



## **ADB Working Paper Series**

Financial Inclusion and Financial  
Stability: Current Policy Issues

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**Abstract**

The recent financial crisis has shown that financial innovation can have devastating systemic impacts. International standard setters' and national regulators' response has been a global concerted effort to overhaul and tighten financial regulations. However, at a time of designing stricter regulations, it is crucial to avoid a backlash against financial inclusion.

In this chapter, we argue that greater financial inclusion presents opportunities to enhance financial stability. Our arguments are based on the following insights:

—Financial inclusion poses risks at the institutional level, but these are hardly systemic in nature. Evidence suggests that low-income savers and borrowers tend to maintain solid financial behavior throughout financial crises, keeping deposits in a safe place and paying back their loans.

—Institutional risk profiles at the bottom end of the financial market are characterized by large numbers of vulnerable clients who own limited balances and transact small volumes. Although this profile may raise some concerns regarding reputational risks for the central bank and consumer protection, in terms of financial instability, the risk posed by inclusive policies is negligible.

—In addition, risks prevalent at the institutional level are manageable with known prudential tools and more effective customer protection.

—The potential costs of financial inclusion are compensated for by important dynamic benefits that enhance financial stability over time through a deeper and more diversified financial system.

In the following pages, we present the current state of financial inclusion globally. We also explore some trends in financial inclusion and what the most effective policies are to favor it. In doing so, we suggest that innovations aimed at countering financial exclusion may help strengthen financial systems rather than weakening them.

**JEL Classification: E44, G15, G18, G20, G21, G28**

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# 1. WHAT IS FINANCIAL INCLUSION?

Financial inclusion aims at drawing the “unbanked” population into the formal financial system so that they have the opportunity to access financial services ranging from savings, payments, and transfers to credit and insurance. Financial inclusion neither implies that everybody should make use of the supply, nor that providers should disregard risks and other costs when deciding to offer services. Both voluntary exclusion and unfavorable risk-return characteristics may preclude a household or a small firm, despite unrestrained access, from using one or more of the services. Such outcomes do not necessarily warrant policy intervention. Rather, policy initiatives should aim to correct market failures and to eliminate nonmarket barriers to accessing a broad range of financial services.<sup>1</sup>

Despite the considerable progress made by microfinance institutions, credit unions, and savings cooperatives over the last two decades, the majority of the world’s poor remain unserved by formal financial intermediaries that can safely manage cash and intermediate between net savers and net borrowers. According to the Consultative Group to Assist the Poor (CGAP), the absolute number of savings accounts worldwide is reported to exceed the global population.<sup>2</sup> And yet half of the world’s adult population—2.5 billion people—does not, in fact, have access to savings accounts and other formal financial services.<sup>3</sup>

Financial inclusion as a policy objective represents the current consensus in a long-standing debate on the contribution of finance to economic development and poverty reduction (see Box 1). It reflects the evolution of financial sector policies in developing countries over the past decades, and embodies important insights into the positive impact that financial services have on the (economic) lives of the poor.<sup>4</sup> Financial sector policies have evolved through three stylized stages: first, fostering state-led industrial and agricultural development through directed credit; second, market-led development through liberalization and deregulation; and third, institution building that aims at balancing market and government failures.

## **Box 1. Financial Development versus Inclusion**

Conventional measures of financial development reflect traditional policy objectives. The focus on aggregate capital accumulation resulted in “domestic credit to the private sector” (as a percent of GDP) being the most prominent measure of the “depth” of financial development. Its impact on growth is well established, but it is poorly correlated with “breadth” or financial access. Hence financial deepening and financial access are only weak substitutes as policy goals. Growing evidence of links from inclusion to equity, growth, and poverty alleviation have turned inclusion into a stand-alone policy objective.

At least until the 1980s, many developing countries channeled public funds to target groups like farmers and small enterprises, and regulated the scope of activities for which these funds could be used. These “directed credit” programs assumed that the rural poor were unable to save or to afford market rates of interest, and therefore need loans at subsidized rates to build capital. Hence development banks lent at below-market rates to selected target groups. To fund cheap loans, deposit rates were often subject to regulatory ceilings,

<sup>1</sup> . Demirguç-Kunt, Beck, and Honohan (2008).

<sup>2</sup> . CGAP (2009a).

<sup>3</sup> . Chaia and others (2009).

<sup>4</sup> . The development benefits of financial services will be addressed in the section on implications for macroeconomic efficiency and welfare.

undermining domestic resource mobilization. The results of “financial repression” were typically shallow financial systems and institutions that had little capacity to allocate resources efficiently according to risk-return characteristics. In addition, poor targeting yielded transfers through highly repressive subsidized interest rates, and subsidies weakened financial institution performance. Not only did these programs typically prove to be unsustainable, they also did not improve outreach of financial services to the poor, particularly in rural areas.

At the end of the 1980s, a new approach emerged that focused on the performance of financial institutions in delivering their services to segments of the population with little or no access to finance. The changes were substantial: the new approach shifted the discussion away from individual firms and households onto institutions and their ability to provide services on a sustainable and widespread basis. Initial experiences in Indonesia, Bangladesh, Bolivia, and some other countries demonstrated that microfinance and rural finance conceived as “banking with the poor” are indeed financially viable and may thus increase outreach on a sustainable basis. These encouraging examples led to a new view called the “financial system” paradigm.<sup>5</sup> The underlying assumptions of this approach were that poor people can generate an economic surplus, which enables them to repay the real costs of loans and to save. The term microfinance came to replace “microcredit,” the former being used increasingly to refer to a variety of financial products such as loans, deposits, insurance, payments, and remittances offered by a variety of regulated and unregulated financial institutions.

Over the past few years, microfinance has undergone a rapid transformation as its links to the formal financial system have been expanded. Growing theoretical and empirical evidence suggests that financial systems that serve low-income people promote pro-poor growth.<sup>6</sup> Lack of access to finance, therefore, adversely affects growth and poverty alleviation. It makes it more difficult for the poor to accumulate savings and build assets to protect against risks, as well as to invest in income-generating projects. As a result, the interest in financial sector development has increasingly focused on the factors that determine not only the depth but also breadth of access, in a move toward inclusive financial systems.

With this increased attention to the poverty alleviation aspects of finance, policy objectives are being constantly expanded to include more quality access to a wider range of financial services.<sup>7</sup> This trend has been facilitated by the development and rapid diffusion of information and communication technology that dramatically reduces the cost of connecting users to formal financial institutions through payment systems, with potential spillovers into a broader range of services.<sup>8</sup>

Against this background, financial services to the unbanked have become a major area of interest for policymakers, practitioners, and academics who increasingly emphasize financial inclusion as a policy objective. The notion of building inclusive financial systems recognizes not only the goal of incorporating as many poor and previously excluded people as possible into the formal financial system, but it also assigns to mainstream financial institutions the role of reaching out to the unbanked.<sup>9</sup> From this perspective, microfinance is now seen as an integral part of an inclusive financial system. As a result, financial inclusion has become an important policy goal that complements the traditional pillars of monetary and financial stability, as well as other regulatory objectives such as consumer protection. Policies to encourage increased access for the previously unbanked must, however, take into

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<sup>5</sup>. Otero and Rhyne (1994).

<sup>6</sup>. Beck, Demirgüç-Kunt, and Maksimovic (2004).

<sup>7</sup>. Morduch (1999); Robinson (2001).

<sup>8</sup>. See Demirgüç-Kunt, Beck, and Honohan (2008); UN Capital Development Fund (2006).

<sup>9</sup>. UN Capital Development Fund (2006).

consideration the objectives of financial stability, especially in light of the current economic and financial crisis.<sup>10</sup>

All these policy changes were possible because at the microlevel, views on household behavior with respect to financial services have changed dramatically. Today, it is understood that poor households rely on a variety of financial instruments in the daily management of their cash flows and risks, and in their endeavors to build assets through saving. Tools such as financial diaries show that the key challenge faced by these low-income households is the irregularity of their cash flows.<sup>11</sup> The average income at the international poverty line of \$2 a day translates in practice into a highly variable flow that requires active management to smooth consumption and reduce vulnerability to various shocks, such as health risks, as well as to cope with major life cycle events.<sup>12</sup>

## 2. HOW TO MEASURE PROGRESS?

Reliable and comprehensive data that capture various dimensions of financial inclusion are a critical condition for evidence-based policymaking.<sup>13</sup> That includes the definition of consistent financial inclusion indicators that not only may set a clear direction for policymaking by translating the concept of financial inclusion into operational terms but also may allow tracking progress and measuring outcomes of policy reforms.

This presents several challenges, though. Thus the definition of financial indicators has traditionally been shaped by previously formulated policy objectives. On other occasions, some indicators may introduce important distortions into the analysis prior to policymaking discussions by prioritizing aggregate volumes over numbers and characteristics of clients.

Broadly speaking, financial inclusion can be measured through the following lenses in order of complexity:

—*Access*: the ability to use available financial services and products from formal institutions. Understanding levels of access may require insight into and analysis of potential barriers to opening and using a bank account for any purpose, such as cost and physical proximity of bank service points (for example, branches and ATMs). A very basic proxy for access can be derived by counting the number of open accounts across financial institutions and estimating the proportion of the population with an account.

—*Quality*: the relevance of the financial service or product to the lifestyle needs of the consumer. Quality encompasses the experience of the consumer, demonstrated in attitudes and opinions toward those products that are currently available to them. The measure of quality therefore would be used to gauge the nature and depth of the relationship between the financial service provider and the consumer as well as the choices available and consumers' levels of understanding of those choices and their implications.

—*Usage*: beyond the basic adoption of banking services, usage focuses more on the permanence and depth of financial service and product use. Hence determining

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<sup>10</sup>. Hawkins (2006).

