000/FernandoAportela.pdf on March 14, 2008.
This paper assesses the impact of increasing financial access on the savings of low-income people and whether the increased access results in crowding out or crowding in of informal savings instruments. The study uses the expansion of a Mexican savings institute, targeted to low-income people, as a natural experiment along with information from National Surveys of Income and Expenditures. Results show that the expansion increased the average savings rate of affected households by 3 to 5 percentage points. The effect was even higher for the poorest households in the sample - savings rate increased by more than 7 percentage points in some cases. The expansion had no effect on high income households. There is little evidence that the expansion crowded out informal savings instruments. The author concludes that low-income individuals save a considerable fraction of their income when they have access to financial instruments and that it is hard to rule out the possibility that a substantial fraction of the increase in savings represents new savings.

Building Savings Institutions and Designing Savings Products

Madeline Hirshland's edited volume, Savings Services for the Poor, *is the single best volume on practical steps for spreading savings accounts. The focus is concrete, and the selections below highlight topics that receive strong treatments in the book and that are relatively neglected elsewhere.*

Marguerite Robinson offers a set of directives for deposit-collecting institutions, written with her typical clarity. Like other "best practices" approaches (including the CGAP guidelines included below), the information is cogent and thoughtful but yields limited insight when it comes to weighing imperfect trade-offs. Patten and Rosengard remains a strong sum of the Bank Rakyat Indonesia experience.

Robinson, Marguerite. 2004. "Mobilizing Savings from the Public." Chapter 1 in Ledgerwood, Joanna and Victoria White, eds., *Transforming Microfinance Institutions: Providing Full Financial Services to the Poor*. Washington, DC: The World Bank. pp. 3-20.
Transformation to a regulated savings institution can be the key to long-term commercial microfinance for many organizations. This chapter discusses "ten basic principles" of managing voluntary savings from the public in developing countries, with the aim of informing MFIs' decisions about whether or not to offer savings products and helping them transform in order to do so. Also included are the "15 steps" to sequencing the introduction of public savings in MFIs. The single most important point that transforming MFIs must understand is that successful mobilization of savings from the public, including from large numbers of low-income people, changes the institution (but not its mission) profoundly and irreversibly. Only financial institutions that are prepared for such change should open public savings facilities.

Richardson, David and Madeline Hirschland. 2005. "The Keys To Cost Recovery." Chapter 3 in Madeline Hirschland, ed., *Savings Services for the Poor: An Operational Guide*. Bloomfield, CT : Kumarian Press, Inc. pp. 43-61.
Mobilizing small savings deposits can be not only feasible but also profitable – the question is – how? As credit unions have discovered, there are two keys to viable small savings mobilization: attracting an adequate volume of deposits and managing operational costs. Managing costs while achieving volume is particularly challenging for institutions that do not have the option to mobilize large deposits, as well as those that serve less densely populated areas. The book chapter provides an overview of principles and strategies for tackling these challenges, discussing the importance of several factors including product design and marketing, physical presence of the organization, liquidity management, interest rates, low-cost delivery systems, and controlling staff costs.

Christen, Robert, N. Srinivasan and Roger Voorhies. 2005. "Managing To Go Down Market." Chapter 5 in Madeline Hirschland, ed., *Savings Services for the Poor: An Operational Guide*. Bloomfield, CT : Kumarian Press, Inc. pp. 93-113.
Many non-profit institutions already serve small depositors, but few large, regulated financial institutions have done so. However, doing so would allow them to expand and diversify their market, lead to a positive public image, increase profits, and provide a funding source for lending. For these institutions, there are three main obstacles to expanding savings products to smaller and more rural depositors: costs, controls and culture. Once the benefits to providing savings exceed the costs, regulated financial institutions will move down market. This book chapter examines what it takes for organizations to successfully do so – understanding the challenges, the means to overcome them, and the importance of the institutional commitment necessary to downstream savings.

