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From Revolution to Evolution:  
Charting the Main Features of Microfinance 2.0

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# From Revolution to Evolution: Charting the Main Features of Microfinance 2.0

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## Abstract

The past thirty years or so has seen microfinance take off from small group-based lending experiments to several thousand financial service providers (FSPs) serving a growing portion of the developing world today. Nevertheless, the challenge to improve broadbased access to financial services—going beyond credit and into other products such as savings, insurance and money transfer services—remains. Where is the microfinance industry headed? This essay reviews the available evidence, and argues that both the public and private spheres are crucial to the continued dynamism and expansion of the microfinance industry—the private sector as a continued source of product and process innovations; and the public sector taking on a strong market enabling and development role.

JEL: D52; O31; Q13

Key words: microfinance, market failures, information, innovation

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## 1. Introduction

Access to financial services, notably credit and insurance, are particularly important from a standpoint of human and economic development. The microfinance literature highlights how financial market imperfections could prevent the poor from borrowing against potential future earnings in order to invest, serving as an obstacle to lifting themselves out of poverty and locking them in a poverty trap (e.g. Armendariz de Aghion and Morduch, 2005). Unsurprisingly, development practitioners and policymakers have devoted considerable energy and resources in the last thirty years or so towards advancing the cause and practice of improving broad based access to microfinance.<sup>1</sup> With its humble beginnings in the late 1970s providing credit to small groups of women, Grameen Bank is now a famous example of the microfinance revolution: today it has well over 7 million borrowers, 97 percent of whom are women. Its 2,481 branches provide services in over 80,000 (or over 90 percent of) Bangladeshi villages.<sup>2</sup> Despite impressive gains by Grameen and others like it, notably in the Asian region, (very) rough estimates suggest that access to formal financial services is still very low in many parts of the world (table 1). Looking beyond credit, into other types of financial services such as savings, insurance and money transfer services, the available evidence suggests that penetration rates are even less impressive.<sup>3</sup>

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<sup>1</sup> If one considers the late 1970s (when Grameen Bank was created) as a rough approximation of when the microfinance revolution began, then we probably have about thirty years of accumulated experience and knowledge in this area.

<sup>2</sup> See <http://www.grameen-info.org/bank/index.html>.

<sup>3</sup> Studies of such demand and market prospects in India, Indonesia and Lao People's Democratic Republic have been undertaken by Allianz AG, GTZ and UNDP Public Private Partnership (2006a,b,c), revealing possibilities for growing microinsurance markets in these countries. Another recent study on India provides a rough guesstimate of the total microinsurance potential (life and non-life insurance) for that country, reaching up to \$1.9 billion (UNDP, 2007: 97). For a survey of the present state and key issues of microinsurance provision in developing countries today, see Churchill (2006).

**Table 1. Preliminary Guesstimate of the Coverage for Microfinance**

	<b>Target market (number of people in million)</b>	<b>Total active accounts (number of accounts in million)</b>	<b>Market Coverage (percent share of low-income target market)</b>
<b>Africa</b>	413	20	4.91
<b>East Asia and the Pacific</b>	1148	240	20.88
<i>China only</i>	(801)	(118)	(14.74)
<b>Europe and Central Asia</b>	220	14	6.14
<b>Latin America and the Caribbean</b>	286	11	3.69
<b>Middle East and North Africa</b>	231	37	15.97
<b>South Asia</b>	857	179	20.88
<i>India only</i>	(639)	(141)	(22.11)
<b>TOTAL</b>	~ 3000 million	~ 500 million	~ 16 percent

Source: Data for column 1 is drawn from Christen, Rosenberg and Jayadeva (2004: 7). Data reported in columns 2 and 3 are derived using data on total alternative financial institutions (AFI) account shares from Christen, Rosenberg and Jayadeva (2004: 7). It was assumed that the regional distribution of the total AFI accounts reported is roughly similar to the distribution of the estimated total active accounts by these authors.

If the past 30 years or so of microfinance represents the first phase of this industry's development, what might the next phase look like? Speculating on the future of microfinance, this essay elaborates on the critical role to be played by private innovations, as well as market enabling and developing public policies. Progress on these two main fronts could help to propel the microfinance industry towards reaching a wider group of the world's low income population and providing them a broader array of financial services. In this "next phase", private innovations will be even more critical in mitigating costs and ensuring that financial service providers (FSPs) are more responsive to evolving client demands. Though access to basic credit and savings products are still deficient in some parts of the world, growing competition and sophistication in the array of products, as well as in individual product design, are now emerging as keys to the microfinance industry's future. Public policies will need to be designed in ways

that meets the challenges of a maturing microfinance industry; and in many ways, both the private and public spheres will need to innovate.

## **2. The Role of Private Innovation**

Private sector innovations could come in the form of new and improved products, processes, and organizational structures that reduce production costs, better satisfy customer demands, and yield greater profits (Baumol, 2002). In microfinance, a now well-known example of a critically important innovation is the group-lending scheme applied by financial service providers (FSPs) such as Grameen and Accion.<sup>4</sup> Group lending involves joint liability among members and it helps respond to information problems by incentivizing group-based screening (which could be more efficient than bank screening since members of the group may have more information on each other) as well as improving contract enforcement to the extent that peer pressure prompts repayment. As they got to know their clients, and as many of the latter established good credit histories (solving part of the information related problems), a number of FSPs have also evolved, in part reflected by a transition out of group lending into more individual lending based products (to be discussed in more detail below), as well as offering financial services beyond credit.<sup>5</sup> The innovation of group lending sparked the microfinance revolution, and there is little doubt that further innovation will be needed to sustain and take it to the next level. This section describes a

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<sup>4</sup> The Grameen model of group lending was developed by Muhammad Yunus in 1976 in Jobra, Bangladesh. It involves lending to groups of five individuals who are jointly liable for loans made to group members. First developed in 1984 in Bolivia by John Hatch, village banking is an alternative modality of group lending, which involve large groups of 15 to 30 people who are given a single loan to manage and on-lend to members. It must be noted that the antecedents of group lending could be traced at least as far back as the 19th century, when German credit cooperatives (and some imitators in other European countries) operated in very similar ways. See Ghatak and Guinnane (1999) for a discussion of this latter point.

<sup>5</sup> Nevertheless, it should be noted that group lending can potentially keep credit from reaching those who have been ostracized from social networks, regardless of their credit history. Certain schemes can also lead the most vulnerable of a community to become even worse off. See Huq (2004) for a discussion of some anecdotal evidence of these negative effects.

number of these innovations in two critical areas: those overcoming cost-related constraints; and those that help to better respond to evolving microfinance demand.<sup>6</sup>

## **2.1 Overcoming Cost-related Constraints**

Information asymmetries contribute to high screening and monitoring costs, while an unstable economic and political landscape as well as poor (or missing) institutions, notably in urban slums, are factors that ratchet upwards both the risks of investment and the cost of capital. Additionally, geographic dispersion of many of the poor in rural areas leads to high marketing and operational costs. Going beyond group-based lending, a number of innovations could help mitigate some of these costs, notably those associated with screening and monitoring, the cost of capital, and distribution and marketing.

### **Mitigating Screening and Monitoring Costs**

*Dynamic Incentives.* As many MFIs move away from group lending, they tend to build dynamic incentive features into their lending strategies in order to encourage repayment and minimize costs related to monitoring and enforcement. Thus dynamic incentives also help to mitigate the effects of information asymmetry (Roodman and Qureshi, 2006). Some of these dynamic incentives include the threat of exclusion of defaulting borrowers and giving borrowers in good standing access to larger loans, both of which give borrowers strong reasons for paying their loans back and keeping good credit standing. Some scholars consider this—collateralizing the asset of future access to loans—as an additional innovation (i.e. the other is group lending) by MFIs (Schreiner, 2003).