<sup>11</sup>. "The Financial Diaries project is a year-long household survey that examines financial management in poor households" in South Africa. Data are "captured into a specially designed Access Database that produces customised diary questionnaires for each household, as well as a system of reports that allows for continuous data surveillance." The overall aim of the project, which is funded by the FinMark Trust, the Ford Foundation, and the Micro Finance Regulatory Council, is to get a better grasp of how poor people manage their finances. See [www.financialdiaries.com](http://www.financialdiaries.com).

<sup>12</sup>. Collins and others (2009).

<sup>13</sup>. This section is based on Bankable Frontier Associates (2009).

usage requires more details about the regularity, frequency, and duration of use over time. To measure usage, it is critical that information reflect the user’s point of view, that is, data gathered through a demand-side survey.

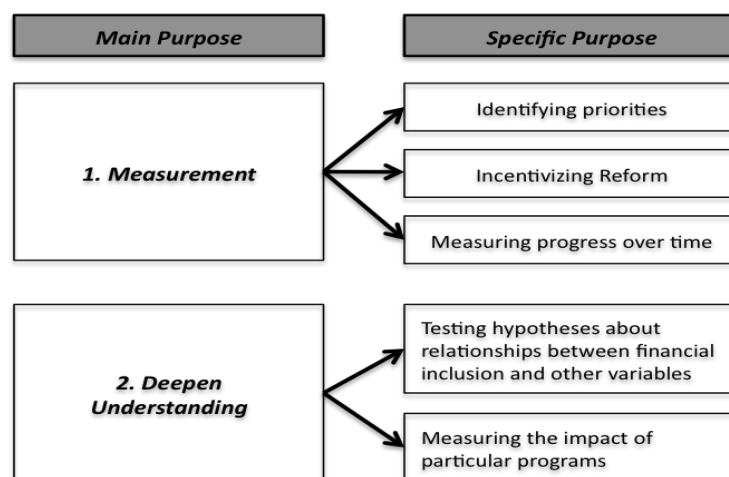
—*Impact*: measuring changes in the lives of consumers that can be attributed to the usage of a financial device or service poses serious methodological challenges to survey design.

This information can be sourced either from the demand side, that is, at the individual, household, or firm level, or from the supply side, that is, at the level of a financial institution, or from a combination of both. The key surveys that have produced relevant data have been compiled by CGAP.<sup>14</sup>

With all these elements in mind, it can be stated that measurement of financial inclusion serves two primary objectives that imply different data needs: first, measuring and monitoring levels of financial inclusion, and second, deepening understanding about factors that correlate with financial inclusion and, subsequently, the impact of policies.

These primary objectives can be broken down to more basic levels (Figure 1). Measurement data can be used to approximate the number of people who have access to or are currently using some type of financial service or product. Provided these data can be linked to other in-country factors, such as population characteristics, they can also help identify priorities and catalyze changes in policy and approach. If collected repeatedly, these data can also be used to monitor progress over time. On the other hand, data can also deepen understanding of the problem of financial inclusion. This is typically entails a more complex method of design and collection. This type of data is more appropriate to support solution building and impact measurement of policies put in place.

**Figure 1: Measurement Objectives**



Source: Porteous (2009).

### 3. FINANCIAL INCLUSION TRENDS

There has been significant but uneven progress toward financial inclusion around the world in recent years. Some of these steps have been driven by market-friendly policies that will be presented in more detail in a later section.

<sup>14</sup>. Kneiding, Al-Hussayni, and Mas (2009).



Some countries in Asia, such as India and Indonesia, have a long tradition of emphasizing access to finance.<sup>15</sup> At the regional level, these policy priorities have paid off: 25 percent of households living on less than \$2 a day now have access to formal or semiformal financial services, compared to 40–50 percent of the population as a whole.

Other success stories include:

—Mongolia: a successful turnaround of a state bank increased the number of deposit accounts by over 1.4 million since 2006, now reaching 62 percent of households.

—Philippines: mobile phone banking has expanded to serve to 4 million clients since 2002.

—India: access to credit among the poor is up from 7 percent in 2004 to 20–5 percent in 2009, as the microfinance sector added 9.9 million clients.

—Bangladesh: 4–6 million new microcredit clients have been added since 2006; financial services have reached about 55 percent of poor households, substantially expanding access to savings.

—Viet Nam: 2.1 million new microfinance clients have been added since 2006.

In contrast, access in People's Republic of China (PRC) appears to have declined since the reforms of the rural cooperatives. Also, India's poor have little access to deposits: "no frills" accounts have increased to over 28 million, but studies show that many of these are barely used.

Particularly in Asia, the poor are often served by public banks or nonbank entities, including nongovernmental organizations (NGOs), with private sector banks playing a smaller role. Key examples of these public banks and nonbank entities include:

—Pakistan: Post Savings Bank, with 3.6 million accounts in 2006.

—India: post offices, with 60.8 million savings accounts as of March 2007.

—Bangladesh: Rural Development Board, with 4.7 million active borrowers in 2007.

—Viet Nam: Bank for Agriculture and Rural Development, with 10 million farmer clients in 2007, and Bank for Social Policy, with 6.79 million active borrowers in 2008.

—Thailand: Government Savings Bank, with 36 million accounts in 2006.

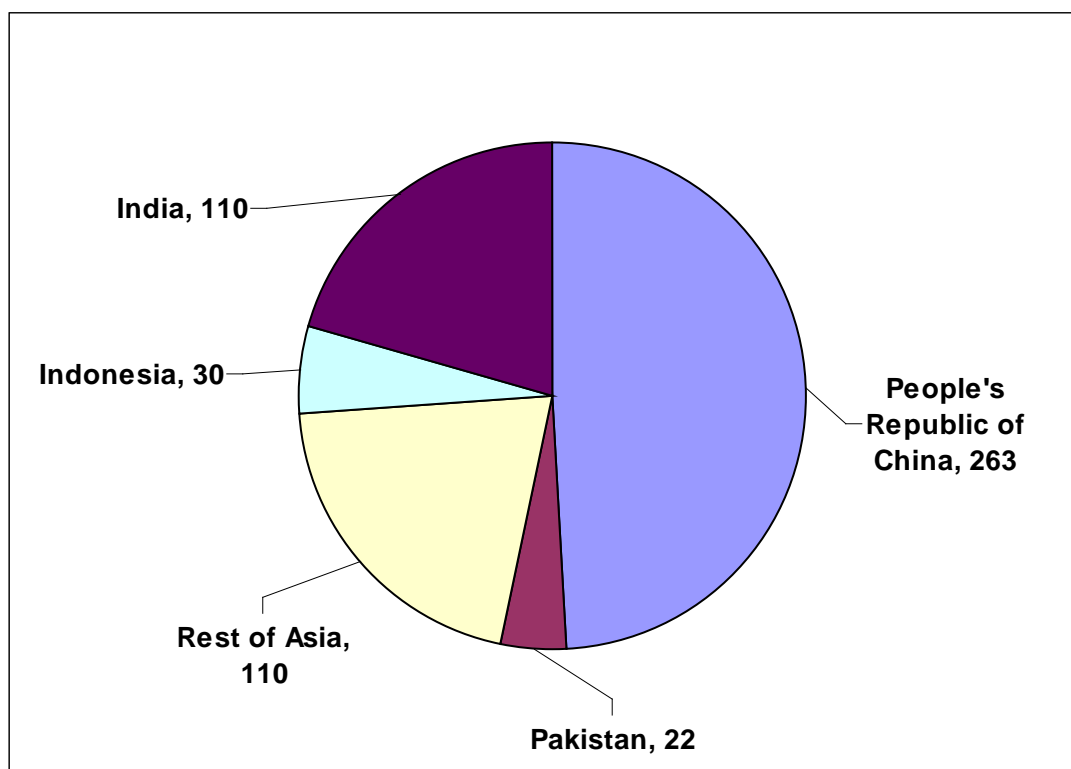
—Sri Lanka: state banks, which were used by 72 percent households by the end of 2006.

However, despite this outreach, service quality is inferior, and most institutions depend on subsidies. Furthermore, as shown in Figure 2, despite remarkable improvements in India and Bangladesh, an estimated 535 million people in these two countries still are excluded from financial services. Table 1 shows how countries in Asia sort out by their level of financial inclusion.

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<sup>15</sup>. The information on Asia in this section is based on Fernando (2009).

