

# Designing Government Policies to Expand Financial Inclusion: Evidence from Around the World

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September, 2013

**Abstract:** Half of the world's adult population is excluded from using even the most basic formal financial services, despite the large potential benefits (Chaia et al., 2009; Demirguc-Kunt and Klapper, 2012). This paper discusses some common reasons behind not having a formal account and reviews regulatory policies introduced to remove the physical, bureaucratic, financial, and trust barriers to the use of formal accounts. We summarize some public and private sector product innovations designed to expand financial inclusion—defined here narrowly as the ownership and use of formal financial accounts—particularly for the poor.

*Keywords:* financial inclusion; emerging markets; financial institutions; regulatory policy

*JEL Classifications:* G21; G28

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## **1. Introduction**

The rise and the subsequent fall of the microcredit movement have brought unprecedented attention to credit markets in developing countries. Microcredit highlighted the multiple market failures that these markets suffer from, and brought external intervention and new innovations to facilitate efficiency (see Karlan and Murdoch, 2013, for a review of the extensive literature on new credit mechanisms). Considerably less attention has been paid to the presence of savings constraints in these economies. They can manifest either as high transaction costs, or as unavailability of appropriate savings instruments. Lately there has been a push towards government intervention to correct these market failures. A worthwhile policy question, then, is if this intervention might improve social welfare. For instance, if savings constraints impede the ability of the poor to meet lumpy expenses like buying business inventory or paying kids' school fees, intervention could improve social welfare by adding to the economy's stock of physical and human capital.

Savings constraints cause poor households and small businesses to make suboptimal choices. For example, Dupas and Robinson (2013) show that the provision of non-interest bearing bank accounts to microentrepreneurs in Kenya led to high take-up. This happened despite the accounts being very expensive (high withdrawal fees), pointing to a huge unmet demand for savings products. More importantly, they show that these accounts led to increases in both investment and consumption, suggesting that there is inefficient allocation in the absence of formal savings mechanisms.

Previous studies have also highlighted the benefits of broader access to financial services. For instance, Aportela (1999) and Prina (2012) find that the exogenous provision of accounts to poor households in Mexico and Nepal, respectively, led to high take-up rates and a significant

increase in household savings. Burgess and Pande (2005), and Bruhn and Love (2009) find significant increases in income, output and employment as a consequence of bank branch expansion in India and Mexico, respectively. Having a formal account also facilitates the transfer of funds or receipt of wages, remittances or government payments such as welfare benefits. Studies have also found that a lack of access to finance can lead to poverty traps and increase levels of income inequality (Beck et al., 2007).

A growing number of papers in behavioral economics use field experiments to show that varying incentives can be designed to encourage individuals with accounts to reach formal savings goals. For instance, Ashraf et al. (2006) and Duflo et al. (2011) show that time inconsistent individuals may need “commitment”-based products in order to be able to save. For example, Brune, Gine, Goldberg, and Yang (2011) find that "commitment" accounts that allow customers to restrict access to their own funds until a future date of their choosing significantly effect on agricultural input, crop sales, and household expenditures. Karlan, McConnell, Mullainathan, and Zinman (2010) show that monthly reminder via text message or letter encourages savings. And results in Kast Meier, and Pomeranz (2012) highlight the role of self-help groups and peer pressure to achieve savings goals in a formal savings account.

Inability to smooth consumption during shocks also causes poor households in financially underdeveloped economies to make suboptimal choices. Jacoby and Skoufias (1992), Funkhouser (1999) and Jensen (2000) provide evidence from India, Costa Rica and Côte d'Ivoire respectively, showing that kids drop out of school in the face of adverse income shocks. Behrman (1988) finds that the inability of South Indian households to smooth consumption adversely impacts the health of children, especially girls, just before major harvests. Robinson and Yeh (2011) find evidence that sex workers in Kenya respond to health shocks in the family

by engaging in risky behavior that tends to be better remunerated. Rosenzweig and Wolpin (1993) show that farmers in India sell productive livestock in order to smooth consumption during shocks. In addition, Mudroch (1995) makes an extremely important observation that households and enterprises might be making inefficient employment and production choices *ex ante*, simply because they entail a smaller risk (income smoothing, as against the more commonly reported consumption smoothing).

Other studies have also documented a large unmet demand in savings among the poor in developing countries (see Banerjee and Duflo, 2007). For example, Collins et al. (2009) document the household balance-sheets of several very poor families that turn to either informal institutions or the space below the mattress to save, due to the absence of formal financial institutions. Besley (1995) writes of the popular use of moneylenders in Western Africa who charge significant withdrawal fees (effectively, a negative rate of interest) on deposits.

