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PORTFOLIOS OF THE POOR

How the World's Poor Live on $2 a Day

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Notes

Chapter One

1. To get a sense of the debates, the most sharply worded arguments for aid-fueled strategies are in Sachs 2005, which is countered by Easterly (2006). Wolf (2005) makes the case for globalization, while Stiglitz (2005), for example, points to its limits.

2. If we include the Grameen II diaries (see chapter 6), which covered 43 households, this increases to just under 300 households.

3. The countries we refer to here, as well as the three countries where we collected the diaries—Bangladesh, India, and South Africa—are all fortunate in that they are not at war or in conflict, and have working, recognized governments and functioning economies. Some of what we say in this book may not apply to fragile or "failed" states, or areas where there is no monetized economy. Our broad perspectives have been shaped by research completed by a wide range of individuals and organizations, and we cite representative studies in the text.

4. In important new work, Krislert Samphantharak and Robert Townsend (2008) apply the idea to monthly data from Thailand, providing rigorous methodological foundations for drawing analogues between households and corporate firms.

5. There are eight Millennium Development Goals—which range from halving extreme poverty (defined as living under one dollar per day per person in 1993 PPP dollars) to halting the spread of HIV/AIDS and providing universal primary education, all by the target date of 2015. These have been agreed to by all the world's countries and all the world's leading development institutions. See http://www.un.org/millenniumgoals.

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6. An excellent source showing how to calculate dollar-per-day estimates from local currency incomes is Sillers 2004. More on the World Bank International Comparison program and new data can be found at www.worldbank.org. For a related take on the same set of issues see *The Economist's* "Big Mac" index at http://www.economist.com/markets/bigmac/about.cfm. The 1993 and 2005 figures in table 1.1 are calculated using consumer prices indices from the International Monetary Fund's *International Financial Statistics*. The 2005 comparison using PPP conversion rates are the latest available at the time of writing.

7. A growing literature indicates that income given to women is more likely to be used for investments in education, children's nutrition, and housing than income given to men (see, for example, Thomas 1990, 1994; Hoddinott and Haddad 1995; Khandker 1998; and Duflo 2003). Hossain (1988), Hulme (1991), Gibbons and Kasim (1991), and Khandker, Khalily, and Kahn (1995) also find that microloans given to women are more likely to be repaid than those given to men. For an overview, see Armendáriz de Aghion and Morduch (2005). Nava Ashraf (2008) suggests that some of these differences in preferences may not be based on gender alone but on the structure of control in household financial management.

8. Note that this is not unlike patterns found in developed countries. The 2004 US Survey of Consumer Finances shows that the share of nonfinancial assets in total assets is much higher for the lowest income quintile of households than the highest.

9. The median household showed an increase of 14 percent in their financial net worth over these 10 months. This was not due to a change in value of these assets, the way we think about a wealthy person's stock portfolio. Rather households were *adding* to their financial wealth at the rapid rate of 1.4 percent per month. By tracking households over time, we were able to see that South African households accomplished this rapid rate of financial growth by managing to save, on average, about 20 percent of their income per month. We discuss the instruments that helped them to do this in chapter 4.

10. More details on this analysis can be found in appendix.

11. By "semiformal providers" we mean microfinance organizations and other nonbank providers, such as NGOs, that offer services to poor clients. They are sometimes referred to as "MFIs"—microfinance institutions.

12. See Aleem 1990 on moneylenders and Ardener 1964 on savings clubs. Both literatures and examples are discussed further by Armendáriz de Aghion and Morduch (2005, chapter 2 and 3) and by Rutherford (2000).

13. Smoothing consumption refers to efforts to reduce the ups and downs of consumption in the face of fluctuating income patterns. Consumption can be smoothed by borrowing and saving, for example, and by obtaining insurance through formal or informal means. More on the literature on informal insurance can be found in, for example, Townsend 1994; Deaton 1992; and Morduch 1995, 1999, 2006.

14. In South Africa, we started with a large sample of 181 households. During the year, some households moved away or dropped out, leaving us with 152 full sets of yearlong diaries. Most of the South African data in this book is based on this sample of 152 households.

15. In South Africa, consumer marketing surveys make great use of Living Standard Measures (LSMs) to segment markets on the basis of wealth. The LSM is calculated entirely on observable goods. In local terms, LSM1–5 are considered underserved. We calculated the LSM for every South Africa household in our financial diaries sample and found 90 percent to be in LSM 5 or below.