**Figure 2: Financial Exclusion in Asia, million people**



Source: Fernando (2009)

**Table 1: Level of Financial Inclusion, Asia**  
**Percent of adult population or households included**

Level of financial inclusion	Countries
High: >50	Thailand, Malaysia, Sri Lanka, Nepal, Mongolia
Intermediate: 30–49	India, People’s Republic of China, Indonesia, Bangladesh, Viet Nam
Low: <30	Cambodia, Myanmar, Philippines, Papua New Guinea, Pakistan, Lao PDR, Timor-Leste, Solomon Islands, Vanuatu, Samoa, Tuvalu, Kiribati

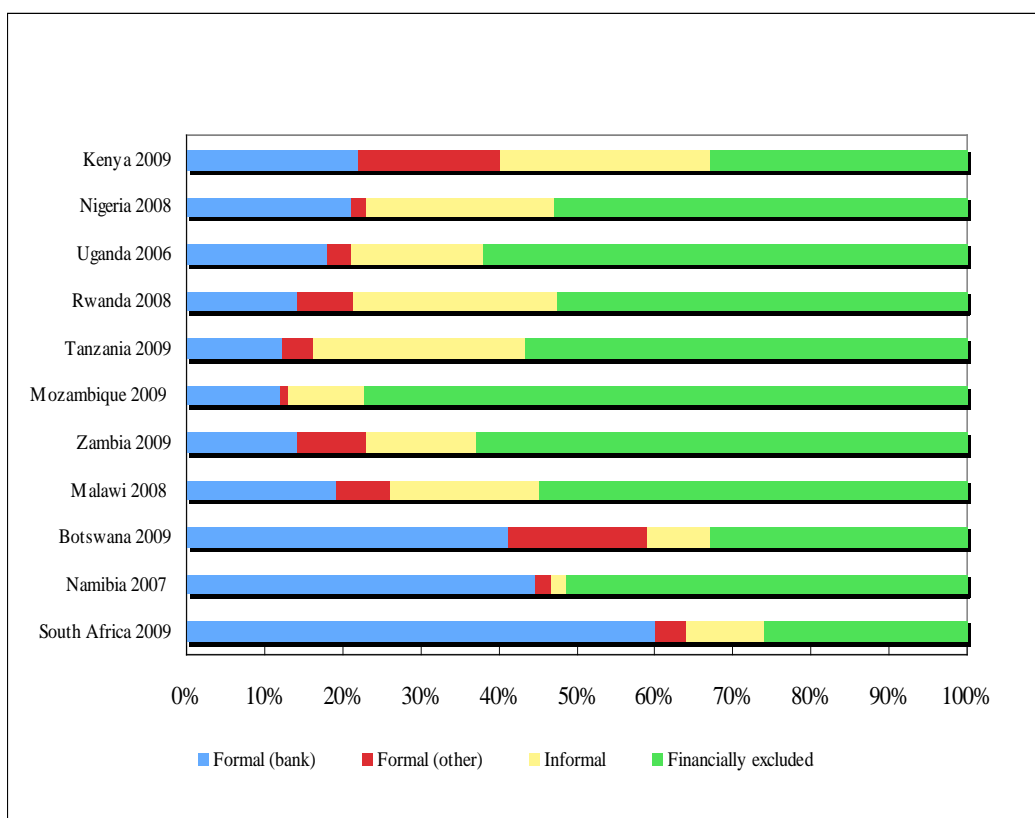
Source: Authors’ calculations.

Africa faces substantially larger challenges than most of Asia, mostly due to a much higher incidence of poverty.<sup>16</sup> FinScope household surveys that are comparable across countries illustrate this difference for eleven countries (Figure 3). While across Asia 25 percent of poor households have access to formal financial services, individual countries in Africa rarely demonstrate such a level of household access.<sup>17</sup>

<sup>16</sup>. Information on Africa draws on Makanjee (2009).

<sup>17</sup>. FinScope surveys (designed and managed by FinMark Trust, established in 2002 with funding from the U.K. Department for International Development) are nationally representative market segmentation studies that explore consumers’ perceptions and usage from informal to formal products. See [www.finscope.co.za](http://www.finscope.co.za).

**Figure 3: Africa: Access by Degree of Formality**



Sources: Finscope 2009 brochures for South Africa, Mozambique, and Zambia. See [www.finscope.co.za](http://www.finscope.co.za).

In Africa, Kenya has pioneered an interesting process of financial inclusion through leapfrogging to mobile phone payment solutions (discussed below). Within only three years, the Kenyan telecommunications provider Safaricom has attracted 7.9 million subscribers to its short message service–based transfer scheme, with significant positive impacts on users.<sup>18</sup>

Latin America is home to some of the best regulatory environments for microfinance, such as Peru and Bolivia.<sup>19</sup> In these two countries, rapid growth over the past seven years has included 6 million clients in the formal financial system. Two new policy tools stand out.

Brazilian policymakers achieved universal coverage of over 5,500 municipalities by enabling banks to use retail agents. This new low-cost delivery channel triggered a massive expansion of formal financial services to 12 million clients in only six years. Other countries, such as Colombia and Peru, are replicating this model.

Latin America has also demonstrated the potential of conditional cash transfers into simplified bank accounts as a way to connect beneficiaries to formal finance while simultaneously lowering delivery costs to the government. Transfer challenges motivated the use of agents in Brazil.<sup>20</sup> In Mexico, beneficiaries increased savings and investment, and more than 90 percent of households started to use banking services.<sup>21</sup>

<sup>18</sup>. Morawczynski and Pickens (2009); Safaricom (2009).

<sup>19</sup>. Economist Intelligence Unit (2009).

<sup>20</sup>. See Kumar and others (2006).

<sup>21</sup>. Zimmerman and Moury (2009).

Despite these impressive achievements, half of the world's population is still without access to savings accounts, insurance, and other financial services, and about 95 percent of the unbanked are in developing countries.

#### **4. THE RELATION BETWEEN POVERTY AND FINANCIAL INCLUSION: RECENT EVIDENCE**

As mentioned previously, collecting reliable financial data is not an easy task. A common obstacle is that both current levels and recent progress in financial inclusion vary substantially across countries. Most countries are only beginning to track financial inclusion, so data for projecting longer-term trends are not yet available. In addition, comparing survey results across countries is often difficult because methodologies used often differ from one survey to the next.

CGAP's *Financial Access 2009*, a global survey of regulators with regard to financial access, focuses on individual account holdings with regulated institutions. Using a statistical model to fill in data gaps, the survey finds 6.2 billion bank deposit accounts globally. Because of the aforementioned challenges faced by survey collectors, this number may include substantial double counting of users, which may therefore mask a rather uneven distribution. Assuming three bank accounts per banked adult, the CGAP survey arrives at an estimate of 2.6 billion unbanked adults in the developing world.<sup>22</sup>

Another recent survey is the World Bank's composite access indicator.<sup>23</sup> It suggests that financial inclusion is an issue well beyond households living on less than \$2 a day (see Figure 4). Instead, it shows how in many countries, the number of financially excluded adults significantly exceeds the adult population living under the \$2-a-day poverty line.<sup>24</sup>

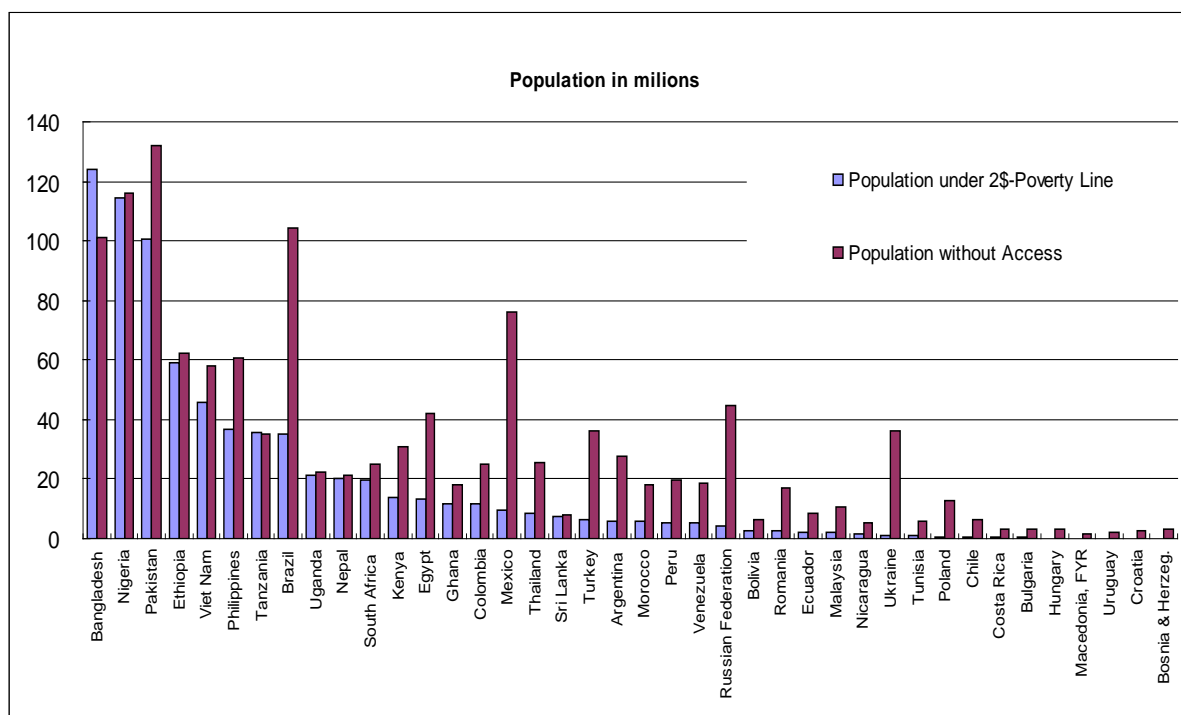
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<sup>22</sup>. CGAP (2009a).

<sup>23</sup>. See Honohan (2007). The correlation between CGAP's data on individual accounts and the World Bank composite indicator is 0.67.

<sup>24</sup>. Due to data constraints, information on poverty and inclusion is not necessarily from the same year for many countries. Both variables are relatively slow moving, though.