Access to formal savings channels will help these households and enterprises to increase investment and smooth consumption. This could potentially also be addressed through insurance or credit. While these are important aspects of financial inclusion in their own right, they are fraught with questions on financing, potential indebtedness, and agency problems. Another aspect that adds to the appeal of savings is that many barriers to access can be lowered simply by altering the regulatory environment, without resorting to distortionary subsidies.

This paper discusses some common reasons behind not having a formal account and the role for regulatory policy in order to enable financial access in general and savings in particular. We start by documenting the severity of and the causes behind financial exclusion, by drawing upon data from the Global Financial Inclusion (Findex) database. Subsequent sections review government initiatives and private sector innovations designed to expand financial inclusion and

to remove the physical, bureaucratic, financial, and trust barriers to the use of formal accounts. Section 7 concludes.

## **2. Reported Barriers to Financial Inclusion**

Half of the world's adult population is excluded from using even the most basic formal financial services, despite the large potential benefits (Chaia et al., 2009; Beck et al., 2007). The lack of financial inclusion has been brought to the forefront by the Global Financial Inclusion (Finindex) data, which is the first cross-country database of how people around the world save, borrow, make payments, and manage risk (Demirguc-Kunt and Klapper, 2012). The survey covered at least 1,000 nationally representative and randomly selected adults age 15 and above in each of 148 countries and was carried out by Gallup, Inc. in 2011 as part of the annual Gallup World Poll Survey.<sup>1</sup> The survey found that that the unbanked are disproportionately concentrated in the developing world - only a third of South Asians, a quarter of Sub-Saharan Africans, and less than a fifth of Middle-Easterners and North Africans have an account at a formal financial institution (Demirguc-Kunt and Klapper, 2012).

How do we define 'financial inclusion'? For the purposes of this paper, we define 'inclusion' as the ownership and use of a checking or savings account at a formal financial institution such as a commercial bank, microfinance institution, credit union, cooperative or post office. These services provide a safe place to keep paper money, rather than the more risky practices of keeping money in the home or with unregulated informal agents. Formal banking services often provide a convenient way to receive wage or government payments and storing money in an account might lead to more responsible spending behavior.

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<sup>1</sup>. For additional information on the methodology, the questionnaire, and the complete individual-level dataset, see: [www.worldbank.org/globalfindex](http://www.worldbank.org/globalfindex).

From a practical perspective, it is important to recognize that financial ‘exclusion’ may be voluntary or involuntary. That is, despite having access to financial services, some individuals may choose not to use them, either because they do not need them or for other reasons. The Findex survey asked the unbanked the reasons for not having a formal account (see Table 1 for summary statistics by region). Worldwide, by far the most common reason for not having a formal account— cited as the only reason by 30 percent of adults without an account (multiple answers were permitted)—is lack of enough money to use one. These adults might be classified as the “voluntarily” excluded, who may not have enough income to warrant an account, or are deterred from using formal financial services for small sums because of high bank and travel costs (see Allen et al., 2012).

The rationale for policy intervention arises in the case when exclusion is involuntary. Individuals who would otherwise choose to use financial services cannot do so due to barriers such as difficulties in opening an account or distance to banking services. For instance, the Findex data finds that globally, 25 percent of unbanked adults cited costs, 20 percent reported that the bank is too far away, and 13 percent reported lack of trust in the bank. An additional 18 percent cited “lack of necessary documentation” as their reason for not having an account (Demirguc-Kunt and Klapper, 2012). Supply-side data on the barriers to access to financial services corroborates these findings. For instance, using data from over 200 banks in 62 countries, Beck et al. (2008) identify affordability of deposit services and physical distance as barriers to access. In addition, reported barriers to financial inclusion in Findex are supported by country-level data, such as the costs of opening and maintaining an account, branch and ATM penetration, and number of documents required to open an account. For instance, unbanked individuals are more likely to report cost as a barrier in countries with higher banking costs and

lower bank branch penetration (Allen et al., 2012). This paper reviews changes in government regulations (like relaxed documentation requirements for small accounts or permitting bank agents to collect deposits) and government subsidized and commercial innovations (like mobile money) intended to alleviate these constraints.