16. Five examples of household portfolios from each country can be found in appendix 2 of this book. Backgrounds and portfolios for many more households from all three samples, as well as research on a wide variety of topics using the financial diary data, are available at www.financialdiaries.com.

17. While the main problem of poor households is lack of choice, there are local markets in which competition among microfinance providers has grown considerably, including markets in Peru, Nicaragua, the Philippines, and Bangladesh. Real competition will likely increase, but it remains far from the norm.

18. See Aleem 1990 for a survey of moneylenders that helps explain costs from the supply side. A different set of literature tries to understand prices from the demand side, by measuring the return to capital (see Banerjee and Duflo 2004; Udry and Anagol 2006; de Mel, McKenzie, and Woodruff 2008; Morduch 2008).

19. In South Africa, the Small Enterprise Foundation, based in Limpopo Province, has ambitious expansion plans, as do other microfinance groups.

20. Much new work is turning a fresh eye to problems of low quality, unreliability, and corruption in basic services, and some of the work is pointing to new solutions. Bertrand et al. (2007) document corruption in the driver's license system in India. Das, Hammer, and Leonard (2008) describe problems of low quality and unreliability in basic healthcare. Banerjee and Duflo (2006) address possibilities for confronting absenteeism in education and health settings.

Chapter Two

1. Savings programs indicate similar low balances. In the middle of 2003, the average savings balance at *Safe*Save (Bangladesh) was $22, and average savings balance at Bank Rakyat Indonesia (BRI) was $75. See chapter 6 of Armendáriz de Aghion and Morduch 2005.

2. These dollar figures are converted at official exchange rates, which may give too low a sense of the effective value of the assets. When converted using "purchasing power" parity (PPP) rates, the median asset values rise to $293 for Bangladesh, $637 for India, and $1,128 for South Africa. The financial assets of the median South African diary household, in other words, ought to be able to buy goods and services locally that would cost $1,128 if purchased in the United States.

3. Again, this pattern is upheld elsewhere. BURO Tangail in Bangladesh showed that at the end of 2000, the savings accounts of their clients were worth just under 27 million takas, less than 2 million takas more than the year before. But though balances did not grow much in the year, *during* the year the owners of the accounts had deposited more than 62 million takas and withdrawn more than 60 million takas. See Armendáriz de Aghion and Morduch 2005, following Rutherford, Sinha, and Aktar 2001.

4. See Case and Deaton 1998 for a description of the South African transfer system and its benefits for low-income families.

5. Ramadan arrives two weeks earlier each year, because of differences between the Muslim and the Gregorian calendars. During the research year, it happened to fall in November, along with Diwali.

6. More information on the National Credit Act can be found on the website of the National Credit Regulator, http://www.ncr.org.za/.

7. See Collins 2008.

8. David Hulme reports interviewing five rickshaw drivers in Bangladesh in 2006. All five rented their machines. Two had at one time bought their own machine but had them stolen, while a third had borrowed heavily to buy a motorized rickshaw that broke down and was repossessed.

9. The concept of "relationship" banking has real meaning in the financial world of poor people, just as it does for the rich. Microfinance institutions have enjoyed very high repayment rates on uncollateralized loans, suggesting that the value placed on honoring contracts does not diminish, and may even be enhanced, by material poverty.

10. Kishan (farmer) Credit Card, the name of the first product of its kind from the State Bank of India, has become a generic term for similar products offered by other Indian banks, while they carry different names.

11. See Schreiner and Sherraden 2006.

12. The example is from Prahalad 2005, 16–17.

13. All households can have trouble paying back loans when they meet with emergencies, as the next chapter shows. See Johnston and Morduch 2008 for additional evidence from Indonesia on the wide range of uses for loans by low-income households. They find that about half of the loans taken by poor households are used for nonbusiness purposes, including consumption, education, and health.

14. See Sinha et al. 2003.

Chapter Three

1. The data are from World Bank *World Development Indicators*, accessed in July 2008. In 2000 the under-five child mortality rate was 92 per 1,000 children in Bangladesh, 89 per 1,000 in India, and 63 per 1,000 in South Africa. In the United States, by comparison, the child mortality rate was 8 per 1,000 in 2001.