In some contexts, the ability to credibly apply dynamic incentives could be considered as one of the most important differences between the MFI approach and the earlier experience of state-directed credit. Many state-run banks often faced pressure to extend loans based on political

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<sup>6</sup> This section also draws on a broader survey of pro-poor innovations by Mendoza and Thelen (2008).

exigencies and patronage politics, thus curtailing the steady supply of financing available. This could have resulted in an expectation that one would only be able to take out one loan in those institutions—which in turn curtails the incentives to repay, and this in turn was anathema to financial viability.<sup>7</sup> By being able to provide a credible threat of exclusion and as well as offering higher loan amounts to those who do pay, microlenders are able to apply repayment incentives that state-run banks may not have had (Armendariz de Aghion and Morduch, 2005).

*Information Sharing.* Credit bureaus and similar information-sharing devices can also mitigate screening costs and help to increase the performance of credit markets—one could think of these as market underpinning public goods.<sup>8</sup> By sharing negative information on borrowers (i.e. defaults and arrears), lenders can avoid risky borrowers and provide current borrowers with additional incentive to improve repayment performance. Additionally, arrangements that share positive information on borrowers (i.e. credit history, employment, income, overall loan exposure), allow borrowers to create “reputational collateral,” often in the form of a credit score. Over-all this can possibly help mitigate borrower overindebtedness, lower average default rates in the credit market, and reduce interest rates (McIntosh and Wydick, 2005).

One example of a successful credit bureau is CREDITREF, a centralized microfinance credit bureau in Guatemala. According to Luoto, McIntosh, and Wydick (2007), CREDITREF is made up of an association of 19 MFIs and contains information for over 120,000 borrowers as of January 2003. Using information from Genesis, an MFI using the system, their impact study provides some evidence that CREDITREF helped decrease the prevalence of missed and late payments. Results from a randomized experiment show that repayment performance further

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<sup>7</sup> Some of India’s experiences with state directed credit reflect this. For a discussion, see Armendariz de Aghion and Morduch (2005).

<sup>8</sup> Alternatively, if one thinks of the state of higher access to information as the final public good, then the organizational and institutional aspects of the credit bureau could be considered an intermediate input to provide this final public good.

increased both internally and for other lenders, as Genesis introduced a course for lenders explaining how their repayment information was used in CREDITREF, indicating an improvement in client behavior (De Janvry, McIntosh, and Sadoulet, 2006).<sup>9, 10</sup>

A recent partnership between PlaNet Finance, an international NGO, and Experian, one of the largest providers of credit bureau information services, will seek to leverage these types of innovations by introducing credit bureaus in countries where microfinance is fairly developed.

*Improving Product Design.* In addition to innovations in the design of operations (e.g. group lending, dynamic incentives), as well as those that help provide market underpinning public goods (e.g. credit bureaus), innovations could also come in the form of better designed products, i.e. products that better fit the low-income market landscape. BASIX's partnership with ICICI Lombard to pilot and scale up a weather index insurance product is one example as its specific design helps to overcome screening and monitoring cost constraints.

Related problems of asymmetric information and moral hazard create formidable constraints to insurance markets in general. Traditional crop insurance products (in which insurers have paid claims based on actual losses of households, businesses and farmers) have often failed in many countries mainly due to the high costs associated with settling claims. However, index insurance, like the weather index insurance product offered by BASIX, is different from more traditional insurance products because it combines a number of useful features.

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<sup>9</sup> Using experimental methods, Brown and Zehnder (2005) find that the impact of a credit registry depends strongly on the nature of the credit market. They are highly valuable in markets which are dominated by one-off transactions (due possibly to highly mobile borrowers) but add little value in markets that are dominated by repeat transactions and relationship banking.

<sup>10</sup> Regarding increasing competition amongst Latin American credit providers, Dellien and Schreiner (2005) argue that commercial banks will have to use more personalized approaches to collect data in order to compete with microcredit institutions for low-income markets whereas MFIs will have to increasingly use technology to bolster their share of the market.



First, traditional crop insurance programs typically require significant monitoring and farm-level inspection to confirm crop losses. Index insurance offered by BASIX requires relatively less administrative and operational costs (e.g. the costs borne by insurers if they are to overcome imperfect information) due to the simplicity of the product. Its payout is based on rainfall levels (i.e. it is triggered when rainfall levels exceed a certain amount pre-specified in the contract) and no longer on information specific to the farmer covered. In addition, traditional crop insurance programs often suffer from adverse selection (i.e. those who know ex ante that their risk is high are also most likely to seek insurance) and from moral hazard problems (i.e. ex post, after insurance is offered, the insured may change their behavior in ways that increase their risk). However, one of the chief benefits from weather index insurance is that moral hazard problems and instances of claims manipulation are minimized to the extent that farmers have no control over what triggers the insurance (i.e. as opposed to traditional insurance products whereby a farmer's effort and output is linked to what triggers the insurance).

Adverse selection is also minimized to the extent that the contracts and indemnity payments are the same for all buyers per unit of insurance (Skees, Varangis, Larson and Siegel, 2005). Table 2 summarizes the key differences between weather index insurance and traditional crop insurance, highlighting how the former implies simpler and less costly underwriting and administrative functions and is thus a “better fit” for the kind of high-volume, low-margin business model required to serve the poor.<sup>11</sup> Scaling up from the 2003 pilot of 230 participants, BASIX sold 7,685 policies to 6,703 customers in 36 locations across India during the 2005

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<sup>11</sup> Government interventions will likely be critical for infrequent, high-loss events; but a growing number of studies suggest that it might be possible to leave to the private insurance markets the development of insurance products for more frequent risk events, notably if the transactions costs for these insurance products could be minimized. For an extended discussion of market-oriented risk management products (including commodity futures as well as parametric and weather index insurance) that could be used to cope with some types of shocks to the poor (i.e. notably those related to market risks like prices for outputs or inputs; and those related to natural disaster risks like those arising from hurricanes droughts and floods), see Skees, Varangis, Larson and Siegel (2005).

monsoon season (World Bank, 2007: vi). The World Bank attributes this success partly to the effectiveness of BASIX to increase product awareness and improve design by encouraging village participation and building a level of trust with the community.

**Table 2. Comparison of Indicative Expected Cost Levels Involved in Underwriting and Administration Functions of Traditional and Index Insurance**

<b>Function</b>	<b>Traditional</b>	<b>Index</b>	<b>Comment</b>
Establishing insured yield	Key function: Insurers must establish farm or district level yield.	Not required: Use an index as an agreed basis for payout.	Individual farmer yield setting not feasible in small scale farming.
	Cost: High	Cost: Low	
Underwriting	Needs assessment of individual risk or localized district risk.	Not required, but insurers need to screen clients to check for insurable interest.	Product must be adapted to local weather situation to minimize basis risk.
	Cost: High	Cost: Low	
Policy Sales	Sales process requires high skills since it involves underwriting decisions.	Sales process also requires good product knowledge. No major underwriting decisions in sales process.	Education and extension remains important for any crop or index product.
	Cost: High	Cost: Medium	
Paperwork/IT	Generally complex.	Simplified certificates or coupons.	A key to cost reduction is effective IT in head office and districts
	Cost: High	Cost: Medium	
Field inspection	Check for crop emergence.	Not required.	The insurer should monitor crop growing conditions in all cases.
	Cost: High	Cost: Low	
Loss adjustment	Needs inspection of crop damage and claim adjustment.	Not required: Payment according to measured index.	This category is one of the most important differences between traditional and index products.
	Cost: High	Cost: Low	
Claims payment	Settlement of claim.	Settlement of claim.	Once claim finalized, similar payment costs are incurred.
	Cost: Low	Cost: Low	

Source: William Dick as quoted by Manuamorn (2005: 16-17).

## Mitigating the Cost of Capital

When FSPs are able to intermediate between potential savers and borrowers, this can produce a significant multiplier effect, where a set amount of capital is used to help many different clients. Capital constraints are a major issue that impedes financial service providers from expanding financial services to areas with low levels of access. Various approaches have been used to address these constraints, and Ananth (2005), for example, describes three models used in India:

- ***Self-help groups and banks.*** The self-help group (SHG)-Bank linkage model involves third-party promoting institutions helping a group of 15-20 individuals through a period where they are linked to a bank and begin receiving loans. The promoting institution typically manages the loan portfolio for the SHG for a time at a low cost to the individual borrowers, but the bank bears the risk of this arrangement.
- ***On-lending.*** MFIs could also borrow directly from commercial sources and then on-lend to clients, shifting credit risk to the MFI.
- ***MFIs and banks.*** A third model involves a partnership between banks and MFIs where the bank has direct contracts with the borrower, but the MFI manages collection and supervision, due to its expertise in field operations. Here the bank has recourse to the borrowers in case of MFI failure. The MFI shares risk on the portfolio with the bank through a guarantee structure that creates incentives for the MFI to perform well.