### **3. Banking Costs**

Almost a quarter of unbanked adults in the developing world cite high costs of banking services as one of the reasons behind not having a formal account, according to the Global Findex. An individual might find it expensive to maintain a bank account for a number of reasons. There is the direct cost of monthly account maintenance fees that are charged in many countries, especially in Africa, and averages about \$4 per month in this region (World Bank, 2009). In some countries, commercial banks charge users a fee for opening an account. In Burundi, for example, the fee is as high as 3 percent of the annual per capita income. Most banks also impose minimum balance requirements that can be as much as three times the per capita income in poorer countries. In addition, there are indirect costs which are usually in the nature of time costs. The time taken to travel to the bank or the time required to procure all the documents needed for opening an account are both pertinent examples. Particular indirect costs such as documentation and distance are discussed in subsequent sections.

What changes in the delivery of financial services can lead to a reduction in banking costs for the financially excluded? The high costs of banking services persist, in part, due to the high transaction costs borne by banks in providing more expensive financial products catered to higher income segments of the population. Banks often do not have an incentive to provide simplified financial products tailored to the needs of the low income consumer. Public policy has

played an important role here, both with and without bank subsidies. The following sections review programs introduced by national governments to encourage or mandate banks to offer simpler, less expensive financial accounts for the poor.

### ***3.1 Basic Accounts***

In response to high costs, many governments have encouraged or required banks to offer more innovative and cheaper product offerings, such as basic accounts that entail little to no fees or minimum balance requirements and often offer some fee-free transactions. For example, the South African Mzansi Account is a transactional bank account that targets low income customers. The introduction of this account was voluntary, in response to a commitment by large banks to improve access to banking and making the sector more racially inclusive. Though each bank established its own pricing, collaboration between banks allows Mzansi account holders to make use of any of the participating banks' ATMs at no additional cost – effectively creating a network of over ten thousand ATMs across the country and extending the banking platform to the greater community. This was augmented by point of sale functionality available at retailers. The product was immensely successful, with 6 million new Mzansi accounts and a 10 percent penetration rate among the adult population over a span of just 4 years.

However, Mzansi was loss-making for banks—it had high cost origination in-branch, servicing was expensive, and customer utilization of the accounts (such as for payments or savings) was very low. Yet, Mzansi was successful in showing banks the strong demand for simple accounts by the poor and the commercial potential, and by 2013, the four largest banks in South Africa were offering their own branded no-frills, simple bank accounts (Bankable Frontier Associates, 2009).

In comparison, in 2006, the Government of India launched a technology driven banking correspondent model for the introduction of “No Frill Accounts” (NFA’s) and the expansion of branchless banking to areas not serviced by any formal financial institution. They encouraged a menu of delivery technologies, with models ranging from kiosk models, to mobile based biometric models, to SMS based mobile model. As of March 2012, 96,828 “Customer Service Points” (CSP’s) had been set up to offer under the banking correspondent model in villages without any banks. However, there has widespread criticism that CSP’s have not delivered the intended results—as evidenced by dormancy rates on NFA’s estimated at 88-96%. One challenge has been the commercial viability of the NFA account—at the bank level, NFA’s were too small to attract corporate attention or resources. Banks granted licenses to business correspondents to provide CSP’s based on lowest cost, and CSP’s that underestimated direct and indirect costs frequently abandoned their role in light of high losses. Furthermore, the lack of proper supervisory mechanisms led to operational risks, such as fraud and misappropriation, and the loss of customer trust (Citi Foundation, 2012).

In light of its poor reputation among the rural poor, in 2012 the Reserve Bank of India “advised” banks to convert (and rename) the existing ‘no-frills’ accounts into ‘Basic Savings Bank Deposit Accounts’ (Reserve Bank of India, 2012). These accounts are required to have no minimum balance requirements or number of deposits, provide an ATM card and allow four free withdrawals a month, and receive electronic government payments.<sup>2</sup> Yet the challenge remains how the government can encourage basic accounts at commercial banks, without providing government subsidies to banks. As one course of action, in May 2013, the Government of India governed that registered members of any Government Welfare scheme can open a Basic Savings

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<sup>2</sup> For example, the complete list of account benefits for the Bank of India is available at: <http://www.bankofindia.co.in/english/BSavingsAcnofrill.aspx>.

account at any Post Office and receive any social benefit through this postal account.<sup>3</sup> As discussed in the next section, electronic government payments can be used as a way to provide a safer and more convenient delivery channel and expand financial inclusion among the financially underserved.