Hirschland, Madeline. 2005. "Savings Products." Chapter 7 in Madeline Hirschland, ed., *Savings Services for the Poor: An Operational Guide*. Bloomfield, CT : Kumarian Press, Inc. pp. 137-157.
Microfinance practitioners are increasingly focusing on designing savings products that are driven by demand. The most important features for the poor are often access to funds and being able to deposit in small and irregular amounts. MFIs face the challenges of offering as few products as possible that meet the demands of their clients while being managerially and financially feasible. However, savings products are actually rather simple, and fall into three basic categories: demand deposits, contractual products, and time deposits. The book chapter first looks at what low-income savers want from products and product variations, and what these products cost and require. Then it discusses the product mix offered by MFIs and looks at how these products might differ for institutions that only serve small depositors.

Hirschland, Madeline and John Owens. 2005. "Pricing." Chapter 9 in Madeline Hirschland, ed., *Savings Services for the Poor: An Operational Guide*. Bloomfield, CT : Kumarian Press, Inc. pp. 193-209.

The interest rates that a deposit-taking institution pays and the fees it charges depositors will affect its profitability, volume of deposits, and competitive position. Given their importance – how should rates and fees be set? The first step is to determine what range of pricing is possible. The second is for management to determine the institution's pricing objectives. Third, it must be decided whether and how to vary the base rate. The book chapter discusses the factors that define the range of feasible prices, identifies some common pricing strategies, and considers when to vary the base interest rate or provide non-interest returns.

Hirschland, Madeline. 2005. "Promotion: The Final Step in Marketing." Chapter 10 in Madeline Hirschland, ed., *Savings Services for the Poor: An Operational Guide*. Bloomfield, CT : Kumarian Press, Inc. pp. 211-236.
An important component of offering sustainable savings products to the poor is successful promotion; that is, communication of the product to the target market. Promotion aims to influence buying behavior, and MFIs must therefore translate ideas about why potential clients should want to deposit with a particular MFI into a message that motivates them to do so. This chapter discusses the steps involved in creating a promotional strategy and looks at two specific elements: messages and promotional tools. Tools include personal sales, advertising, word of mouth, sales promotion, and public relations. Steps to strategy implementation are also outlined, with guidance for assessing effectiveness of promotional activities, and highlights of common mistakes made by MFIs in their promotional strategies.

Consultative Group to Assist the Poorest (CGAP). 2002. "Microfinance Consensus Guidelines. Developing Deposit Services For The Poor." Washington, D.C: CGAP/The World Bank Group.
These guidelines embody the working consensus of CGAP donor members on how donors can support deposit services in microfinance. Given that demand for deposit services far exceeds the supply, how can this demand best be met? What are the most appropriate services and institutions that could meet this need? Should donors promote deposit services, and if so, how? The paper examines what the poor seek from savings and other deposit services, and analyzes the potential of different financial institutions to offer these services. It reviews the financial and institutional capacity requirements needed, such as operating environments, costs and pricing, market orientation, and the depth of outreach of a deposit services provider.

Westley, Glenn, and Brian Branch. 2000."Issues and Recommendations for Credit Unions in Latin America." Overview in Westley, Glenn, and Brian Branch, eds. *Safe Money. Building Effective Credit Unions in Latin America*. Washington, D.C.: The John Hopkins University Press. pp. 1-29.
Decades of stagnancy for credit unions in Latin America have been followed by a resurgence of credit union memberships and savings growth in the region. While the new era of diminished donor funds and increased competition for lower income client bases has been hard on credit unions, it has also spurred greater financial discipline and service innovation. In facing this new environment, credit unions have to grapple with four key issues: rehabilitation, regulation and supervision, governance and consolidation.

Patten, Richard H., and Jay K. Rosengard. 1991. Case Study Two: Bank Rakyat Indonesia (BRI) Unit Desa. Chapter 5 of *Progress with Profits. The Development of Rural Banking in Indonesia*. San Francisco, CA: ICS Press. pp. 55-89.
This case study paints a detailed picture of Bank Rakyat Indonesia's Unit Desa division and its large-scale success in banking low-income communities. Loans and savings products from this large state-owned, commercial bank serve mainly small agricultural traders. The book chapter documents the phases of growth experienced as an institution, its relationship to certain larger events such as the green revolution, how it became a full-service rural bank, its improvements in efficiency, and its current performance. The middle section describes the TABANAS and SIMPEDES saving products and their evolution. The logic of providing better savings services is highlighted.