Using the latter model of partnerships between MFIs and banks, ICICI Bank works with more than 30 MFIs in India, accounting for loans of approximately \$55 million in December 2004 (Ananth, 2005: 61). This allows ICICI to facilitate the participation of a wider investor base through securitization, or pooling similar microfinance portfolios into marketable securities. Similar partnerships could take place at an international level, holding the promise of helping to

reach greater scale. For example, BlueOrchard Finance S.A. recently partnered with Morgan Stanley to issue a collateralized debt obligation (CDO) called BOLD 2, “BlueOrchard Loans for Development”, creating international bonds backed by repayments on loans to strongly performing MFIs. The 110 million dollars raised as part of this CDO will be loaned to 20 MFIs and is expected to reach over 70,000 microentrepreneurs.<sup>12</sup>

In addition, it might also be possible to leverage the internet in order to more directly establish micro-connections between individual financiers and entrepreneurs on different parts of globe. For instance, Kiva.org is one of several internet platforms that now enable individuals to evaluate different microenterprises in different parts of the world, and directly choose and sponsor the entrepreneur of their choice. Kiva partners with existing microfinance institutions who then supply information on their most qualified borrowers. One could then choose which entrepreneur’s project to finance, by browsing through Kiva’s website.

Finally, mobilized savings may be a lower-cost form of capital compared to other sources, especially if institutions can draw on savers that have larger balances and fewer transactions, such as wealthier customers or small/medium enterprises. The introduction of savings services can benefit an institution’s lending business and expand outreach to new borrowers (Hartarska and Nadolnyak, 2007). Additionally, savings can be used to establish a working relationship between borrower and lender, as well as establishing collateral that the borrower can use to take out loans.

### **Mitigating Distribution and Marketing Costs**

ICT networks and community (or social) networks could also offer lower-cost alternatives to more traditional brick-and-mortar strategies to distribute and market financial services.

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<sup>12</sup> For further information, see <http://www.blueorchard.org/jahia>.

*Leveraging ICT Networks.* Banks are increasingly using technology networks to overcome geographical barriers and enhance clients' access to services. Examples of leveraging ICT networks include recent innovations by Globe Telecom and Smart Communications, the two largest mobile telecommunications companies in the Philippines. Globe Telecom offers a service which allows customers to send and receive money via a mobile phone. The service is called G-Cash and facilitates money remittance, and many other transactions with just a text message or SMS. Through this innovation, the cost for money transfer decreases substantially and access to transfer services for remittances is extended to geographically remote areas. On the other hand, Smart Communications introduced an over-the-air payment system for mobile phones which has many advantages compared to traditional payment systems. It allows a retailer to load a customer's airtime electronically and therefore helps minimize physical product distribution costs. Also, product distribution becomes faster, more efficient and more secure and enables consumers to reload and purchase airtime even in remote rural areas. Leveraging ICT networks offers a range of possibilities to improve access to money transfer services. Table 3 below provides a brief description of a selection of mobile and cardbased technologies for remittance transfers and payments.

**Table 3. Mobile and Card-Based Technologies for Remittance Transfers and Payments**

<p><b>Celpay</b></p> <p>Description: SIM-based mobile phone payment system</p> <p>Countries: Zambia, Democratic Republic of Congo</p> <p>Webpage: <a href="http://www.celpay.com">www.celpay.com</a></p>	<p>A Celpay SIM card provides the Celpay menu. Funds are deposited in a Celpay account, using the cell phone to transfer from a bank account or, if the user is unbanked, depositing cash at a partner bank. Purchases can be made via SMS by entering the amount to be paid into the phone and authenticating the transaction with a PIN. The service provider instantly transfers the money to the merchant’s Celpay-enabled account. Merchants pay a commission of 3.4 percent of the total transaction amount.</p>
<p><b>G-Cash</b></p> <p>Description: Mobile phone-based money transfer service provided by Globe Telecom (GTel)</p> <p>Countries: Philippines, in partnership with Bahrain, Hong Kong, Italy, Singapore, Taiwan, and U.K.</p> <p>Webpage: <a href="http://www.myglobe.com.ph/gcash/about.asp">www.myglobe.com.ph/gcash/about.asp</a></p>	<p>GTel mobile phone subscribers register via text message. Funds can then be deposited and cashed at G-Cash affiliates and GTel offices throughout the network. Funds transfers (from sender to recipient and from G-Cash account to payout in cash) are communicated via text message. A 1 percent processing fee is charged both to deposit and to receive funds (i.e. 2 percent total for a remittance transfer).</p>
<p><b>SMART Money</b></p> <p>Description: Mobile phone-based SMS money transfer service and linked debit card</p> <p>Countries: Philippines and 17 partner countries—in the future, users will be able to pay off micro loans through a linkage with the Rural Bankers’ Association of the Philippines</p> <p>Webpage: <a href="http://www.smart.com.ph/smart">www.smart.com.ph/smart</a></p>	<p>SMART Money is provided by SMART, a mobile phone company in the Philippines, in partnership with MasterCard. The service enables users to transfer money from a bank account to a SMART Money account. Subscribers can then use a SMART Money card like a debit card to pay for goods and services at a network of retail stores and restaurants, or to make withdrawals from ATMs. The service also allows users to transfer cash from one SMART Money card to another via SMS. For remittances, workers outside the Philippines can deposit funds at any of the phone company’s remittance partners in 17 countries. A 1 percent processing fee is charged.</p>
<p><b>No Borders</b></p> <p>Description: Stored value card</p> <p>Countries: Currently pilot testing in Ecuador, El Salvador, and Mexico; planned expansion to Asia, Caribbean, East Africa, and South/Central America; signed alliance agreement with Banco Solidario to</p>	<p>Funds from SVA (closed system) cards can be transferred in real time to bank-issued debit (open system) cards, which can be used for ATM withdrawals, signature-based purchases, and card-not-present transactions. Also allows for direct deposit of payroll checks and for bill payment without a bank account.</p>

<p>link payout locations in Bolivia, Ecuador, and Peru</p> <p>Webpage: <a href="http://www.no-borders.com">www.no-borders.com</a></p>	
<p><b>NTT-DoCoMo i-Mode FeliCa</b></p> <p>Description: Cell phones with embedded multi-application smart chips</p> <p>Countries: Service initiated by DoCoMo in Japan in summer 2004</p> <p>Webpage: <a href="http://www.nttdocomo.co.jp/english/service/imode/make/content/felica/">www.nttdocomo.co.jp/english/service/imode/make/content/felica/</a></p>	<p>Phones are loaded with cash deposits at terminals. The phones can be used as pre-paid electronic cash, credit cards, travel tickets, access control cards, authorizations to access corporate networks, or entry cards such as for club memberships or loyalty programs. Selected information—the remaining electronic cash balance, for example, or transaction records—can be displayed offline on the cell phone. Transactions are completed at POS terminals that deduct the amount of a purchase or read other information from the embedded chip.</p>

Source: UK DFID and USAID (2005 : 2).