**Figure 4: Poverty and financial exclusion in absolute numbers**

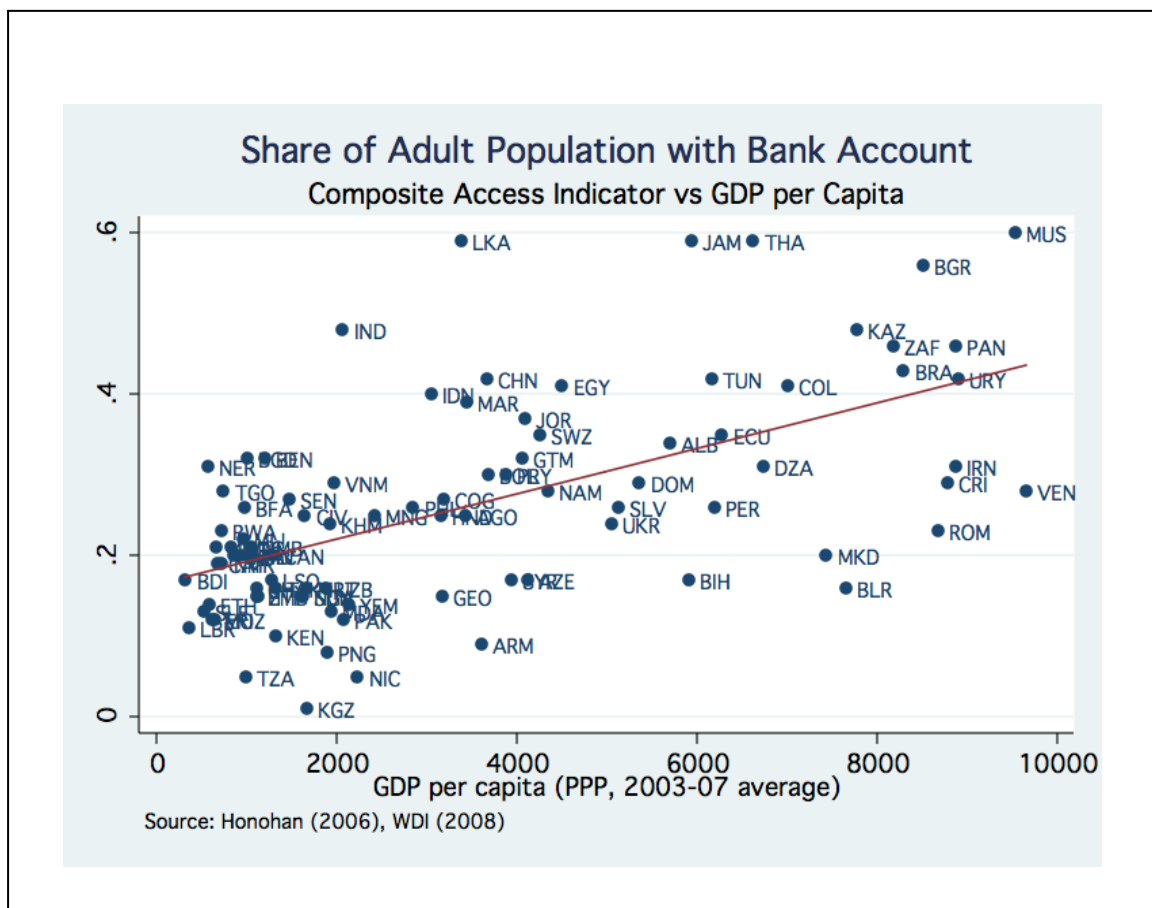


Source: Authors' calculations based on data from Demirgüç-Kunt, Beck, and Honohan (2008), World Bank "Finance for All" access data ([http://siteresources.worldbank.org/INTRES/Resources/PRR\\_Data\\_for\\_Website.xls](http://siteresources.worldbank.org/INTRES/Resources/PRR_Data_for_Website.xls)), and World Bank World Development Indicators (<http://data.worldbank.org>).

Does this mean there is not a clear correlation between financial inclusion and economic development? It seems obvious that financial inclusion has some relationship to economic development. However, as Figure 5 shows, the correlation between GDP per capita and the composite indicator is imperfect.<sup>25</sup> Thus, for a given income level, there is a wide variation around the conditional mean represented by the regression line. This means that many other factors play a role determining the amount of people without access to formal financial services. In this sense, more research is needed to analyze how policy, by making the environment more conducive for the expansion of financial access, plays a role in reducing financial exclusion.

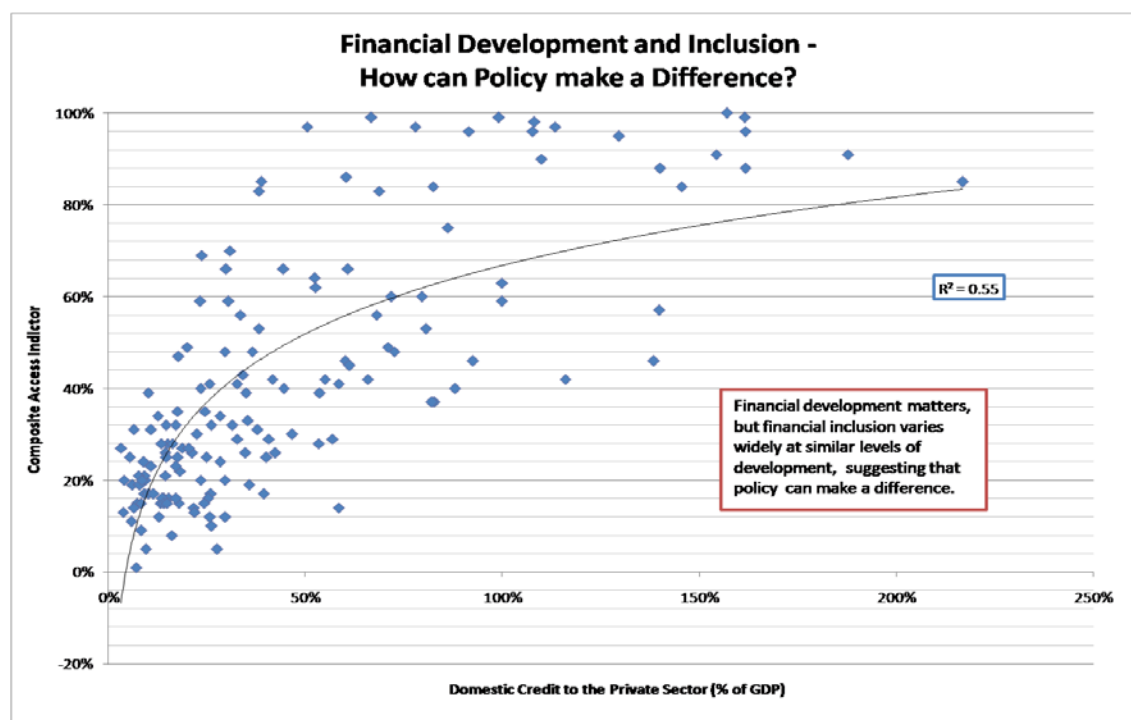
<sup>25</sup>. The correlation coefficient is 0.55 (significant at the 1 percent level).

**Figure 5: Composite Access Indicator versus GDP per Capita<sup>a</sup>**



Notes: <sup>a</sup> GDP per capita based on 2003–07 average purchasing power parity.

This idea is reinforced by Figure 6, which shows the correlation between domestic credit by the banking sector and financial inclusion. Again, it is possible to appreciate a wide variation in access for a given level of financial development.

**Figure 6: Implications for macroeconomic efficiency and individual welfare<sup>a</sup>**

Note: a.  $R^2 = 0.55$ . Financial development matters, but financial inclusion varies widely at similar levels of development, suggesting that policy can make a difference.

Source: Source: Authors' calculations based on data from Demirgüç-Kunt, Beck, and Honohan (2008),

World Bank "Finance for All" access data

([http://siteresources.worldbank.org/INTRES/Resources/PRR\\_Data\\_for\\_Website.xls](http://siteresources.worldbank.org/INTRES/Resources/PRR_Data_for_Website.xls)), and

World Bank World Development Indicators (<http://data.worldbank.org>).

There is evidence for the impact of financial inclusion on both aggregate growth and individual welfare. Consistent with the evolution of policy objectives, the research focus has been first on macroeconomic aspects of financial system development; only in recent years has it begun to address the microeconomic impacts of financial inclusion.

#### 4.1 Macroeconomic Evidence

Financial institutions contribute to growth by reducing information asymmetries that would otherwise hinder the efficient intermediation of resources among savers and investors. There is substantial evidence that financial development has a causal impact on growth.<sup>26</sup> A prominent explanation is Schumpeter's view that finance fuels "creative destruction" by allocating resources to newcomers that promote innovation and possibly topple incumbents.<sup>27</sup> Along these lines, access to finance for new entrepreneurs is an important ingredient in the finance-growth nexus.<sup>28</sup>

<sup>26</sup> Beck and de la Torre (2006); Beck, Demirgüç-Kunt, and Levine (2004); Honohan (2004); Levine (2005).

<sup>27</sup> Beck and de la Torre (2006).

<sup>28</sup> De la Torre, Gozzi, and Schmukler (2007).

More recently, the focus has shifted to links between finance and income inequality. Beck and others (2008) found a link between financial development, reduced income inequality, and poverty alleviation: the aggregate usage of financial services, that is, deeper financial systems, appears to reduce Gini coefficients, a measurement of inequality.

There is also evidence at the macroeconomic level that broader financial systems enhance economic growth. Giné and Townsend (2004) show that, based on a general equilibrium model of the Thai economy, the expansion of access to the financial sector has significantly raised Thailand's growth rate. Conversely, Banerjee and others (2009) emphasize the efficiency and productivity losses associated with preferential access to finance by the better off, and suggest a potential first-order effect of access on investment and growth.

Finally, Pande and Burgess (2005) find a strong positive effect on rural poverty, using a "natural experiment" of new branching regulations in India that incentivized banks to expand into underserved areas. However, the high cost of this expansion policy outweighed the aggregate benefits. This result suggests large potential benefits from technology-enabled, lower-cost branch expansion.