### **3.2. *Electronic Government Payments***

Another role the government can play is in the design of government payment programs that support financial inclusion. These “government to person” electronic bank payments can lower administrative costs for the government and increase bank account penetration among the rural poor. For example, Brazil’s *Bolsa Familia* program delivers cash transfers to 12.4 million recipients. The large volume of payments issued by governments, as well as the nature of some specific programs like social spending programs, represents an opportunity to promote or facilitate financial inclusion on a large scale (World Bank, 2012b). And the cost to the government is generally limited to the bank withdrawal fee. These programs (e.g. Brazil, Pakistan, the Philippines, etc.) are generally card-based, meaning that deposits can be accessed through bank ATM networks or the post office. However, in general, these cards do not provide the full-services of a bank account; i.e. adults cannot deposit additional money or save. For commercial banks, the challenge is cross-selling additional savings, payment, and credit products to make it commercially viable (or profitable) to offer government transfer recipients full-service accounts. For the government, designing a cost effective way for banks to provide recipients with accounts, rather than just payment cards remains a challenge for the future.

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<sup>3</sup> The complete Government of India Ministry of Communications & IT and Department of Posts circular is available at: <http://www.indiapost.gov.in/DOP/Pdf/Circulars/SBOrder9.pdf>

#### **4. Documentation Requirements**

National regulations may impose stringent documentation requirements on banks. Many banks pass on such regulatory costs on to the customers. These requirements often create significant barriers to the use of financial services in developing countries. For instance, the Global Findex data highlights that 18 percent of adults in the developing world cite documentation requirements as one of the reasons behind not having a formal account. Further, 21 percent of adults in Latin America and the Caribbean cite documentation as a barrier, the highest proportion among the different developing regions.

Most formal banks have stringent Know-Your-Customer (KYC) requirements in order to comply with what are called AML/CFT (Anti-Money Laundering, Combating the Financing of Terrorism) guidelines that have been stipulated internationally. While these requirements reflect the priority of effective AML/CFT measures, the application of these requirements may inadvertently exclude a large number of individuals from using financial services. Around the world, each additional document required for opening an account reduces the number of accounts by 153 per 1,000 adults. Indeed, the Financial Action Task Force, recognizing that overly cautious Anti-Money Laundering and Terrorist Financing (AML/CFT) safeguards can have the unintended consequence of excluding legitimate businesses and consumers from the financial system, has emphasized the need to ensure that such safeguards also support financial inclusion (FATF, 2011).

In many developing countries with dysfunctional bureaucracies and no formal identity systems in place, it can be hard to procure these documents even under the best of circumstances. The problem is further compounded for the poor due to a combination of many other factors: ignorance about procuring these documents in the first place, lack of a safe spot to store these

documents due to which they often get misplaced, the cost of trips to distant government offices, bureaucrats that tend to give a harder time to the poor; and in the case of migrant urban poor, no proof of current residence. The easing of these rules would certainly lower barriers to entry (CGAP, 2009). Using data from the national regulatory agencies of 107 countries, Barth et al. (2004) find that documentation requirements may restrict financial development by restricting bank entry.

#### ***4.1 Relaxing Documentation Requirements***

A number of countries are now easing their KYC requirements to enable greater financial inclusion. For instance, banks in Kenya, Nigeria, Tanzania, and Uganda accept letters from the local rural authority in lieu of identity documents. Colombia, Mexico, and South Africa have begun to allow remote account opening, which necessarily entails easier documentation procedures. Colombia provides this facility only to people residing in certain low-risk geographical areas. Colombians receiving welfare transfers are also exempt from KYC formalities, as long as the corresponding account is used only for receiving these transfers. Additionally, banks in a number of countries (Brazil, Colombia, India, Mexico, Nigeria and South Africa) now offer basic savings accounts that are subject to more flexible KYC requirements. For instance, in India, the Central Bank simplified KYC requirements for bank accounts with annual balances less than Rs. 50,000 and credits less than Rs. 100,000. In the case of Nigeria and Mexico, it is also possible to ease the restrictions in place on these accounts by producing more extensive identity documents. For example, Chin et al. (2011) found that when Mexican migrants to the United States were provided with assistance in procuring official

identification from the Mexican consulate, they were 38 percent more likely to open a US bank account. As a result, formal savings as a percentage of their income increased by 9 percent.

#### **4.2 National ID Projects**

While the outcomes from relaxed KYC norms are promising, there is also cause for concern: governments have laid out the AML/CFT guidelines for a well-defined goal. Circumventing these guidelines to promote financial inclusion can only serve as a stopgap arrangement. Ultimately, developing countries need to implement robust identity systems. The national unique identification project launched by the government of India in 2009 addresses precisely this need. The project—named ‘Aadhar’— involves the government issuing a unique biometric identification number and card to every citizen of the country. The project has already covered about 260 million individuals across the country. In India, and many other developing countries, such identity systems can be used to serve multiple purposes (for instance, the provision of welfare benefits), and the fulfillment of KYC norms is just one of them. Since the project has not been fully rolled out yet, it is difficult to assess its impact on financial inclusion.