Leveraging ICTs could also help enhance access to banking services. Mobile phone banking (or m-banking) is now being offered in a number of countries; and WIZZIT Bank in South Africa is one example. WIZZIT is a startup mobile banking provider that offers a transaction banking account accessible via mobile phone and debit card. Launched in December 2004, it operates as a division of the South African Bank of Athens. WIZZIT targets the 16 million people in South Africa (48 percent of adults) who are unbanked or who have difficulty accessing formal financial services. WIZZIT is a “virtual bank” and has no branches of its own. Customers use their mobile phones to make person-to-person payments, transfer money, purchase prepaid electricity, and buy airtime for a prepaid mobile phone subscription. WIZZIT also gives customers a Maestro branded debit card with which they can make purchases and get cash back at retail outlets and withdraw money at any South African ATM. Customers can also make cash deposits at any Absa Bank or Postbank branch. WIZZIT costs less than the lowest

cost full-service bank accounts offered by the Big 4 (i.e. South Africa's four major banks Absa, First National Bank, Nedbank and Standard Bank), and Mzansi accounts.<sup>13</sup>

In addition, a sophisticated delivery channel developed by Brazilian banks, called “banking correspondents”, has led to the opening of millions of new accounts in urban slums, peri-urban areas, and rural locations. Partner banks equip small shops, such as lottery outlets, post offices, supermarkets, petrol stations, and other retail outlets, with a point-of-sale (POS) device, such as a card reader or PC connected to a mobile phone. At these outlets, customers can open or access a variety of accounts, including savings, credit, insurance, money transfers, government benefits, and bill payments. Since 2000, Brazilian banks (notably Caixa Economica Federal, Lemon Bank, Banco do Brasil and Banco Bradesco) have opened an estimated 8 million new accounts through these banking correspondents, many to people that did not have previous banking accounts (Ivatury, 2006: 7).

*Leveraging Community Networks.* Marketing strategies built on leveraging community networks could also be considered as examples of using soft networks. These types of innovations could not only help lower the costs of marketing products; they also tap the comparative advantage on information that community members might have on fellow-community members. For example, instead of using mass media advertising, such as TV commercials, South Africa's mobile banking provider WIZZIT markets its services through more than 2,000 “WIZZ Kids”, who are typically young individuals from the lower income population, which WIZZIT views as its core market. WIZZ Kids usually know the target market well, and are employed to inform and educate potential customers about WIZZIT and earn a commission for each new customer.

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<sup>13</sup> See Porteous (2007) for an evaluation of WIZZIT's potential to increase access to financial services for the unbanked in South Africa.



## 2.2 Meeting Client Product Demands

The agenda for microfinance has evolved from subsidized agriculture credit starting in the 1950s to a broader range of mostly privately provided microfinance services that are beginning to offer customers a wider choice of delivery systems and institutional structures (Kirkpatrick and Maibo, 2002). This is partly a result of formal providers gaining more experience working with low income markets, and also of growing competition.

Increased competition could have a number of effects on the supply of and demand for credit services, thus enhancing the usage of these services. While many MFIs have historically used group lending techniques, competition from new entrants and client demand has played a role in influencing lenders to switch to more flexible, individual-based systems as mentioned earlier. Grameen Bank in Bangladesh responded to competition and customer demand through a major overhaul of its classical delivery system. “When external factors such as floods and droughts put borrowers in trouble, and as increasing competition gave borrowers the choice of other financial partners, Grameen's response... was not, until the development of Grameen II, sufficiently flexible” (Rutherford, 2006: 15). Grameen II removed the use of joint liability and differentiated the types of loans and insurance available to women. This change has led to a rapid increase in clients, increased profitability, and improved quality of the loan portfolio, despite increased competition from other providers.<sup>14</sup>

Various institutions respond to competition in a number of ways, for example commercial banks may inject more flexible loans into the market using new credit-scoring

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<sup>14</sup> Further empirical evidence seems to support this. For example, Giné and Karlan (2006) worked with a bank in the Philippines to randomly transition existing joint-liability groups to individual-liability groups, while keeping some as they were. For the new individual-liability groups, who still meet for weekly repayment meetings, repayments rates are not affected, but outreach increases as new clients are attracted to the individual-based products. In addition, Wright and Rippey (2003) find that while group lending practices dominated the market at the time of their research in Uganda (accounting for 63 percent of the respondents loans), 81 percent of the clients prefer individual loans.

techniques based on assessment of cash flow attached to a client's savings account; MFIs may introduce new products, such as emergency and medical loans, and improve service quality and customer care; and cooperatives may seek to change their by-laws to extend their services to workers who have regular income streams and are typically served by commercial banks.<sup>15</sup> Demand may increase as providers offer products that are more oriented to clients' need and as financial literacy increases (due either to increased exposure or training).

Two major qualities are important as FSPs form strategies to respond to competition. First, effective management is important in streamlining operations so that new financial services can be piloted, tested, and implemented. Forward-thinking management practices themselves can possibly be utilized to overcome constraints. For example, in order to build capacity in a sustainable manner, SKS, a microfinance institution based in India, implements scaling models based on Coke's or McDonald's factory model in recruiting and training loan officers, as well as deploys branch expansion strategies based on Starbucks' "hub-and-spoke" model.<sup>16</sup> Second, these innovations illustrate the need for a client-oriented approach that focuses on the characteristics of local consumers. As the microfinance landscape becomes more competitive, FSPs that produce a brand image that effectively communicates care for the customer will likely gain an edge over competitors, as may have been the case for ProMujer in Bolivia. Brand loyalty from customers is one possible result of effective, client-oriented management. Using financial performance data from a number of MFIs in Bolivia, Marconi and Mosley (2006) show that the village-based lender ProMujer experienced lower default rates compared to credit-only institutions during a recession (1998-2004). They argue that by offering an "integrated lending

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<sup>15</sup> Johnson (2004) highlights these effects in the Kenyan market. Wright and Rippey (2003) detail the competitive environment in Uganda.

<sup>16</sup> See <http://www.schwabfound.org/india.htm>.

model” including training, health services, advice on legal rights, and political education, ProMujer incurred greater loyalty in their clients.<sup>17</sup>

Increased client loyalty may also be achieved by offering lower interest rates to established customers, offering new products, or capping the interest rate charged even if the opportunity to charge higher rates is present. For example, although SKS finds itself as the only formal provider in some villages, management chooses not to extract monopolistic rates, as these would have to drop drastically if other FSPs enter the market (Akula, 2007). One would expect customer reactions to be negative in this situation, driving them to competitors. Thus, FSPs that refuse to exploit monopolistic opportunities may be building social capital with customers and this may strengthen brand loyalty when competitive pressures begin to grow. A long-term business strategy for financial providers must include building this trust (or social capital) with the communities in which they are working.

Furthermore, a number of innovative designs for savings and lending products are proving to better meet customer needs. Listed below are a number of studies that show impacts of various loan-product innovations. So far, the few studies based on randomized control trials of microfinance innovations have already shown positive, context-specific results such as increased technology adoption for fishermen, higher agricultural yields for farmers, increased employment, and reduced hunger and poverty.

- Giné and Klöner (2005) examine data collected on 65 small-scale, boat-owning fishermen, in India, and they find evidence that easing credit constraints speeds up their

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<sup>17</sup> An additional reason for ProMujer’s better repayment rates could be that information asymmetry problems are overcome through the type of relationship lending techniques that ProMujer utilizes. Brown and Zehnder (2005) find that in the absence of credit registries, relational lending can improve credit markets and enforce repayment. Prior to 1999, Bolivian law forbade the existence of private credit bureaus and public credit registries refrained from collecting information on the microfinance sector (Luoto, McIntosh, and Wydick, 2007).

adoption of technology (in this case, fibre-reinforced plastic boats that are cost and fuel efficient), hence potentially accelerating economic growth.

- A program for smallholder farmers in Kenya called DrumNet has two main components: first, a cashless micro-credit program that links commercial banks, smallholder farmers, and retail providers of farm inputs; and second, market services offered through an integrated marketing and payment program. Based on the expansion of DrumNet services to a new region in 2003, a randomized study by Ashraf, Giné and Karlan (2005) shows that participants who were offered credit experienced a higher increase in yield per acre compared to those who were not offered credit services, possibly through the financing of better inputs.<sup>18</sup>
- Exploring impacts of consumer credit, a randomized control trial study by Karlan and Zinman (2006) examines a South African lender as it expands the supply of consumer loans by encouraging its loan officers to approve randomly-selected, marginal rejected applications (i.e. those who would normally be turned down for loans). Their study shows that consumer credit expansion in this case increased credit access and possibly produced benefits in the form of increased employment, reduced hunger and poverty, as well as increasing profits for the lender.
- In studying links between building human capital and development, a randomized control trial study by Karlan and Valdivia (2007) analyzes the impact of adding business training to a Peruvian group lending program for female microentrepreneurs. Their study finds that training leads to increased business knowledge, practices and revenues for the

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<sup>18</sup> Nevertheless, it must be noted that the DrumNet initiative recently collapsed due to its inability to ensure that the products satisfied standards and regulations in the importing countries.

program participants, as well as improved client repayment and retention rates, which potentially contributes to greater financial viability for the MFI offering these programs.