## 4.2 Microeconomic Evidence

Until very recently, the support for financial inclusion from a microeconomic level has been solely based on plausibility, anecdotal evidence, and data that were not subject to statistical tests, such as claims that 65 percent of Grameen Bank clients cross the poverty line.<sup>29</sup> Establishing a causal link from the use of financial services to improvements in the lives of the poor is methodologically challenging and very expensive. It requires eliminating influences of self-selection and survivor biases in the sample, as well as numerous unobservable effects that may confound the analysis. The method of choice is field experiments that establish this link through the creation of a counterfactual by randomly dividing a subset of the population into treatment and control groups. Statistical analysis is then used to identify the differential effects of the intervention, such as exposure to a certain type of financial service.

These randomized controlled trials (RCT) are critical to underpin the claim that financial inclusion positively affects the poor. RCTs are not without shortcomings, however: while methodological rigor produces results with high levels of internal validity, it is much more difficult to generalize beyond the specific context of the experiment, that is, external validity is substantially weaker.<sup>30</sup>

A number of RCTs have been conducted so far. In Kenya, a randomly selected group of rural poor were offered savings accounts. The impact was found to be highly positive: uptake was very significant for female clients, and female market vendors reached higher daily expenditure levels within six months of opening an account.<sup>31</sup> There was no evidence that savings accounts crowd out other investments, and neither was there evidence that the savings accounts allowed for more efficient smoothing over bad shocks, particularly sickness. This study also shows a more significant positive impact of savings accounts for women than for men.

Another RCT example from India provides evidence that the effect of microcredit depends on household characteristics:

—Business owners use credit to expand their businesses, as demonstrated by an increase in spending on durables and an increase in business profits.

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<sup>29</sup>. Grameen Bank (2007).

<sup>30</sup>. For further criticism, see Rodrik (2008).

<sup>31</sup>. Dupas and Robinson (2009).



—Those initially identified as having a low propensity to start a business do not increase investment but rather increase consumption, such as food and transportation.

—Households with a high propensity to start a business reduce nondurable spending, increase durable spending, and reduce temptation spending.<sup>32</sup>

Over the eighteen-month period of study, there were no significant effects on education, health, or women's empowerment. However, business outcomes were significantly positive, including the creation of new businesses and the profits for existing business. While the impact on female welfare could not be established (despite frequent claims to the contrary), one has to take into account the limited time horizon.

Recent research in South Africa highlights the risk management benefits of financial inclusion.<sup>33</sup> Loan applicants that had been declined "at the margin" were randomly offered loans and turned out to be significantly less likely to report leaving a job after entering the experiment than those rejected clients without loans. Treated households earned more and were more likely to move out of poverty. Overall, increased access to credit appears to improve welfare. The study does present evidence that short-term loans are an important cash flow management tool and that they have largely positive impacts on people's welfare, particularly in the area of employment and income. The study also found that loans to customers at (or slightly beyond) the margin were actually profitable.

Given the difficulty with drawing generalized conclusions from RCTs, new tools will be needed to deepen understanding about which services matter most to low-income households and microenterprises, how they impact welfare metrics, and how policy tools can help relax binding constraints on the access frontier.

In conclusion, recent evaluation techniques suggest that positive effects of microfinance exist, but they may be not as overwhelming as assumed or may take more time to materialize. There is room for further research to produce more empirical evidence in support of the need to pursue financial inclusion as a policy objective.

## 5. FINANCIAL INCLUSION POLICIES: RECENT INNOVATION

The financial sector is prone to market failure and, therefore, is generally heavily regulated. The low-income segment is particularly plagued by information asymmetries as participants on the demand side often lack a track record or collateral to pacify lenders' concerns. In addition, lenders lack experience in new markets at the bottom of the pyramid and face adjustment costs regarding business processes. At the same time, the limited size of both individual transactions and the overall market pose challenges to suppliers that need to recover fixed costs.

However, once the pioneers of the microfinance revolution demonstrated tangible market opportunities, substantial business model innovation has expanded the "access possibilities frontier."<sup>34</sup> More recently, technological innovation has dramatically lowered the fixed costs of reaching the low-income segment and attracted a broader range of new suppliers.

Policies are a key complement to private sector innovation through regulatory frameworks, public ownership, the provision of market infrastructure, and measures that lower demand-side barriers. Regulatory frameworks determine the set of institutions that are allowed to enter, shape the scope of available services, and affect institutions' cost of doing business.

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<sup>32</sup>. Banerjee and others (2009).

<sup>33</sup>. Karlan and Zinman (2007).

<sup>34</sup>. Beck and de la Torre (2006).

Prudential regulation is critical to enable financial intermediation and facilitate domestic resource mobilization and financial institution growth while simultaneously protecting savers. Furthermore, public ownership has frequently expanded outreach into segments that were considered beyond the scope of commercial approaches. Secured lending frameworks and public credit registries facilitate transactions despite asymmetric information. Finally, the low education level of poor clients suggests a need for consumer protection and financial education policies.

Policymakers have struggled to accompany rapid innovation. They have been particularly successful where they facilitated experimentation within regulatory frameworks that carefully limited the potential risks. In some cases, policymakers have even taken the lead in introducing new solutions to the market through regulatory or legislative measures or direct participation in the market.

The rapid pace of innovation has substantially increased the complexity of policymaking. On the one hand, this calls for a rethinking of policy principles with respect to financial inclusion.<sup>35</sup> On the other hand, there is substantial scope for stepping up peer-to-peer advice as innovative solutions are being generated by developing country regulators.

To capture and compare emerging policy trends in developing countries, the German Gesellschaft für Technische Zusammenarbeit or GTZ (German Technical Cooperation) assessed thirty-five policy solutions geared toward promoting financial inclusion across ten countries.<sup>36</sup> Six solutions were found to be particularly effective. Four have improved conditions for reaching the poor through various channels, including agent banking, mobile payments, diversification of providers, and state bank reforms. The remaining two solutions are consumer protection and financial identity policies, which play key roles in enabling financial inclusion.

## 5.1 Agent Banking

Policies that enable banks to contract with nonbank retail agents as outlets for financial services have proven highly successful in advancing financial inclusion where bank branches are not economically viable. Such policies leverage existing retail infrastructure as delivery channels, and turn pharmacies, post offices, or supermarkets not only into agents of banks but agents of financial inclusion.

Collaboration among banks and agents has become possible as technology has reduced the costs and risks of the remote exchange of information to carry out financial transactions. Coupled with simplified account opening procedures and other incentives to use this channel, such as the delivery of cash transfers, financial system outreach and numbers of users can increase explosively, as recently observed in Brazil.

Brazil was the early leader in agent banking through the large-scale introduction of “banking correspondents” to distribute welfare grants to unbanked Brazilians. This solution addressed a key physical access barrier: only 1,600 municipalities had bank branches in 2000.<sup>37</sup> Today, some 95,000 correspondents cover all of the 5,500 municipalities, and nearly 12 million accounts were opened at agents over three years. The Brazilian success has inspired similar approaches in Colombia, Peru, Mexico, and Chile.<sup>38</sup> In 2006 Colombia passed

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<sup>35</sup>. See Claessens, Honohan, and Rojas-Suarez (2009).

<sup>36</sup>. See Hannig and Jansen (2008). This study laid the groundwork for creation of the Alliance for Financial Inclusion. For an overview, see APEC Business Advisory Council (2008).

<sup>37</sup>. Ivatury (2006).

<sup>38</sup>. Mas and Siedek (2008).

enabling regulations allowing financial institutions to use retail agents, attracting 3,539 agents that initially focused on bill payments.<sup>39</sup>

Given the topography of Latin America—often a major obstacle to improving access to financial services—it is not a coincidence that agent banking schemes are blooming in the region. With a huge percentage of population concentrated in large cities, the minority living in remote rural areas do not receive enough attention in terms of infrastructure, communications development, and services. This is particularly evident in countries like Brazil or Peru, where these minorities account for millions of people, affecting equally both poor and better-off residents. That is why, as shown in Figure 4, in countries like Brazil, Russia, or Mexico, the population without access to financial services outnumbers the population living on less than \$2 a day to a greater extent than holds in smaller countries.

Critical features of the agent banking model are timely transaction settlement to minimize fraud, simplified account opening procedures, and customer due diligence compliant with international know-your-customer standards. The cost savings are substantial: according to the Peruvian Superintendence of Banks, forty banking agents may be established for roughly the same cost as one bank branch.<sup>40</sup>

The experience of Brazil offers valuable lessons for countries. A Brazilian agent is a service provider of a bank or other financial institution. Any institution that is supervised by the central bank can contract an agent, and anyone can become an agent as long as the bank takes the responsibility and the relationship is governed by a public contract. The success of this model is based on its pragmatic and flexible approach. While the oversight is focused on the financial institution, with the central bank getting access to all data on the agent, it also gives the financial institution enough freedom to articulate the relationship with the agent on its own terms. The Mexican case shows that know-your-customer procedures for smaller transaction authority can also be delegated to agents.