### **5. Trust in Banks**

Trust in banks has been an issue in large parts of the developing world. In fact, 13 percent of unbanked adults in the developing world report that lack of trust is a key reason behind not having a formal account (Demirguc-Kunt and Klapper, 2012). Of the regional groups, the proportion of unbanked adults that cite lack of trust as a barrier to not having a bank account is highest in Europe and Central Asia (31 percent), followed by Latin America and the Caribbean (26 percent) and Sub-Saharan Africa (16 percent). In addition, risk of embezzlement and

unreliability of the bank were also stated as reasons for low usage of savings accounts in a recent study based in Western Kenya (Dupas et al., 2012).

In part, this distrust stems from past episodes of banking crises, government expropriations, and currency devaluations. For instance, the banking sector in 32 African countries faced crises related to solvency and non-performing assets in the 1980s and 1990s (Caprio and Klingbiel, 2003), and banks across much of East and Southeast Asia were in the midst of a crisis in the late 1990s. In several countries, many banks had to be shut down, and people lost large shares of their savings. As a result, some wariness towards banks persists even today across the globe. Studies have also found that mistrust in commercial banks present a barrier to financial inclusion among the poor in high-income countries. For instance, Collard et al. (2001) and Collard et al. (2003) argue that low-income individuals in Britain do not use bank accounts due to a lack of trust in them.

### ***5.1 Bank Accountability***

One approach to improve public trust in banks is to increase accountability, through greater disclosure and transparency requirements. Previous literature shows that “market discipline”—encouraging depositors to monitor bank behavior—can be an effective because depositors faced with some risk of loss in bank failures will reinforce the efforts of supervisors by rewarding banks that manage risk effectively and penalizing those whose risk management is inept or imprudent (Barth et al., 2003). Depositors discipline banks by withdrawing deposits and by requiring higher interest rates (Martinez Peria and Schmukler, 2001).

### ***5.2 Deposit Insurance***

Explicit deposit insurance pays out to depositors in the case of bank failures and is intended to increase depositor trust in banks. However, only a handful of low-income countries (16 percent) provide explicit deposit insurance (Demirguc-Kunt et al., 2005). Sub-Saharan Africa has the lowest occurrence of explicit deposit insurance at 11 percent (Demirguc-Kunt et al., 2005).

Furthermore, explicit deposit insurance can also fuel bank crises by giving banks perverse incentives to take unnecessary risks. Previous studies have shown that in countries with weak institutions, over the long-term deposit insurance can reduce market discipline, deter financial development, and increase financial fragility (for a review of the literature, see Demirguc-Kunt and Kane, 2002). For instance, a study using data from 61 countries finds that deposit insurance significantly increases bank fragility in poor institutional settings, but not in countries where institutions are strong (Demirguc-Kunt and Detragiache, 2003). Explicit as well as implicit (“too-big-to-fail”) deposit insurance also reduces the incentive of depositors and shareholders to monitor their banks (Lovett, 1999). In addition, recent research on confidence in banks around the world finds no effect of deposit insurance on trust in banks prior to the 2008 financial crisis or on changes in trust in banks over the financial crisis (Demirguc-Kunt, et al., 2013).

### ***5.3 Building Financial Capability***

Another approach is to improve consumers’ financial capability, which encompasses the knowledge (literacy), attitudes, skills and behavior of consumers with regard to understanding, selecting, and making use of financial services. In other words, consumers are more likely to trust banks if they can understand financial terminology and are able to make knowledgeable

financial decisions. Both the G20 and APEC have placed priority on financial education and financial consumer protection as an important complement to financial inclusion. This includes financial numeracy (e.g. inflation and interest compounding) as well as awareness of deposit insurance, credit information bureaus, and other features of the financial infrastructure. Improved financial literacy could lead to increased demand for financial services among the voluntarily unbanked. Previous surveys have shown that adults around the world do poorly on a basic multiple-choice test on interest rates, inflation, and risk diversification (e.g. US: Lusardi and Mitchell, 2011; India and Indonesia: Cole et al., 2011; Russia: Klapper et al., 2012).<sup>4</sup> There is compelling survey evidence from both developed and developing countries that low financial education is significantly correlated with less retirement savings, higher interest rate borrowing, and lower formal financial sector participation (Lusardi and Mitchell, 2008; Stango and Zinman, 2011; Alessie et al., 2011). Many governments have shown interest in improving financial literacy, for instance, Indonesia declared 2008 the “Year of Financial Education” and the Reserve Bank of India has established “Financial Literacy and Credit Counseling Centers”.