In addition, commitment savings products are particularly interesting in regards to development and poverty alleviation. Based on survey data for a number of developing countries, Banerjee and Duflo (2007) note that the poor have a difficult time saving at home, due to the risk of theft and constantly facing the temptation to use up any small amount they are able to save. Many poor individuals might be expected to have a high demand for outside savings services, if only as another means to help smooth consumption when unexpected shocks affect their income. Many microsavings products have attached restrictions on access to savings until a target date, or until an amount is achieved, which helps the poor fight the temptation to draw on their savings prematurely. This helps make the product more financially viable and also enhances its positive impact, notably by helping to increase poor households' savings.

One example of a personalized contractual savings product with an emergency loan facility is the Jijenge savings account offered by Equity Bank in Kenya. Customers in the lower-income market segments define the length of the contract and the periodicity of the deposits. Customers taking out longer term contracts are offered a premium rate, but penalties are imposed for premature withdrawals from the account. For an added measure of flexibility, Jijenge savings account holders have guaranteed, immediate access to an emergency loan of 90 percent of the value of the amount in their Jijenge savings account.<sup>19</sup>

Another product where savings is committed to certain uses is a “purchasing through savings” technique that CEMEX uses in its Patrimonio Hoy program in Mexico. Through a well-planned savings program Patrimonio Hoy allows low-income families to obtain access to

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<sup>19</sup> On the *Jijenge* savings account, see. <http://www.microfinancegateway.com/content/article/detail/23457>.

services, cement and other building materials on credit.<sup>20</sup> Put differently (and perhaps more creatively) the flexible payment scheme allows them to “purchase their house in installments”.<sup>21</sup>

Empirical studies are also beginning to find some positive effects from the use of commitment savings products:

- Studying whether microfinance can be used as a tool toward female empowerment, a randomized control trial study by Ashraf, Karlan and Yin (2007) evaluated the impact of a commitment microsavings account offered by a rural bank in the Philippines, where savers committed to restrict access to savings accounts until a specific date or until they had reached a pre-committed balance. Their study found positive impacts on the empowerment of women in the households studied, particularly for those women who had below median decision-making power in the baseline. They also found that this led to a shift towards female-oriented durable goods purchased in the household (e.g. sewing machines, electric irons, kitchen appliances, stoves, etc.).
- Door-to-door deposit-collecting services are sometimes provided by informal microfinance providers, extending savings services to individuals who might not have access to formal banks or who want a safer place to store their money. Such services can lower transaction costs for potential savers as well as provide them with an incentive to commit to saving. Using data collected from a Philippine bank seeking to enter this market, a randomized control trial study by Ashraf, Karlan, and Yin (2006) found evidence that individuals who are offered a monthly, door-to-door collection service substantially increased their savings compared to those not offered the service.

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<sup>20</sup> On the Patrimonio Hoy Program, see [http://www.vision.com/clients/client\\_stories/cemex\\_pat.html](http://www.vision.com/clients/client_stories/cemex_pat.html).

<sup>21</sup> It must nevertheless be noted that offering more flexible payment terms does not necessarily make the product cheaper. It would be important to analyze the cost of the flexible payment scheme as a form of financing, in order to ascertain whether the implicit rate being offered is competitive.

Finally, product innovations in insurance and money transfer markets are also proving to meet client product demands for better risk protection and easier access. One such innovation involves attaching insurance services to access to credit. For instance, Grameen Koota,<sup>22</sup> a solidarity group MFI in India, requires borrowers to deposit 2 percent of their loan amount into an emergency fund, while FINCA-Uganda,<sup>23</sup> a village banking MFI, offers credit-life insurance in partnership with the American Insurance Group at the cost of 1 percent of the loan amount. In both cases, the outstanding loan balance is written off in the event that the borrower dies, which results in better risk management for the client's family, the client's group, and ultimately, the MFI itself (Roodman and Qureshi, 2006).

### **3. Policies for a Maturing Industry**

While a market-activist view seems to offer the best chances for continued self-sustaining expansion for the microfinance industry,<sup>24</sup> government action will nevertheless be needed in the formation of financial markets; not as a substitute, but as a mechanism that develops and enables market processes (De la Torre, Gozzi and Schmukler, 2006). In this section, the theme of innovation continues in two ways: first, policy-makers could promote the private-sector initiatives that expand access and usage to poorer consumers, as those discussed above; second, public officials could also use 'innovative' thinking themselves in implementing policies and providing public goods that enhance the development of financial markets. This is critically reflected in the public sector's market-developing and market-enabling roles.

#### **3.1 The Market-Developing Role**

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<sup>22</sup> For further information on Grameen Koota, see [www.grameenkoota.org](http://www.grameenkoota.org).

<sup>23</sup> For further information on FINCA-Uganda, see [http://villagebanking.org/work-afr\\_uga.htm](http://villagebanking.org/work-afr_uga.htm).

<sup>24</sup> The experience to date so far suggests that well intentioned direct-intervention policies can have short-term effects of increasing financial access, but this may come at the cost of pushing out competitive players and diminishing incentives for innovation, which might hinder the longer-term goal.

The market developing role of policy consists of building the framework upon which a country's population engages in financial transactions with one another. There are numerous dimensions to this role, but two seem particularly critical in the next phase of the microfinance industry: financial regulation and facilitating the development of information and communications technologies (ICTs).

### **Financial Regulation**

Finding the appropriate regulatory regime for the variety of institutions that provide financial access to the poor is proving to be a great challenge in terms of costs, flexibility, and competition. Regulating low-income financial markets consists of more than simply extending the reach of formal bank regulation. Many of the same constraints that drive up the costs for financial institutions (i.e. poor infrastructure, weak institutions) also drive up the cost of regulation and supervision.<sup>25</sup> Regulatory changes must take into account the nature of this environment, understanding the difference between various classes of borrowers, the methodologies employed to reach them, the asset and liability management techniques used, and the documentation and legal systems surrounding the local market. Most risk management techniques have come about due to experimentation on the part of financial providers seeking to find the mix that leads to profitability (Arun, 2005).

Despite the possible pitfalls of poorly designed regulation, financial providers serving low-income regions are typically working within poor market environments which expose both themselves and their clients to great risk, some of which can be mitigated by effective regulation and supervision. Research shows a number of benefits, especially related to institutions that offer

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<sup>25</sup> Unique features of these institutions also drive up regulatory and supervisory costs: it is time-consuming to scrutinize large numbers of very small transactions, especially if the providers are small, geographically dispersed, and use manual bookkeeping methods. Arun and Turner (2002) use the case of India to argue that credible and well-developed supervisory mechanisms must be in place before meaningful regulatory reform can take place.



savings services.<sup>26</sup> Prudential regulation on institutions that accept deposits has been shown to mitigate problems of microbank fraud or incompetence (Wright, 2000; Arun, 2005). In a regression analysis of 114 microfinance institutions from 62 countries, Hartarska and Nadolnyak (2007) find that while regulation itself does not directly lead MFIs to greater operational self-sustainability or client outreach, institutions that mobilize savings do reach more borrowers, thus the provision of regulated savings services can expand usage of lending services. Other possible benefits of regulation include greater access to commercial sources of funds for equity and debt, ability in providing diversified products, higher standards of control and reporting, and enhanced legitimacy in operations (Rhyne, 2002).

Different types of regulation have different outcomes for FSPs. Christen and Rosenberg (2002) differentiate between prudential regulation, which sets detailed standards regarding accounting practices, management principles, and financial structure, and “non-prudential” regulation, which include rules for licensing, reporting financial statements, disclosure of ownership and contract structures, external audits, and transparency in interest rate disclosure. Regulatory requirements for bank transparency (i.e. requiring banks to disclose information on their activities, risk management, and financial health) give bank managers incentives to ensure that their banks are healthy and well managed in order to prevent bank runs. Disclosing information on the bank’s health leads to changes in how the bank makes lending decisions and manages its portfolio. Additionally, information disclosure allows private sector monitoring of both bank managers and public sector regulators, as transparency makes collusion between the two much more difficult (Islam, 2007).