2. On the other hand, the fact of prevalent risk steered the Bangladeshi households away from making investments that could have led to a stronger livelihoods and living standards.

3. The confluence of poverty and vulnerability has become a major theme in the study of poverty, led by a wide range of scholars; for Africa, the work of Oxford economists Stefan Dercon and Marcel Fafchamps is particularly notable. See, for example, the papers included in Dercon 2006. Morduch (1995, 1999) gives a broad frame on the academic work with an eye to policy interventions.

4. The study, by Abhijit Banerjee and Esther Duflo (2007), pools World Bank household surveys from across the world to present a broad view of the economic lives of the poor. The paper reports on detailed survey data, culled largely from World Bank and Rand Corporation surveys conducted between 1988 and 2005, representing the expenditures of tens of thousands of poor households in 13 developing countries.

5. The general problem is framed in Morduch's (1999) essay on the strengths and weaknesses of informal risk sharing. He asks: "does informal insurance patch the safety net?" And answers: "yes, but not very well." The essay also

describes the hidden costs—financial, economic, and emotional—often attached to informal risk sharing. See Townsend 1994 for the seminal paper on formal tests of village-level risk sharing, as well as Deaton 1992, 1997 for similar work in Côte d'Ivoire, Ghana, and Thailand, Morduch 2005 in India, Udry 1994 in Nigeria, Grimard 1997 in Côte d'Ivoire, Lund and Fafchamps 2003 in the Philippines, and Dubois 2000 in Pakistan. Morduch 2005 provides a critical overview of the work on South Asia, and Morduch 2006 provides an accessible introduction to the broader research program. The econometric work on village insurance following Townsend (1994) focuses on coping with income variability *within* villages. It does not focus on what is often a larger problem: income shocks that affect a village or region as a whole.

6. This section draws heavily on Sinha and Patole 2002. The paper reports on a study of financial institutions and products that was carried out alongside the financial diaries in the same India rural site.

7. The LIC agent's manual suggests that the lowest premium product available was about $9.40 per quarter at the time, so this is one of the lowest premium products that Ismael could have taken. See Sinha and Patole 2002.

8. For small and marginal farmers, on the other hand, infrequent and higher premiums may be more manageable, but they need to coincide with seasonal cash flows. All this, of course, would create additional costs for LIC agents and perhaps require a higher commission.

9. See the case study of Delta Life by McCord and Churchill (2005).

10. McCord and Churchill (2005) make the case for developing insurance schemes as a partnership between an insurance company and a microfinance institution. They argue that the risks, administration, and expertise required are such that typical microfinance institutions are ill-placed to provide insurance completely "in-house."

11. For more details on the financial implications of death on households in South Africa, see Collins and Leibbrandt 2007.

12. Dorrington et al. (2006) describe the demographic impacts of AIDS in South Africa. Their estimates suggest the likelihood of death before 60 among adult males jumps from 36 percent in 1990 up to 61 percent in 2008, and among adult females from 21 percent in 1990 to an expected 53 percent in 2008.

13. See, for example, Booysen 2004 on the relationships between AIDS, income, and poverty.

14. The study, by Jim Roth (1999), found evidence that funerals in the Grahamstown township cost approximately 15 times the average monthly household income.

15. A few prominent examples are Avbob, Old Mutual, and Standard Bank.

16. There is evidence that burial societies also exist in a strikingly similar format in other parts of the world. Dercon et al. (2004) survey the informal funeral insurance markets in Ethiopia and in Tanzania. They note that village members tend to know each other well and are often related, which the authors assume would mitigate the informational risks. However, the contracts within burial societies still closely resemble common insurance contracts with constitutions and enforcement rules. Dercon et al. also notice that most groups charge an entrance fee that is inconsistent with most insurance models and indicates that financial stability may prove to be a problem with these groups. As in South Africa, they also find that membership is widespread and that most individuals belong to more than one group.

17. Data are available in *FinScope 2003*; see www.finmark.org.za for more details.

18. South Africa has long used savings accounts through the wide network of Post Offices to increase the number of banked individuals in the country. We found that many of the financial diaries respondents would have both a Post Office bank account and a commercial bank account.

19. For more details on this analysis, see Collins and Leibbrandt 2007.

20. Strictly speaking, the club did not allow such loans. This case shows that such rules are sometimes broken, and this may be one of the reasons why they sometimes run into liquidity problems. Thembi was under pressure to repay quickly, before the loan came to the attention of the general membership of the club.