## 5.2 Mobile Payments

Globally, 4 billion mobile phone subscriptions were projected for 2009, well over half of them in the developing world.<sup>41</sup> Mobile phone penetration in developing countries has almost tripled in the past five years, with Asia in particular showing high growth rates (see Figure 7). In Kenya, for example, 47 percent of adults own a mobile phone, and the rate of ownership rises to 73 percent in urban areas and 80 percent in Nairobi.<sup>42</sup>

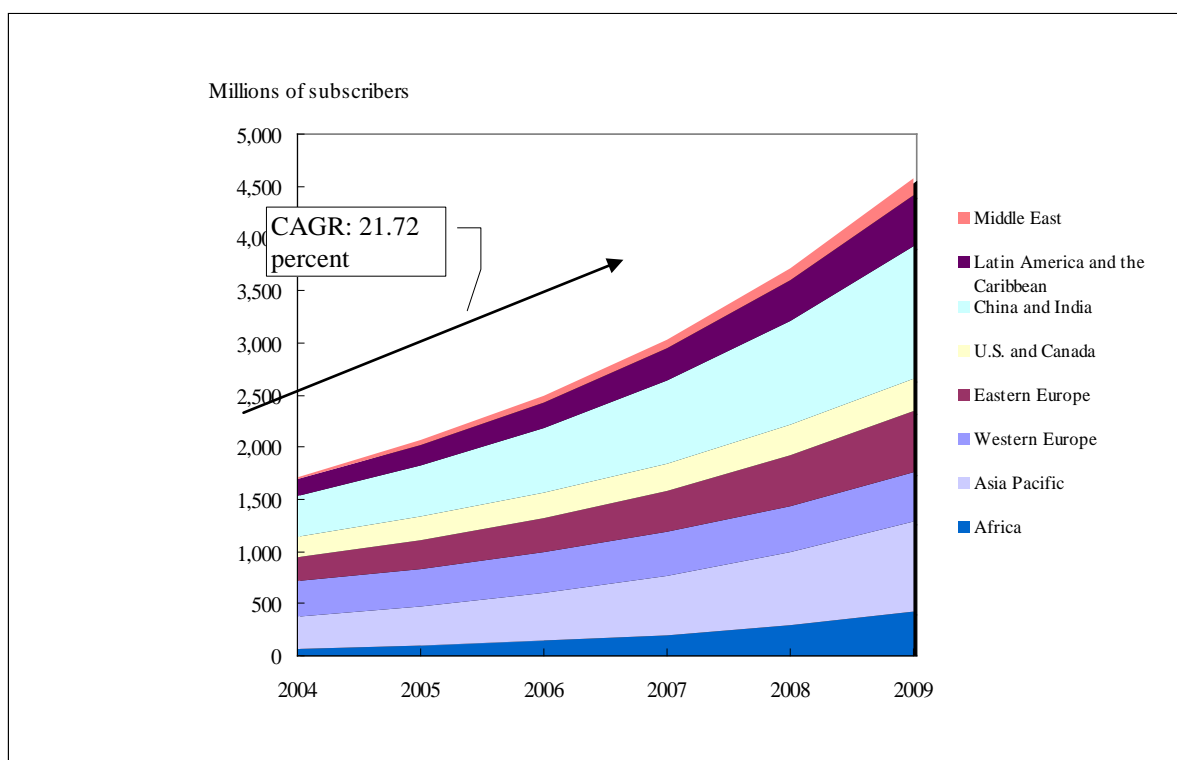
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<sup>39</sup>. Aguirre, Dias, and Prochaska (2008).

<sup>40</sup>. Mas and Siedek (2008).

<sup>41</sup>. Schulze (2008).

<sup>42</sup>. See Financial Sector Deepening Trust (2009).

**Figure 7: Evolution of GSM Mobile Phone Subscribers<sup>a</sup>**

Note: a. GSM, global system for mobile communications; CAGR, compound annual growth rate.

Source: Authors' calculations based on 2009 data from International Telecommunication Union ICT Statistics, Mobile Cellular Subscriptions ([www.itu.int/ITU-D/ict/statistics/](http://www.itu.int/ITU-D/ict/statistics/)).

Proliferating mobile phones open another delivery channel for basic financial services to poor people. This new technology drastically reduces the costs of convenient and real-time financial transactions, expands access points, lessens the need to carry cash by introducing e-money, and attracts previously unbanked customers.

Several country cases illustrate the promise of mobile payments for financial inclusion. The Philippines launched the first successful mobile payment service in a developing country in 2004. Two mobile payment operators have an estimated 5.5 million customers. Mobile phone transactions cost about one-fifth of those executed through bank branches (\$0.50 versus \$2.50).<sup>43</sup>

In Kenya, the e-money transfer service M-PESA offered by mobile network operator Safaricom has achieved the most impressive outreach of mobile payments thus far. The service has experienced rapid growth and currently enjoys a subscription base of more than 7 million registered customers, many previously unbanked.<sup>44</sup> A recent national survey illustrates the positive impact on financial inclusion: the usage of semiformal services including M-PESA has increased from 8.1 percent in 2006 to 17.9 percent in 2009, while the proportion of the population with access to only informal financial services decreased from 35 percent to 26.8 percent, respectively. Most important, the share of the population excluded from financial service decreased from 38.3 percent to 32.7 percent over the same time frame.<sup>45</sup>

<sup>43</sup>. Lyman, Pickens, and Porteous (2008).

<sup>44</sup>. M-PESA Key Performance Statistics, released by Safaricom June 8, 2009. The most recent statistics are available online at [www.safaricom.co.ke/fileadmin/template/main/images/MiscUploads/M-PESA%20Statistics.pdf](http://www.safaricom.co.ke/fileadmin/template/main/images/MiscUploads/M-PESA%20Statistics.pdf).

<sup>45</sup>. See also Kimenyi and Ndung'u (2009).

Mobile payments challenge regulatory capacity as they cut across various regulatory domains, including banking, telecommunications, payments systems, and anti-money laundering regimes. Where mobile payments have taken root, regulators have tended to adopt a “test and see” approach that allows operators to experiment and develop their business models under close supervision. Once market innovation and learning have satisfied the needs of regulators and mobile operators, regulation has been created and implemented to provide legal certainty and to create a level playing field to allow new players.

### 5.3 Diversifying Providers

Policymakers have adopted various regulatory and supervisory strategies to manage the risks of licensing a wider range of institutions to offer deposit and insurance products. Strategies to adapt banking regulations to the specific nature of microfinance include:

- licenses for specialized institutions dedicated to taking microdeposits,
- bank licenses for successfully transforming financial NGOs, or
- licenses for nonbank financial institutions.

A tiered regulatory approach that differentiates institutions by permissible activities and limits credit risk exposure of lower-tier institutions minimizes risk from the central bank's standpoint.<sup>46</sup> Regardless of the strategy chosen, high-level political leadership has proven critical in catalyzing regulatory initiatives to broaden access.

In Peru, Bolivia, and Uganda, regulators have incorporated nonprofit innovators into the formal system by creating legal paths toward a license.<sup>47</sup> This has led to higher savings, benefiting not only consumers but also institutions, enabling them to weather financial crises by making them less dependent on external and wholesale funding.

In Bolivia two microfinance NGOs that transformed into banks, and six nonbank deposit-taking microfinance institutions (known as private financial funds), operating under a special regulatory framework, held a combined \$955 million in deposits as of June 2008. Of this amount, \$458 million were held by the private financial funds, which opened almost 136,000 new savings accounts in the first half of 2008.<sup>48</sup> New laws, specially designed for previously unregulated NGOs, were passed in 2008.<sup>49</sup> The main difference from the preceding model is that NGOs will not need to be transformed into private financial funds. Instead, they will keep their nonprofit status and be allowed to collect deposits and offer extra financial services. NGOs will have the nature of nonbanking financial intermediaries but will be under the same rules as banks and financial entities.

In Indonesia the entry barriers to the financial sector were lowered by the introduction of second-tier rural banks during financial sector liberalization in the late 1980s. After initial explosive growth due to a very liberal licensing regime and postcrisis consolidation, today there are 1,800 rural banks that hold more than \$2 billion in deposits in 9.8 million accounts.<sup>50</sup>

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<sup>46</sup> Hawkins (2006).

<sup>47</sup> Peru and Bolivia ranked at the top of the Economist Intelligence Unit's global microfinance index. See Economist Intelligence Unit (2009).

<sup>48</sup> Bolivian Superintendence of Banks.

<sup>49</sup> Bolivian Superintendence of Banks and Financial Institutions, Legal Resolution SB 0034/2008.

<sup>50</sup> See Institutions-BPR on the Promotion of Small Financial Institutions website ([www.profi.or.id/images/map/scripte/](http://www.profi.or.id/images/map/scripte/)).

## 5.4 State Bank Reform

In many countries, state-owned banks still play a major role in the banking system, and in providing financial services to the poor. They are present in about 73 of 102 countries, where they hold roughly 15 percent of banking assets.<sup>51</sup> Public banks often are the only financial institutions in rural areas with large branch networks, not least because governments have used public banks extensively to promote savings and credit in areas of less commercial interest, such as agriculture or housing, and to implement social programs.<sup>52</sup>

The global picture is rather mixed: some governments have closed down poorly performing state banks as the least-cost choice, as did Benin, Brazil, and Peru, while others continue to suffer from political interference and mediocre performance. More interesting, however, some policymaker-pushed reforms have demonstrated the potential to turn financial inclusion into a new, profitable business for state banks.

Rather than restructuring the whole bank, Bank Rakyat Indonesia (BRI) and Banco do Nordeste in Brazil, for example, created separate lines of business to introduce profitable microfinance operations. Key success factors were governance reform and state-of-the-art microcredit technologies.

BRI has over 4,200 village units that serve 3.5 million borrowers and 21 million savers.<sup>53</sup> The profit of BRI's microfinance operations (27 percent of total loan portfolio) cross-subsidized the less successful banking operations during the Asian crisis.

Banco do Nordeste's "CrediAmigo" has grown rapidly, becoming to be the second largest microcredit program in Latin America since it was launched in the late 1990s. CrediAmigo is a microfinance line of business that operates in 2,000 municipalities, providing microcredit to 400,000 clients for a total portfolio of \$155 million.<sup>54</sup>

## 5.5 Consumer Protection

Every year 150 million new customers enter financial markets worldwide. Information asymmetry between consumers and banks regarding financial products and services puts these new customers at a disadvantage. This imbalance is greatest when customers are less experienced and the products are more sophisticated. Progress on financial inclusion therefore carries the risk of producing more inexperienced and vulnerable customers.