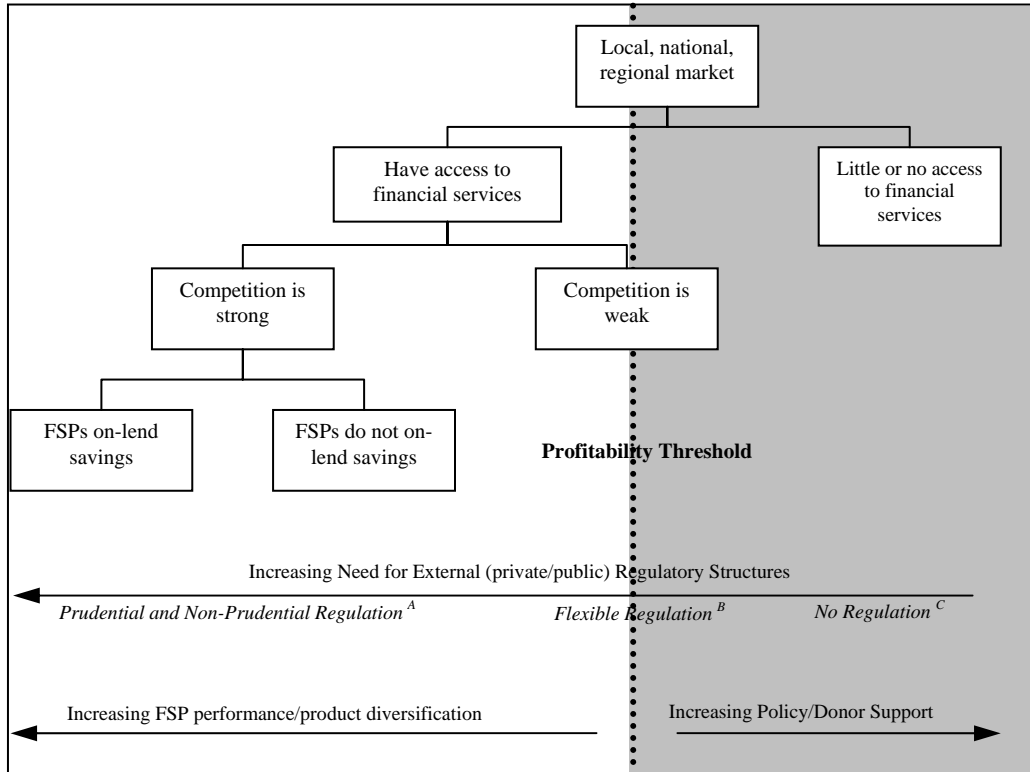
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<sup>26</sup> MFIs use and handle savings in a number of different ways. While some use compulsory savings as loan collateral, others act as a traditional financial intermediary. Thus, regulation will affect these providers in distinct ways. The UN Blue Book (2006: 123) discusses the impact across various providers.

Any regulation can also potentially affect the competitiveness of the sector, either opening or closing barriers to entry. In terms of innovations in “branchless banking” for example, over-regulation (and approval of a narrow swath of potential supply agents) seems to have stifled this trend in India, while more flexible regulatory arrangements seems to have allowed for this to flourish in countries like Brazil and the Philippines (Lyman, Pickens and Porteous, 2008). This suggests the importance of regulatory proportionality, notably when it comes to balancing public good concerns (including consumer protection) and the incentives for providers to experiment and innovate.

Clearly, appropriately designed regulations and policies are only possible with more information on the levels of competition, specific constraints, and the layout of the market for the country. Figure 1 offers a conceptual framework that calls for different financial regulation and policy decisions to address different levels of financial access for consumers and competition between FSPs. For regions where microfinance competition is strong or growing (on the left side of Figure 1), policies that promote competition, ease of entry, and lower barriers to expansion could lead to lower operational costs for FSPs, greater competition-driven innovation and expanding access to lower income individuals. Regulation and supervision in this area could seek to protect customer deposits and implement controls to prevent system-wide overlending.

**Figure 1: Policy Framework based on Access Levels and Market Layout**



Source: Authors' own elaboration.

<sup>A</sup> Regulatory structures take into account the breadth of FSPs (commercial banks, cooperatives, MFIs, etc.) in deciding the level of prudential regulation (due to differing uses of mobilized savings).

<sup>B</sup> Low-cost, easy to implement regulation allows for organic growth of market (Wright 2000; Christen and Rosenberg 2000). Policy may be developed to help existing unregulated providers with switching costs as they move into a flexible regulatory framework (as in Mexico) or remove barriers that keep informal FSPs from being regulated (as in the 1992 Exemption to the Usury Act in South Africa).

<sup>C</sup> Regulation is costly and difficult. Policy should focus on removing access constraints, promoting private innovation (notably those with strong demonstration effects), and developing underlying infrastructures.

The middle of the figure could represent the market's early growth stages,<sup>27</sup> where overregulation can keep FSPs from entering the market yet customers can still be hurt by predatory or poor practices. In this area, regulatory models need to have low administrative costs, allow greater flexibility for innovation to providers, and push for greater information

<sup>27</sup> This precise boundary will vary across regions and institutions. Within institutions, possible cut-offs could be individual loan sizes, number of customers, or portfolio size. Additionally, other factors could include region of operation, provision of non-financial services, and client characteristics. FSPs that cross-subsidize may work on both sides of the line, increasing the difficulty of regulation. Increasing competition will force these providers to choose either to compete or focus solely on provision to poorer clients.

transparency to customers.<sup>28</sup> Furthermore, Kirkpatrick and Maimbo (2002) show that as microfinance institutions grow and become more diversified, self-regulation methods may become ineffective and cease to serve the intention of consumer protection and safeguarding the financial system, thus graduation mechanisms would need to be in place that allow these MFIs to move to more stringent, external regulation. The diversity of FSPs and their customers, along with the vastly changing nature of the market suggest the need for “organic development” of the industry. The need for dialogue between non-governments organizations and government agencies in developing an appropriate regulatory framework is essential. This enables the new regulatory institutions to recognize the activities of various FSPs, creates a space for these institutions to continue growth, and allows them to engage in decisions that work toward the development of the sector.

Where financial markets are weak or non-existent (far right of figure 1), costs of such regulatory measures go up, as does the need for providers to have flexibility to innovate to help mitigate costs as well as reach the poorest clients. This might suggest less regulation—and perhaps even incentives such as subsidies—for FSPs seeking to serve higher-cost, lower-profit populations.<sup>29</sup> The Consensus Guidelines on MFI regulation (Christen, Lyman, and Rosenberg, 2003) argue that deposit-taking on a small-scale may essentially be allowed to go unsupervised, as much of the innovation required to expand access will require flexibility in order to find the management and accounting techniques which can make serving these market profitable.<sup>30</sup>

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<sup>28</sup> Wright (2000) suggests four models that leverage techniques used in the informal sector. These include a “Savings Guarantee Foundation”; a credit union rating agency, as used in Guatemala; market-driven deposit insurance; and a voluntary register.

<sup>29</sup> Others attempt to formalize a tiered approach (UN, 2006; Honohan and Beck, 2007); Van Greuning, Gallardo, and Randhawa (1998) argue for a risk-based approach that differentiates FSPs by their sources of funds (liability structure).