21. Lim and Townsend (1998) give evidence on the importance of saving in dealing with risk in data from three Indian villages (the specific mechanism is the storage of grain in-kind). In their case, it is self-insurance again that is the main mechanism for coping, not collective insurance per se.

22. The classic moral hazard problem in the health context is described by Pauly (1968), and Morduch (2006) extends the discussion in the context of "microinsurance" in poor communities.

23. The evidence is from International Labour Organisation 2006 cited in Ghate 2006.

24. The SEWA insurance mechanism is described by Ghate (2006).

25. A broader view on safety nets is provided by Barrientos and Hulme (2008).

26. The argument is developed in Roth, Garand, and Rutherford 2006.

Chapter Four

1. In a sign of progress in creating financial products for the poor, six diary households in South Africa bought their homes with a mortgage through a special program. More contribute to pension funds, and, as described in chapter 6, long-term savings plans (called "pensions," though they are more general saving devices) have become a new and popular Grameen Bank product. Grameen Bank has long offered a multiyear housing loan, usually used for home expansion and repairs, and some of the Bangladeshi diary households described in chapter 6 hold them—or have held them in the past.

2. Behavioral economics combines perspectives from psychology and economics. Among the lessons are that assuming the ability to act with perfect foresight and rationality, a staple of twentieth-century economics, ignores the self-discipline problems that challenge rich and poor alike. Another lesson is that the way contracts and financial mechanisms are presented can affect their take-up and usage. See Thaler and Sunstein 2008 for an accessible overview of new thinking in behavioral economics.

3. See Banerjee and Duflo 2007. They find that by households living under one dollar per day per person spend, on average, from 56 to 78 percent of household income on food, with slightly less being spent in urban areas.

4. In South Africa, the average benchmark across households was $425 per month, but an average South African income hides a wide distribution of incomes, even within these poorest of areas. Over all three areas in South Africa, roughly two-thirds of the sample had incomes that are higher (often well higher) than those in India and Bangladesh, but one-third of households had incomes that are as low or lower than $50.

5. Most poor South Africans are dependent on a government-provided monthly old-age grant in their retirement. See Collins 2007.

6. See Banerjee and Duflo 2007.

7. Studies have shown that festivals are major consumer of resources among the poor around the world. See Banerjee and Duflo 2007, which quotes survey results indicating that in several developing countries more than half of all households spend on festivals each year. Fafchamps and Shilpi (2005) found that in Nepal households spend lavishly on festivals as a way of asserting their worth in front of other more economically successful households.

8. See Deaton 1997 for an overview of recent analyses of the economics of saving and risk-sharing in developing economies.

9. See, for example, Laibson, Repetto, and Tobacman 2003.

10. Bauer, Chytilova and Morduch (2008) take a close look at this pattern using data collected in villages in the South Indian state of Karnataka. As a first step, surveys were used to determine households particularly likely to have self-discipline problems that could correlate to difficulties saving (i.e., evidence of "hyperbolic" preferences in the language of behavioral economics). They showed that households with signs of self-discipline problems were more likely than others to borrow through microfinance institutions featuring enforced, regular weekly payments. Though taking the loans was costlier than saving, it provided the households with an effective way to accumulate.

11. For an excellent presentation of these issues, we refer readers to Mullainathan 2005.

12. See Ashraf, Karlan, and Yin 2006. They evaluated the impact of this "commitment" saving product using a randomized controlled trial, where 1,800 customers of a bank were randomized to either receive an offer to open the new type of account or not. (Everyone already had access to a standard account.) Among those offered the new type of accounts, 28 percent opened one. After 12 months, average savings balances increased by 80 percent in the group offered the new type of account compared to the control group. This translates as a 300 percent increase for the impacts among those who actually opened the accounts—a large and meaningful increase in savings.

13. For more on lessons from behavioral economics, see, for example, Laibson, Repetto and Tobacman 1998; Laibson 1997; and O'Donahue and Rabin 1999a, 1999b.

14. Anderson and Baland (2002) argue that informal saving and borrowing clubs in the slums of Nairobi are used by women in part to protect funds from their husbands. Mary Kay Gugerty's (2007) study in western Kenya highlights the use of informal clubs as discipline services.