Regulating Savings

There is a fair amount of generic writing on prudential regulation (including the classic Diamond and Dybvig article), but much less on regulating "micro-savings" specifically. Demrigüç-Kunt and Kane serve as a reminder that regulation carries trade-offs, a position often argued by CGAP and demonstrated in Vogel's multi-prong approach to credit union regulation.

Diamond, Douglas and Philip Dybvig. 1986. "Banking Theory, Deposit Insurance, and Bank Regulation." *Journal of Business* 59(1). pp. 55-68.
We now face policy decisions that will shape the future of the banking industry. We need a theory to extrapolate from past experience to future decisions. This paper summarizes the policy implications of existing economic models of the banking industry and examines some current recommendations in light of the theory. It begins with a survey of the important ideas in the existing academic literature on the banking industry, and a discussion of some of the more obvious policy implications of the ideas. The authors use these ideas to give a detailed examination of two policy proposals: 100% reserve banking, and using market discipline on large incompletely insured deposits or subordinated short-term debt. They conclude that both proposals are dangerous, and may have the opposite effect as intended.

Demrigüç-Kunt, Asli and Edward Kane. 2002. "Deposit Insurance Around the Globe: Where Does It Work?" *Journal of Economic Perspectives* 16(2) (Spring) pp. 175-195.
While explicit deposit insurance has spread rapidly in recent years, trade-offs exist. As a benefit, they represent a seemingly costless approach to reducing the risk of bank runs or panics. On the cost end, in addition to the budgetary costs of running an insurance enterprise there is the potential of excessive risk taking due to the reduced incentive of depositors to monitor banks. The adoption and design of an explicit deposit insurance system depends on the financial and supervisory environment in which it must function. The authors review empirical evidence on deposit insurance and bank regulation. They explain the ways that explicit deposit insurance affects financial stability, how markets discipline risk taking by banks, and how a financial system can develop safely and productively. They argue that countries must correct the observable weaknesses in their institutional environment before offering explicit deposit insurance.

Braun, Gabriela and Alfred Hannig. 2003. "Creating a separate tier – The Micro Finance Deposit-Taking Institutions Act, 2003." Chapter 14 in Ledgerwood, Joanna and Victoria White, ***Transforming Microfinance Institutions: Providing Full Financial Services to the Poor*****. Washington, DC: The World Bank. pp. 441-458.**

Microfinance in Uganda has increasingly drawn attention from governments, donor agencies, experts, and practitioners. An area of great interest is microfinance regulation and supervision, with Uganda becoming a showcase for the collaborative development of a legislative framework. This chapter chronicles the development of microfinance regulation and supervision in Uganda. It provides an overview of the financial sector in Uganda, followed by a description of the process to establish a regulatory framework for microfinance and ultimately, the creation of the Microfinance Deposit-Taking Institutions (MDI) Act in 2003. The chapter concludes with a brief description of the licensing process, and a review of the key success factors and remaining challenges within the Ugandan microfinance sector.

Vogel, Robert. 2002 "Key Issues in Regulation and Supervision of Credit Cooperatives." ***Finance for the Poor, Asian Development Bank Quarterly Newsletter: Finance for the Poor*****. 3(4) pp. 1-6.**

Credit cooperatives are regulated separately from banks because they differ in terms of size, capital structure and composition, deposit characteristics, and membership requirements. This paper reviews the regulatory framework for credit cooperatives in Philippines, Guatemala, Honduras, Brazil and Peru. It provides recommendations on characteristics that should be given priority when considering regulations. Essentially, large, open deposit-taking cooperatives should be regulated like banks; affinity-based cooperatives and intermediate range of open credit cooperatives should be required to report financial statements and conduct external audits; small credit cooperatives should receive no regulatory attention unless they encourage general public deposits.