<sup>30</sup> It can also be argued that directed lending program can have positive effect for credit-constrained individuals and firms in this area. Banerjee and Duflo (2004) find that directed credit in India was used to finance more production,

## Information and Communications Technology

Both the broad information and communications technology (ICT) infrastructure and more specific financial infrastructures of a country affect the efficiency of financial markets and levels of access that can be achieved. Policies that improve ICT and transport infrastructure quality could also help to lower the overall cost of doing business, including information gathering and transaction costs.<sup>31</sup> More advanced, faster, lower-cost physical technologies have permitted more innovations (i.e. electronic credit scoring systems) that allow lenders to overcome information asymmetry problems (Frame and White, 2004). Cellular technology and infrastructure is proving to have a huge impact in expanding access to financial services, as shown by the multiple m-banking innovations discussed earlier. According to Eggleston, Jensen, and Zeckhauser (2002), ICT improvements can potentially enhance the functioning of markets, leading to higher incomes, improved living standards, and economic growth. Additionally, ICTs have the ability to disseminate price and other information to isolated, information-deprived locales, enabling rural consumers and producers to participate more effectively in markets.<sup>32</sup>

Rwanda, for example, has implemented a number of policies to improve its ICT infrastructure, called Vision 2020. The plan includes building national information and communication infrastructure, providing new equipment and support, teaching ICT skills, and integrating these technologies across all sectors. As of 2006, the plan had facilitated the development of a cellular telephone network with an active subscriber base of around 167,000 (Murenzi and Hughes, 2006: 262), growing from approximately 5,000 lines in 1998 to 290,000

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increasing the rate of growth of sales and profits. They find no evidence that it was used as a substitute for more expensive, non-subsidized sources of credit.

<sup>31</sup> Using banking industry data for the U.S., Berger (2003) finds that IT advances appear to have increased productivity and scale economies and reduced costs, in some cases by more than 50 percent during the 1990s.

<sup>32</sup> Jensen (2007), for example, examines the effect of access to mobile phones by fishermen in Kerala, India on the price dispersion of the fish they sold. He found evidence that access to mobile telephony enabled fishermen to find the best markets to sell their catch, thus reducing price dispersion—the coefficient of variation of prices across markets went down from 60-70 percent, to 15 percent or lower with more access to mobile phones (ibid: 883).

lines in 2005 (Donner, 2006: 5). In addition, the policy includes provisions to grow innovative thinking in young people by equipping schools with over 4,000 computers and attempting to connect about 250,000 students through broadband internet access (Murenzi and Hughes, 2006). Entrepreneurs have already started to leverage these infrastructure enhancements, with a village phone endeavor undertaken in 2006 by Nokia and the Grameen Foundation USA, seeking to create over 3,000 small businesses by 2009.<sup>33</sup> Observations from a non-randomized study of 277 microentrepreneurs in Kigali in 2003 suggests that mobile telephony enables small business owners to develop new contacts, amplify communication with repeat customers, and may help them grow their businesses (ibid: 2006).

Some policies can also help to facilitate technological change in the financial infrastructure of the country. Growing competition in the finance sector highlights the importance of information sharing between lenders, both in minimizing declines in repayment performance and in giving borrowers incentive to maintain a good reputation with all lenders. The introduction of public credit registries and/or credit bureaus can enhance information sharing and has positive effects on financial access.<sup>34</sup> In credit markets where there are little consequences to default (i.e. payment is not enforceable by third parties, due to weak institutions, and/or one-off transactions are dominant, due to highly migratory populations), credit registries can greatly enhance the performance of the credit market as they create incentives for borrowers to keep a good track record in order to attract better credit offers in the future (Brown and Zehnder, 2005). Credit bureaus typically operate on a volunteer basis by private lenders agreeing

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<sup>33</sup> Taken from Inter Press Service: <http://allafrica.com/stories/psrintable/200707050609.html>.

<sup>34</sup> For instance, Djankov, McLiesh, and Shleifer (2007) use a sample of credit institutions in 129 countries over 25 years and find that improvements in creditor rights and the introduction of credit bureaus are associated with increases in credit to the private sector. Regarding the U.S. banking industry, Berger (2003) cites a number of studies finding that small business credit scoring technology appears to have increased lending to marginal applicants that otherwise might not have qualified for bank loans, increasing access to low- and moderate-income earners.

to share lender information. Public credit registries, on the other hand, are typically managed by central banks that require that banks submit information about loans and lines of credit. While a credit bureau's information is limited to its members, the information collected by public registries will be more universal. As credit bureaus provide information on consumer and small-business loans, they allow better pricing and targeting of loans and level the information playing field by raising competition and reducing moral hazard (Islam, 2007).<sup>35</sup>

According to Jappelli and Pagano (2000), public registers are more likely to arise where private arrangements (i.e. bureaus) are weak. Any information-sharing arrangements are more likely to arise where there is a lack of protection of creditor rights (i.e. collateral cannot be collected in times of default and third party contract enforcement is not available).<sup>36</sup> While private parties typically find it profitable to administer such institutions, governments can play the role of facilitator by standardizing accounting procedures, improving tax administration, resolving privacy issues, and improving telecommunications infrastructure, all of which make credit registries more effective in facilitating the flow of information.<sup>37</sup> A study using cross-country survey data indicates that public and private registries tend to be complementary parts of a nation's credit reporting system (Miller, 2000).

Information and technology policy also affects the provision of money transfer and insurance services. Regarding money transfer systems, Isern, Deshpande, and Van Doorn (2005) discuss how governments can increase the effectiveness of money transfer companies (MTCs). First, the modernization of ICT infrastructure enhances the financial viability of providing money-transfer services to the poor, as private MTCs can leverage land-line, internet, or mobile

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<sup>35</sup> However, bureaus can also act as a barrier to new banks seeking to enter the market, as established partners can keep newcomers out of the bureau.

<sup>36</sup> In addition, Trivelli, Alvarado, and Galarza (2001) find that the development of a public register in Peru has enabled lenders to move away from reliance on collateral.

<sup>37</sup> For additional information on the public sector's role in credit registries, see World Bank (2002). See also McIntosh and Wydick (2005) concerning private registers.

infrastructure to expand access. Second, public policy can play a role in the use of financial infrastructure which MTCs use, such as automated clearinghouse (ACH) for exchanging payment instructions and settling obligations electronically. In the same way, facilitating broad improvements in the ICT infrastructure allows microinsurance and healthcare providers to find new ways to provide better services to the poor.

### **3.2 The Market-Enabling Role**

While the process of developing a market-oriented framework could lead to more inclusive finance in the long run, people need financial services now, and in many parts of the world where microfinance markets are still very thin, the visible hand of the government can play a market friendly role to promote access in the short run. Whether the government chooses to leverage existing private financial service providers or instead directly intervenes, the experience of the last thirty or so years suggests that the main challenge lies in designing interventions that do not replace long-term, market-based incentives that encourage FSPs to expand access to non-included areas and increase service quality.

#### **Leveraging Existing Private Actors**

Government and private donor subsidies have played an important role in expanding financial services to the poor. It is hard to imagine the great success of microfinance to this point being possible without subsidies being used by organizations to reach those unable to work (as in the SKS Ultrapoor Program) or especially vulnerable persons (as in the K-Rep TRY program in Nairobi).<sup>38</sup> Subsidies had enabled innovative financial services to be offered to people who otherwise would have been marginalized.

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<sup>38</sup> For information on SKS, see <http://www.skfoundation.org>. For information on TRY, see [http://www.popcouncil.org/projects/TA\\_KenyaTRY.html](http://www.popcouncil.org/projects/TA_KenyaTRY.html).



Nevertheless, practitioners and researchers of financial services for the poor are finding that subsidies and markets working in the same space creates problems in the longer term, as subsidies tend to impede competition and expansion. Hoff and Stiglitz (1998) show that these subsidies can potentially lead to higher onlending rates because more lenders are entering the market and paying set-up costs. Claessens (2006) gives additional examples where government subsidies discouraged the emergence of innovative new financial institutions that deliver services to lower-income households or smaller firms. In Brazil, interventions to improve the supply of finance for housing was captured by the middle class; the cost of the program played a role in higher financial intermediation spreads, which especially hurt those less well off. McIntosh and Wydick (2005) offer suggestions to donors (public or private) to best avoid this situation. One option is to reserve grants strictly for geographical expansion of financial activity into poor and unserved areas to avoid undermining competitive markets. Second, the donor can restrict funding to methodologies that do not appeal to profitable borrowers, such as joint liability contracts where loan amounts are typically low and organizational costs high (McIntosh and Wydick, 2005).