15. For more on RoSCAs and related devices, see Rutherford 2000. For an introduction to the economics literature on informal devices, see chapter 3 of Armendáriz de Aghion and Morduch 2005.

16. This example and other examples in this section come from non-financial-diaries research by Stuart Rutherford.

17. As researched and reported in Rutherford and Wright 1998 and later described in Rutherford 2000.

18. Compared to saving-up clubs and RoSCAs, ASCAs are in any case more complicated and more difficult to run well because the cash accumulates and has to be tracked through written accounts. Literate people—and so usually the

better off—get picked as treasurers because they can keep accounts, but even the best-intentioned of them can be cavalier with balances that mean much more to their poorer fellow members than they do to themselves. Particularly in recent years since the rise of microfinance, rural Bangladeshis have made less use of ASCAs.

19. For a fascinating account of attitudes toward RoSCAs, see Vander Meer 2009. Vander Meer studied 60 rural RoSCAs in Taiwan over a 21-year period.

20. Studying "mental accounts" has become a central part of behavioral economics; see Thaler 1990. People who use mental accounts may designate a specific savings account or device for a particular purpose (like sending money to relatives) and designate other accounts for other purposes (household needs, say, or school fees). Doing so may add costs, but it can help instill the discipline to keep some pots of money safe for their intended purposes.

21. The microlenders have since improved their products, as chapter 6 will show.

22. Kenneth's RoSCA and the Filipino *ubbu-tungnguls* are unusual in that they orchestrate what is in fact a series of one-on-one contracts into a social event: each individual contract can break down without damaging the device as a whole, allowing them to continue for years together.

23. Grameen Bank's long-term housing loans had poorer repayment rates, and higher write-offs, than its one-year general loans.

Chapter Five

1. The study of Compartamos's interest rates was completed by Richard Rosenberg (2007). Cull, Demirgüç-Kunt, and Morduch (2009) describe the Compartamos public offering and reactions to it.

2. Muhammad Yunus (2007) offers one of the sharpest criticisms. The survey data on interest rates for the 350 institutions is given by Cull, Demirgüç-Kunt, and Morduch (2009). Consistent with their findings, Aleem (1990) found that the high interest rates charged by informal moneylenders in Pakistan reflected the real costs of their lending—costs of screening and pursuing delinquent loans in particular—in these markets. The general pattern of prices is replicated in other sectors: Prahalad (2005), for example, compares the prices paid by slum-dwellers in Mumbai relative to prices paid by the middle class. He finds the poor paying considerably more for basics like water, phone calls,

diarrhea medicine, and rice. In microfinance, interest rates over 40 percent per year and more (after inflation) are certainly part of the landscape, while better-off customers borrow at rates below 10 percent (Cull, Demirgüç-Kunt, and Morduch 2009).

3. Udry and Anagol (2006) estimate returns to capital of small-scale agricultural producers in Ghana to be 50 percent per year for traditional crops and 250 percent per year for nontraditional crops. Banerjee and Duflo (2004) estimate returns to capital for small firms of between 74 and 100 percent per year. De Mel, McKenzie, and Woodruff (2008) estimate for small firms in Sri Lanka of at least 68 percent, though much lower (statistically indistinguishable from zero at the average) for women. See Morduch (2008) for a synthesis of the evidence and issues around measures of returns to capital in microenterprise.

4. Karlan and Zinman (2008) study interest sensitivity for loans provided by a consumer lender in South Africa who charges very high interest rates for installment credit. The interest rates are nearly 12 percent per *month*. Sensitivity to interest rates was gauged by mailing out over 50,000 credit offers to customers. The letters offered interest rates that were selected at random (within bounds), and the question was how much price would affect their interest in taking new loans. Borrowers turned out to react to interest rates, especially to increases, but just modestly. Dehejia, Montgomery, and Morduch (2007) find evidence for substantial short-term interest sensitivity in a study in the Dhaka slums when a microfinance lender increased interest rates from 24 percent to 36 percent per year, but over the longer term, borrowing remained strong.

5. In this calculation, one would take a monthly, weekly, or daily interest rate to the power of the number of months, weeks, or days in a year.