Many financial institutions ensure that these customers are well served, but some have abused their information advantage to increase profits at the expense of consumers who found themselves overindebted, underinsured, or without a return on their investment. This was the case in Bolivia during the early 2000s, where the combination of financial illiteracy, unethical practices of some institutions, and some voids in the legal framework resulted in abuses. Preventing these situations is critical.

Consumer protection is generally considered to be a regulatory response to a market failure.<sup>55</sup> Appropriate regulation should correct information imbalance and encourage sustainable market expansion through timely information disclosure throughout the service relationship—before, during, and after the contract. Disclosure in manageable portions helps consumers better understand their rights and obligations.

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<sup>51</sup>. CGAP (2009b).

<sup>52</sup>. Young and Vogel (2005).

<sup>53</sup>. Microfinance Information eXchange (MIX) Market, December 31, 2007.

<sup>54</sup>. See Banco do Nordeste do Brasil (2010); MIX Market, December 31, 2008.

<sup>55</sup>. Eisner, Worsham, and Ringquist (2006).

Regulators need to understand the consumer perspective to ensure a level playing field. Active participation of consumer advocates helps avoid regulatory bias in favor of the financial services industry.<sup>56</sup> However, effective consumer advocates exist in only a handful of emerging markets.<sup>57</sup> Some regulators mitigate this issue by perusing consumer complaints to identify areas of concern and trends in market practices. Supervisory tools include reviewing product-related information, conducting on-site reviews, telephone interviews, and media surveillance, as well as industry and consumer surveys.

Consumer education can help balance information asymmetries between consumers and providers of financial services. New, inexperienced entrants to the market are especially in need of education about their rights and responsibilities. Consumer education may be delivered by government agencies, consumer associations, or the industry, but most often consumer education programs are provided through public campaigns that use the Internet; print, radio, and television media; advertising; publications; and training.<sup>58</sup>

Peru has reduced the number of complaints across the financial system by 32 percent since 2004 due to the implementation of a holistic system of consumer protection. The regulatory agency supervises consumer protection policies and procedures by financial institutions but does not directly respond to complaints. In 2008, 99 percent of nearly 400,000 complaints were successfully handled by the financial institution itself. Of the remaining 4,000 complaints, two-thirds were referred to the Consumer Protection Commission, and one-third was referred to the financial ombudsman. In addition to oversight by the regulator and multiple channels for redress, Peruvian consumers have access to cost information about financial services, published daily in newspapers. When this information was first published, interest rates dropped by as much as 15 percent in six months.

## 5.6 Financial Identity

In most countries, credit information is only provided above a certain loan amount, effectively excluding poor customers from the demonstrated benefits of information cost reduction provided by credit registries. More fundamentally, such clients may not even have the identification documents required to open a bank account.

Policymakers have begun to address these barriers to access by narrowing the gap between the documentation threshold associated with bank accounts and the quality of documentation prevalent among low-income clients. As a result, these policies endow clients with a financial history and transform their transaction history into a financial asset that they can use to leverage access to credit and other banking services.

In lowering documentation barriers to entry, regulators must decide on the level of risk they want to accept to promote inclusion. To reduce credit and identification risks, Indonesia has started to collect local information in the informal financial sector, especially among the pooled funds that are popular among the rural poor. This is an opportunity to capture crucial information on financial identity and financial history. In India stringent know-your-customer norms have been relaxed to allow the creation of low-risk, basic bank accounts with a letter from the local government. In South Africa, the regulator has allowed industry to lead the way in proposing systems to identify their rural clients, as long as providers are able to ensure the proper assessments, enforcement, and consumer protection.

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<sup>56</sup>. Regulatory capture, whereby regulatory agents come to be dominated by the industry they regulate, is a recognized feature of financial markets. For an insightful take on regulatory capture, see Kay (2009).

<sup>57</sup>. Independent advocates are rare in emerging markets, where most advocates for financial customers are affiliated with either the government or the industry.

<sup>58</sup>. Examples of financial education delivery channels can be found at the International Gateway for Financial Education ([www.financial-education.org](http://www.financial-education.org)), a program developed by the Organization for Economic Cooperation and Development.

With regard to effective anti-money laundering (AML) and combating the financing of terrorism (CFT) regimes, although successful policy reforms (for example, in Kenya) are not yet formally compliant with the Financial Action Task Force (FATF) guidelines, regulators have adopted alternative mechanisms to ensure minimum compliance with AML-CFT approaches to client identification and verification. In the Philippines, regulators have played an active role in creating an enabling environment for mobile payments and have shown strong commitment to implementing an AML-CFT regime that allows financial inclusion.<sup>59</sup> However, particularly in the light of rapid adoption of technological innovation, developing country policymakers and regulators increasingly report barriers to financial inclusion due to increasing identification burdens.<sup>60</sup>

## 5.7 Assessment

Developing country policymakers are faced with the challenge of managing trade-offs between the objective of financial inclusion and other objectives, such as financial stability and consumer protection. The policy solutions outlined and illustrated above have been successfully implemented in this respect. To summarize, outstanding success stories include:

- Brazil, where new regulations have achieved universal access in only four years by enabling partnerships between banks and third-party agents;
- Kenya and the Philippines, where central banks have had a key role in supporting mobile phone payment schemes and left regulatory space to mobile phone operators;
- Bolivia and Uganda, which have demonstrated that microdeposit-taking can flourish in the regulated financial system with timely and appropriate policies; and
- Indonesia, which has proved how publicly owned financial institutions may become the driving force behind economic development in rural areas.

Overall, the available evidence suggests that a balance between financial stability and financial inclusion objectives can be achieved. None of the recent policy reforms promoting financial inclusion has failed in the sense that it produced deficient regulatory, supervisory, or corporate governance practices, or unsound financial performance of market participants. To the contrary, the policies discussed above have supported an accessible and stable financial sector environment.

The above policy solutions should be assessed against a widely accepted set of policy principles for expanding access to finance. These principles entail:

- promoting entry of and competition among financial firms;
- building legal and information institutions and hard infrastructure;
- stimulating informed demand;
- ensuring the safety and soundness of financial services providers;
- protecting low-income and all customers against abuses by financial services providers;
- ensuring that usury laws, if used, are effective;
- enhancing cross-regulatory agency coordination;
- balancing government's role with market provision of financial services;

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<sup>59</sup>. Chatain and others (2008).

<sup>60</sup>. The FATF has recently recognized the particular challenges faced by developing countries in balancing AML-CFT standards and financial inclusion objectives. See FATF (2008). Developing countries are encouraged to recognize that there is space for interpretation in the FATF recommendations to promote financial inclusion.



- using subsidies and taxes effectively and efficiently; and
- ensuring data collection, monitoring, and evaluation.<sup>61</sup>

Overall, the policy solutions described above follow this widely accepted set of policy principles for expanding access to finance.

Finally, the policy examples discussed above belong to those countries that have demonstrated the most considerable gains in expanding financing options for the unbanked. As highlighted by the recent Economist Intelligence Unit survey assessing microfinance environments in fifty-five countries, the Philippines, Bolivia, Kenya, and Uganda (in this order) rank among the top ten countries that enjoy the best legal and regulatory frameworks for microfinance.<sup>62</sup>

## 6. TRADE-OFFS AND SYNERGIES BETWEEN FINANCIAL INCLUSION AND STABILITY

As it happened during the 1990s with the Tequila Effect (1994) or the Asian financial crisis (1997), the current crisis has highlighted the immense value of financial stability and motivated a review of the policy tools available to prevent costly breakdowns of the financial system. Since financial inclusion has gained a much higher profile as a policy goal in recent years, it is important to inquire to what extent there are trade-offs between the objectives of maintaining systemic stability and including a growing number of users of financial services.

This appears even more relevant since the origin of the current crisis in the subprime market at least initially suggested destabilizing spillovers from the lower end of the market to the remainder of the system. And of particular concern in many developing countries is the additional regulatory uncertainty arising from the rapidly proliferating, technology-driven policy solutions that boost small-scale transactions flowing through the national payment system.

On the other hand, lessons learned suggest that past financial crises have frequently bypassed the highly localized markets at the bottom of the pyramid: the microfinance segment of BRI remained rock solid throughout the Indonesian crisis, and anecdotal evidence suggests that financial institutions catering to the lower end tend to weather macrocrises well and help sustain local economic activity.<sup>63</sup> Could it even be possible that a more diversified aggregate financial sector balance sheet, spread over a broader variety of economic agents, might contribute to a more resilient economy that follows a higher growth path? Jean Claude Trichet, president of the European Central Bank seems to agree, declaring that financial stability is made up of three factors: the amount and quality of information available to players, the adequacy-inadequacy of the frameworks for crisis prevention and resolution, and the level of completeness of the market.<sup>64</sup>

This section aims at identifying links between financial stability and inclusion that could give rise to either policy conflicts or synergies, and outlines questions for future research. To facilitate regulatory decisionmaking, we highlight the potential costs and benefits of financial inclusion with respect to stability and stress the need to differentiate among policy tools according to their risk profiles given the desired outcome.

Financial stability is a widely accepted public goal because a sound financial system is one of the cornerstones for economic growth. However, this goal is substantially harder to define

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<sup>61</sup>. Based on the ten policy principles most recently provided by Center for Global Development. See Claessens, Honohan, and Rojas-Suarez (2009).

<sup>62</sup>. Economist Intelligence Unit (2009).

<sup>63</sup>. Conversation with central bank officials, for example, from Rwanda.

<sup>64</sup>. Trichet (2003).

and measure than traditional policy goals, such as price stability, and disproportionately more contentious.