Additionally, one-off subsidies connected to a specific project will be less likely to have negative impacts similar to the examples above. For example, as part of a 2001 rural finance expansion, the Mexican government-owned BANSEFI administered a government subsidy of USD 45 million to strengthen and support unregulated, rural FSPs in their transition to a new regulatory framework. In this process, it provided technical assistance, training, and back-office services. BANSEFI developed a network platform that connects the various institutions and cuts their operation and supervision costs. In order to mitigate the inefficiencies of subsidies described above, BANSEFI was financed as a one-off subsidy (seed money) with no annual

budget allocations. The participation of multilateral organizations, such as the World Bank, mandated a clear sunset clause, in which BANSEFI will be sold to the regulated entities.<sup>39</sup>

Furthermore, public credit guarantee systems have been used to help expand access to credit. The government pledges to guarantee loans given to a particular group of borrowers; this public guarantee acts as a substitute for borrowers who have few assets to put up for collateral. While some argue that these schemes can sometimes reduce problems of access while waiting for more inclusive institutions to mature (Benavente, Galetovic, and Sanhueza, 2006), others argue that they possibly increase moral hazard problems: increasing risky use of loans by borrowers and decreasing screening and monitoring activities by lenders (Levitsky, 1997; Bennett, Billington, and Doran, 2005).

To mitigate the increased risks, guarantees could be provided under several conditions, as for instance illustrated by the FOGAPE fund in Chile. First, the lender must share part of the default risk, as the guarantee only covers between 70 and 80 percent of credit losses. Second, supervisors perform stringent monitoring of lending practices, including how lenders screen and monitor their clients. Third, overlending is avoided by capping the amount of FOGAPE guarantees that any one bank can receive. The government provided the seed capital and the fund has been able to sustain itself by charging commission fees. Evidence shows that FOGAPE is breaking even in its operation and that it has not led to higher default rates (Benavente, Galetovic, and Sanhueza, 2006; De la Torre, Gozzi, and Schmukler, 2006). However, the effects that FOGAPE has on non-guaranteed lenders needs to be studied more, as well as its effects on overall competition amongst Chilean FSPs.

It is unknown at this time if short-term increases in access due to guarantees come at the expense of long-term development. Honohan and Beck (2007) show that by bringing together

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<sup>39</sup> See Taber (2005) and De la Torre, Gozzi, and Schmukler, (2006) for more on BANSEFI.

different participants in the financial market, some recent experiments with credit guarantee schemes have discovered unexploited investment banking opportunities. Furthermore, while FGHM was established by government entities in Mali to cross-guarantee mortgage loans, their activities expanded to profitable investment banking ventures, contributing to financial development. In many other cases, guarantee activities have failed both financially and in the development realm, pushing out private actors that cannot compete with subsidized institutions.

Finally, a less direct form used to leverage private actors comes from South Africa. Instead of using regulatory devices to force banks to expand financial access, the government exerted a softer form of power through moral suasion.<sup>40</sup> Partially to deflect political pressure, four major private banks and the government-run Postbank signed the South African Financial Sector Charter (FSC), launching the low-cost Mzansi account, extending banking to low-income earners and those living beyond the reach of banking services. Over 1.5 million accounts had been opened by 2005, mostly by female customers. Over 90 percent of the clients were new to the institution in which they opened the account. Mzansi is an initiative by the country's banks to put full-service banking within at most 15 kilometres of all South Africans, and an automatic teller machine (ATM) within at most 10km of their homes.<sup>41</sup> By bringing private sector actors together, the government played an effective role in expanding financial access.

### **Direct (But Efficient) Participation in the Market**

Rather than attempt to leverage private actors, the government can also take a stronger approach through direct ownership of banks. However, this more direct approach could nevertheless deploy market-oriented strategies that improve incentives for repayment (rather than weaken

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<sup>40</sup> A Financial Sector Summit in August 2002 provided a forum for dialogue between business, labor, and community groups. Representatives of the financial sector and the Association for Black Securities and Investment Professionals started negotiating a Black Economic Empowerment transformation charter, which led to the FSC (United Nations, 2006).

<sup>41</sup> Mzansi statistics come from [http://www.southafrica.info/public\\_services/citizens/consumer\\_services/mzansi.htm](http://www.southafrica.info/public_services/citizens/consumer_services/mzansi.htm).

these as has been demonstrated by past efforts at directed credit). One notable example in this regard is the public-owned Bank Rakyat Indonesia (BRI) which has a customer base of over 25 million depositors with a network of over 3,900 small suboffices (Armendáriz de Aghion and Morduch, 2005: 147). Its use of BRI-Units has proven to be extremely efficient in reaching poor individuals. These BRI-Units aim to be self-sustaining, locally autonomous, and profit oriented. To cut administrative costs, they offer a single loan product and use simple procedures to process applications quickly. At the end of 2003, BRI had 3.1 million active borrowers in the program (United Nations, 2006). Rather than relying on subsidies to fund operations, BRI is able to expand lending by mobilizing savings, offering a limited variety of saving products. Yaron, Benjamin, and Charitonenko (1998) argue that BRI's accomplishments shows that public institutions can provide credit to rural producers in an efficient, market-friendly way without the use of subsidies.<sup>42</sup> De la Torre, Gozzi, and Schmukler argue that BRI is an exception, as the general experience of public banks has been negative, with problems including major incentive and governance challenges; poor loan origination and collection; massive corruption; and political manipulation of lending (ibid: 63).<sup>43</sup>

In addition, Townsend and Yaron (2001) evaluate the government-owned Bank for Agriculture and Agriculture Cooperatives (BAAC) in Thailand and find that it greatly achieves outreach to small-scale farmers. BAAC's use of subsidies act as a premium which is used to pay

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<sup>42</sup> Furthermore, in his analysis of government- and village-owned MFIs (GMFIs and VMFIs) in Indonesia, Rosengard (2007) emphasizes the important role that could be played by enlightened local governments. Local government officials have shown themselves willing to support and protect the public purpose of the GMFIs and VMFIs; he argues that the nature of government at the local level is oriented to respond to community needs without being highly politicized. While noting that some MFIs have succumbed to dangers such as politicized or dividend-hungry officials, Rosengard argues that many have been well placed at the lowest levels of government, developed strong relationships with commercial banks for supervision and institutional support, and avoided regulation that undermines the mission and flexibility of these providers.

<sup>43</sup> An IMF study on the Middle East and North Africa (2005) supports this view, citing negative effects of public banks. Additionally, an Inter-American Development Bank study (2004) shows that public banks have a negative impact on growth in countries with low financial development.

indemnities to households experiencing adverse shocks, (effectively an insurance benefit offered to vulnerable Thai farmers). The benefits of the subsidy are estimated to outweigh the annual subsidy amount by almost three times (ibid: 32). Taking data for total farm households in Thailand, a separate case study shows that BAAC accounts for access rates of 92 percent for savings and 46 percent for borrowing (Haberberger, Wajanawat, and Kuasakul, 2003: 284). The authors attribute these high rates to a number of factors: the institution's evolution from a specialized credit institution to a diversified rural bank; the movement towards financial self-reliance due to the use of pro-active rural savings mobilization; the development of cost-effective management techniques that achieve productivity and efficiency and appropriate financial and delivery technologies, including joint lending; the expansion and decentralization of operations based on maximizing client outreach and conveniences; and the use of customer-oriented product design. Since 2003, the Thai government has reduced special arrangements for BAAC in order to stimulate competition in rural markets. In peri-urban areas, growing competition has driven BAAC to improve efficiency and profitability (Goodman-Groen, 2006). The experience of BAAC and BRI thus helps to illustrate that public institutions could also achieve high performance, primarily due to improved product and delivery systems, improved risk management, and forward thinking management with an eye to growing competition.

#### **4. Conclusion**

The past thirty years or so has seen microfinance take off from small group-based lending experiments to several hundred financial service providers (FSPs) serving a growing portion of the developing world today. Nevertheless, the challenge to improve broadbased access to financial services—going beyond credit and into other products such as savings, insurance and

money transfer services—remains. Where is the microfinance industry headed? This essay reviews the available evidence, and argues that both the public and private spheres are crucial to the continued dynamism and expansion of the microfinance industry—the private sector as a continued source of product and process innovations; and the public sector taking on a strong market enabling and development role.

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