6. The calculation is $((1 + (30/100)^\wedge 12) - 1) * 100 = 2{,}230$ percent, rounding to the nearest percent.

7. See Patole and Ruthven 2001.

8. The interest calculations are as follows: His total repayment on the \$32 loan was \$37.50, which means that he paid \$5.50 in interest. If he paid in 50 days, his annual interest rate is $((5.50/32) * (365/50)) * 100 = 125$ percent. If he pays the same interest in 330 days, his annual interest rate is $((5.50/32) * (365/330)) * 100 = 19$ percent. Neither of these rates are compounded.

9. This is not always the case. Sometimes moneylenders are from distant provinces or even from abroad, such as the South Asians who serve mountain villages in northern Philippines. In many states of India and even in Bangladesh itinerant moneylenders are still called *Kabuliwallahs* (people from Kabul, Afghanistan), just as they were during the British colonial period. In this chapter

we quote the case of a Maharashtra-based ethnic group who serve as moneylenders to Delhi slum-dwellers.

10. In the South African sample, we found very few privately arranged interest-bearing loans given or taken. Borrowing either took place with a moneylender or an ASCA.

11. Chuck Waterfield, a long-term microfinance enthusiast, campaigns for greater price transparency in microfinance. See his website www.mftransparency.org.

12. See Rutherford 2000, 13–17.

13. It is important to remember that this calculation is interest charged on an average balance that is growing over 220 days. So the average balance would be about 220/2 = 110. Therefore, the calculation would be ((20/110)*(365/220))*100 = 30 percent.

14. See Aryeetey and Steel 1995, also available on the MicroSave website www.microsave.org.

15. Armendáriz de Aghion and Morduch (2005) trace (and debunk) economists' arguments that moneylender interest rates can be justified by default risk.

Chapter Six

1. Grameen II is vividly described in Dowla and Barua 2006. BRAC was founded in the wake of Bangladesh's 1971 War of Independence, and Martha Chen's 1986 volume remains an excellent guide to BRAC's philosophy and early years. (BRAC's initials originally stood for the Bangladesh Rural Advancement Committee, but, as noted, today the initials stand on their own.) Rutherford (2009) describes ASA's remarkable rise and transformation from its roots as a civil rights NGO. The *Forbes* ranking of the "Top 50 Microfinance Institutions"—with ASA on top—is reported by Swibel (2007).

2. Explanations of how that came about, and of the way we executed the project, can be found in the appendix. We are grateful to Grameen Bank and other microfinance institutions for their cooperation during the execution of the diaries.

3. In practice, the half-acre rule is not followed strictly, but the rule's intention—to focus on the poorest villagers—remains a principle for the bank.

4. Grameen charged a "flat" rate of 10 percent of the loan value. This interest was, at first, collected at the end of the loan term. But soon Grameen decided

that it would be best collected broken into 50 equal weekly installments, like the loan principal repayments. This produces an annual percentage rate (APR) of a little over 20 percent, a figure that rises somewhat if one takes into account the effect of the compulsory savings.

5. See Yunus 2002.

6. Grameen II also provides for repayment schedules tailored to individual borrowers, but (at least in 2005) field staff were rarely implementing this opportunity.

7. BURO, like BRAC, is no longer an acronym, but a name.

8. When she took a loan, she saved more, since Grameen continued to divert a small proportion of each loan into the member's saving account.

9. Between them, the 37 diarists who took Grameen loans of this sort borrowed \$13,225 in the three years, repaid \$11,347, and ended with \$4,455 outstanding. They paid interest of \$2,056.

10. See Rutherford 2006, the MicroSave Briefing Notes on Grameen II. Briefing note number 7 is used for these paragraphs with permission from MicroSave. The full set of MicroSave Grameen II Briefing Notes can be found on their website, www.microsave.org.

11. Grameen's advantage over the other pioneers in developing savings products (notably BURO and ASA) is that it has a legal identity that formally licenses it to mobilize deposits from the general public. Most other Bangladesh microfinance institutions are legally NGOs and may take savings only from their group-based borrowers.

12. Evidence on how this kind of structure can help people save can be found in the study of commitment savings in the Philippines described in chapter 4; see Ashraf, Karlan, and Yin 2006.

13. The GPS has been a major source of Grameen's growth in savings, and, with that, has given Grameen Bank an important new funding source. We recognize, though, that the innovations have been launched during relatively favorable economic times, and have yet to be tested by economic slowdown, inflation, or social instability.

14. Critical views on the limits to traditional modes of microfinance, including group lending, are offered by the essayists in Dichter and Harper 2007.