Financial stability has a multidimensional scope that depends on the interplay of key elements of the system and requires that the key institutions and markets in the financial system remain stable. This does not preclude occasional failures of smaller institutions and occasional substantial losses at larger institutions; these “are part and parcel of the normal functioning of the financial system.”<sup>65</sup>

Financial inclusion changes the composition of the financial system with regard to the transactions that take place, the clients that use the various services, the new risks created, and possibly the institutions that operate in newly created or expanded markets. Does this mix tend to cause financial instability or make it more likely by multiplying the sources of potential shocks, or does it counter instability by rendering the financial system more diversified? Furthermore, once a financial crisis has occurred, how effective is financial inclusion in helping poor households cope with this particular external shock?

## 6.1 Financial Inclusion: A Potential Cause of Financial Instability?

According to one definition that stresses asymmetric information, financial instability occurs when shocks to the system dramatically worsen information problems so that financial intermediation between savings and productive investment opportunities breaks down.<sup>66</sup> Among these shocks, those due to deteriorating financial sector or nonfinancial balance sheets appear most closely related to financial inclusion.

The exposure of financial institutions to risks from low-income markets depends on the share of their revenues that this line of business represents. Specialized microfinance institutions are most prone to these risks, although some large public banks have developed a significant footprint in the low-income segment.<sup>67</sup> However, microfinance clients typically have high repayment rates: when clients have few options in the formal sector, default likely implies much higher future borrowing costs in the informal sector. Hence, as formal options proliferate, credit bureaus become more important to keep these incentives intact. On the other hand, the regulation and risk-based supervision of financial services in low-income markets appears better understood than in other segments of the market.<sup>68</sup>

Large numbers of clients that frequently transact small amounts put substantial strain on supervisory resources but pose limited systemic risk because they represent such a small share of overall financial sector assets. And as information technology proliferates, supervisory challenges will likely become more manageable. As a result, regulators are, in practice, more concerned with issues of consumer protection raised by the lack of sophistication among low-income clients, and with reputational risks due to the large number of clients involved if a particular institution fails.

This view is confirmed by recent research on a new macroprudential framework that screens instruments, markets, and institutions. The study, from the Bank for International Settlements, identifies two types of externalities as the key drivers of systemic risk: joint failures of institutions resulting from their common exposures at a single point in time, and procyclicality, the fact that the dynamics of the financial system and of the real economy reinforce each other, increasing the amplitude of booms and busts and undermining stability in both the financial sector and the real economy.<sup>69</sup> In addition, the research shows that the

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<sup>65</sup>. Crockett (2002).

<sup>66</sup>. Mishkin (1999). Financial inclusion seems, at most, of second-order relevance for shocks due to increases in interest rates because of the limited size of the relevant market segment.

<sup>67</sup>. A good example is Bank Rakyat Indonesia.

<sup>68</sup>. Christen, Lyman, and Rosenberg (2003).

<sup>69</sup>. Bank for International Settlements (2010).

marginal contribution to systemic risk by a financial institution is correlated in a nonlinear way with its size and links with other institutions such that smaller institutions contribute disproportionately less risk.

In addition, research by the Federal Reserve demonstrates that the Community Reinvestment Act (CRA), a piece of U.S. legislation intended to incentivize banks to extend loans to low-income communities, had little impact on the subprime crisis: few of the mortgages that were originated as a result of the CRA fell into the high-risk subprime category, and those subprime mortgages that were due to the CRA performed above average.<sup>70</sup>

Recently, there have been reports about an incipient credit bubble in the rapidly expanding low-income sector in India, pointing to risks of excessive credit demand facilitated by lower financial education in developing countries.<sup>71</sup> Most observers believe excessive borrowing to be a recurrent yet locally isolated phenomenon that validates recent policy concerns with consumer protection.<sup>72</sup> Given the high share of nonprofit institutions in the in the sector, excessive lending may be driven by disbursement pressure rather than profit motives, in contradistinction to the subprime crisis. In addition, vast unmet demand makes bubbles less likely to develop on a larger scale.

In sum, financial inclusion introduces new lines of business with idiosyncratic risk profiles that can be appropriately regulated and supervised. The contribution to systemic risk is likely to be rather low, especially relative to consumer protection and reputational risk considerations. Especially with respect to technology-based financial inclusion policies, such as mobile phone banking, regulatory concerns have focused on financial integrity rather than stability through FATF policy frameworks to combat money laundering and terrorist financing.

The implementation of FATF standards requires a risk-based approach similar to that required for regulation and supervision of institutions serving low-income clients. It has a direct impact on financial inclusion because customer due diligence through restrictive know-your-customer rules may limit outreach potential. National regulations risk either excluding people who lack certain proofs of identity or imposing prohibitive cost of compliance on financial institutions.<sup>73</sup>

## 6.2 Financial Inclusion: Cushioning Crisis Impact at the Local Level?

An oft-cited feature of past crises, especially the Asian financial crisis, has been the stability and growth of financial institutions catering to the poor amid the turmoil that toppled internationally exposed corporate lenders. As a result, local economic activities could continue, at least to some extent, or recover more quickly.

Microfinance institutions that do not mobilize deposits tend to be harder hit when a systemic crisis triggers a credit crunch, so that funds for on-lending to low-income clients are no longer forthcoming because existing credit lines cannot be rolled over. This has also been observed during the current crisis (CGAP 2009a). The transmission of a higher-level crisis through this credit channel can have a severe consequences for the local economy that otherwise might be more isolated from national or even international shocks.

It remains an empirical question to confirm beyond anecdotal evidence how important local financial intermediation is as a transmission mechanism for (or protection against) an

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<sup>70</sup>. Kroszner (2008).

<sup>71</sup>. Gokhale (2009)

<sup>72</sup>. See *The Economist* (2009).

<sup>73</sup>. FATF (2008).

economy-wide crisis. Similarly, household use of savings for risk management during a crisis should be better researched to explore the stability of the local financial system.

## 7. CONCLUSIONS AND RECOMMENDATIONS: HOW FINANCIAL INCLUSION EQUIPS THE POOR TO COPE WITH INSTABILITY

The global economic crisis, despite its roots in financial sectors of industrial countries, will likely shift the focus of future financial inclusion policies. The fundamental rethinking of the role of government in finance triggered by the crisis has built huge momentum for regulatory change. Policymakers should seize the current reform drive to advance financial inclusion policies that foster economic resilience.

Postcrisis opportunities to promote financial inclusion hinge on the careful analysis of the risks posed by the transactions of the poor. In the absence of such analysis, the heightened risk perception could usher in an indiscriminate restriction of innovation. In formulating financial inclusion policies, policymakers should leverage successful innovations developed by their peers that realized the benefits of financial inclusion in safe ways.

Peer-to-peer exchange among developing countries, as facilitated by the Alliance for Financial Inclusion—a global network of policymakers in developing countries—will help refine and spread these insights widely, enabling other countries to adapt and scale up successful innovations.

Most important, the crisis calls for a shift from credit to savings. Access to savings should be a top priority because it promises three important benefits:

- enhanced household capacity to manage the vulnerabilities exposed by the devastating impact of the crisis,
- diversified funding base of financial institutions to cushion the impact of a global credit crunch on domestic financial intermediation, and
- deeper financial systems that enhance economic resilience by accelerating growth, facilitating diversification, and reducing poverty.

The 2.5 billion unbanked adults are especially vulnerable to economic shocks because they are confined to the inferior risk management features of informal finance. Low-income clients that can build assets before a crash have somewhere to run for cover.

Research has revealed substantial pent-up demand for formal savings that help overcome the costly credit barriers to business expansion. As a result, income and expenditures grow, and health outcomes prove more resilient to turmoil. Better household capacity to manage risks frees up public expenditure during times of crisis. Financial inclusion also has been shown to reduce income inequality. Stronger social cohesion helps prevent political instability and permits undivided attention to crisis management. Social safety nets can simultaneously boost financial inclusion when benefits are delivered through basic bank accounts in the formal financial sector. With the subprime meltdown illustrating the dangers of reckless lending practices, consumer protection has surfaced on the policy agenda. Financial education initiatives have been gaining momentum recently; policymakers now see a stronger rationale to build financial education into high school and college curricula, and seek greater participation from the private sector in this endeavor.

However, further research is needed, especially in the following fields:

- Key barriers to access*: at the strategic level, systematic diagnostic efforts to identify “binding constraints” to financial access will help policymakers set priorities for action.

—*Randomized controlled trials (RCT)*: more effective incorporation of RCT into regulatory decisionmaking will allow for a deeper understanding of the impacts of specific products or services, and should be used more systematically to obtain insights into the appropriate sequencing of reforms.

—*Data and evidence*: updated information on levels and trends of financial inclusion is a critical step toward evidence-based policy decisions. Data collection must be tailored to objectives and available resources. Policymakers should expand collaboration with local researchers to build capacity for the collection of demand-side data.

—*Risk*: greater risk analysis of the scaling-up of technology-based financial inclusion policies with respect to financial stability is necessary to fill critical knowledge gaps due to rapid recent innovation.

Overall, a combination of showcasing of viable business models at the bottom of the pyramid, technological innovation that lowers transaction costs, and rapid growth and progress in poverty alleviation over the past years has helped to attract substantial private sector investment and pushed the access frontier outwards. Policymakers have facilitated strong results by adapting regulatory frameworks to financial innovation in the low-income market segment, and have been able to do so without falling short of their policy goals of financial stability or customer protection. With these recommendations in mind, there is potential to make the necessary gains in expanding financial access without compromising financial stability. The current crisis thus offers a unique opportunity for policymakers to advance financial inclusion policies that promote economic resilience.

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