15. In late 2007 there was a period when between 120,000 and 160,000 new members joined ASA each month, but between 100,000 and 125,000 closed their accounts. Interview by Stuart Rutherford with Shafiqual Haque Choudhury, ASA president, November 2007.

Chapter Seven

1. See Duflo, Kremer, and Robinson 2006.
2. See World Bank 2008, chap. 1.
3. Foreign investment in microfinance, for example, more than tripled between 2004 and 2006, to $4 billion. See Reille and Forester 2008.
4. For a review of early experiences with branchless banking, see Ivatury and Mas 2008.
5. New field research adapts methods from medical research, particularly the use of randomized controlled trials, to test the value and logic of financial innovations. Recently, the Financial Access Initiative, a consortium of researchers at New York University, Yale, Harvard, and Innovations for Poverty Action, has been formed to extend field trials in Latin America, Africa, and Asia. Working with microfinance providers, researchers are investigating, for example, how sensitive borrowers are to changes in interest rates, the value of structured savings devices, and the impact of business training alongside credit. For more, see www.financialaccess.org.
6. It is especially important that regulation enables the mobilization of savings. Where reliable microfinance institutions are not allowed to take savings, poor people are driven to riskier places to store their money. Governments must balance the risk of giving free reign to fraudulent savings collectors with the risk of depriving the poor of opportunities to save in an organized way. See Wright and Mutesasira 2001.
7. See www.safesave.org. In the interest of full disclosure, we note that both Rutherford and Morduch are members of the *Safe*Save cooperative, effectively serving as board members.
8. In *Safe*Save, the small microfinance provider established by Stuart Rutherford in the slums of Dhaka, success has been found by providing structure through regular, scheduled visits by bank workers. In some loan products offered by *Safe*Save, borrowers are free to choose when and in what values to repay loans, and to modify these choices as often as they like, but this freedom is provided with structure and reliability by the unfailing daily visit to the client by the field staff. For more, see www.safesave.org as well as www.thepoorandtheirmoney.com.
9. Bangladesh currently lacks a legal identity that would allow *Safe*Save to expand rapidly, so these services have been limited to just 13,000 clients in the capital's slums.

Appendix

1. See, for example, Ardener 1964; Geertz 1962; Bouman 1989; and Hulme and Arun 2009. Rutherford (2000) also describes a wide variety of informal mechanisms.
2. The World Bank has been the leader in developing large household surveys in its Living Standards Measurement Survey program, with some attention to finance. Other important large surveys include the RAND Family Life Surveys and surveys launched by the International Food Policy Research Institute. FinScope provides an example of an annual survey on the use of financial services. It is undertaken across numerous countries in Africa and beyond (see www.finmark.org.za). While extremely useful in documenting the degree to which populations use financial services, including informal services, the survey is a repeat cross-section, a snapshot of household use at any point in time, rather than a survey that tracks the same households over time.
3. Notably Hulme and Mosley 1996.
4. Rutherford 2000.
5. Planning for the Indian diaries had begun even before the Bangladesh ones were under way, and they formed a part of the same Department for International Development (DFID)-funded research project directed by the University of Manchester. Orlanda Ruthven, who had been working with DFID in Delhi, led the research and was valuably supported by Sanjay Sinha and Meenal Patole from EDA Rural Systems, a private consultancy based in Delhi.
6. In Bangladesh, they were led by S. K. Sinha and included Saiful Islam, Rabeya Islam, and Yeakub Azad. In India, they were Susheel Kumar and Nilesh Arya. In South Africa, the seven-member team was Tshifhiwa Muravha, Busi Magazi, Lwandle Mgidlana, Zanele Ramuse, Nomthumzi Qubeka, Abel Mongake and Nobahle Silulwane.
7. We asked field researchers to try to have a private interview with each household member over the year, including children.
8. In Bangladesh, this gift was a sari or a shirt and a box of soaps; in India, a gift of the respondent's choice up to a stated value, and in South Africa, we gave a cash gift that was equivalent to roughly a month of the income. In South Africa, we also gave two very small gift vouchers for a local supermarket twice during the year. In Bangladesh, we also gave modest cash gifts to households who went to great trouble to help us or who were in distress. We did not tell the respondents what the gifts were before we started the interviews. We believed

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Jonathan Morduch
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