The challenge however, is the difficulty in delivering financial education in a way that changes long-term financial behavior (for a comprehensive review, see Xu and Zia, 2012). For instance, a study in the U.S. found that providing information to university employees on retirement plans significantly increased enrolment of individuals that received the information, as well as on their departmental colleagues (suggesting a social network effect) (Duflo and Saez, 2003). But the evidence in developing countries is more mixed. For example, a study of a program in Indonesia designed to promote household savings behavior failed to find any effect on the overall population (though it finds a small effect on individuals with the lowest levels of

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<sup>4</sup> See Alessie et al. (2011) for a collection of related cross-country studies.

initial financial literacy) (Cole et al., 2011). An innovative South African study shows that including a plot-line on responsible finance in a popular soap opera increased phone calls to a credit mediation center—but had no effect on consumer behavior after three months (Berg and Zia, 2013). However, other papers show more promising results. For instance, the introduction of financial education in a random sample of high-schools in Brazil is associated with a significant improvement in the financial knowledge, savings, and spending behavior of both students and their parents (Bruhn et al., 2012). This literature suggests a role for carefully designed and implemented public policy in broadening responsible financial inclusion.

## **6. Distance to a Bank**

Long distances to the nearest bank branch may deter individuals from using formal accounts. Indeed, the Global Findex survey finds that 20 percent of adults in developing countries cite distance as a reason behind not having an account. The academic literature also supports the idea that distance may impede individuals from availing of financial services. Ashraf et al. (2006) offered deposit collection services to a randomly selected group of micro-savers at a rural bank in the Philippines. They found that take-up for the deposit collection services was predicted by distance to the bank. The deposit collection service reduced the time cost for individuals of going to the bank, thereby reducing a common barrier to access. Policymakers and commercial banks have adopted specific strategies to increase the use of financial services by rural residents or those living in areas with limited coverage. These strategies include mandating banks to open rural locations, banking through local agents and mobile branches.

## **6.1 Rural Branching**

Not only did 20 percent of the unbanked across the globe report not having a bank account because the bank is “too far away,” but rural inhabitants were three times as likely as urban inhabitants to quote distance as a barrier to entry (25 percent vs. 8 percent). Rural banks tend to be less (or not at all) profitable due to lower population density and a less affluent clientele (World Bank, 2003). Additionally, incomes in rural areas tend to be more volatile, rendering the bank’s portfolio in these areas riskier (World Bank, 2003). Therefore, banks are unlikely to recoup their fixed and operational costs, making them reluctant to branch into rural areas. As a result, policymakers have made an argument for mandating the opening of more banks/branches in order to bridge the divergence between social and private costs and thereby addressing a key market failure.

One of the more well-known examples of mandatory banking expansion in rural areas in recent history comes from India. Under this scheme, the Central Bank mandated the 14 state-owned commercial banks in the country to open new branches in areas that had been identified by the government as previously unbanked. In addition, the government also stipulated that, for any given bank, the opening of a branch in an already banked location had to be accompanied by opening of branches in four unbanked locations. As a result, between the years 1969 and 1990, bank branches were set up in 30,000 previously unbanked locations. The share of overall savings accounted for by rural banks went up from 3 percent to 15 percent during the same period (Burgess and Pande, 2005). While this particular policy was scrapped in 1990 as other policy goals began to take precedence, the Reserve Bank of India re-issued mandatory rural branching guidelines in 2011, requiring all banks to open 25 percent of their new branches in unbanked rural areas.

Nigeria has also experimented with quasi-mandatory rural banking, but with less promising results. The Central Bank of Nigeria launched the Rural Banking Program in 1977, under which participating commercial banks were given several incentives and tax-breaks to open new branches in rural areas. All 18 commercial banks participated in the program, and 765 new rural branches came up between 1977 and 1989 (Uche, 1999). However, the scheme failed to mobilize savings due to its very high minimum balance requirement of Nigerian Naira 50,000 (US\$ 370) (Woodstock Institute, 2012).

Mexico has dealt with the issue of rural branching somewhat differently. In 2009, the Banking and Securities Commission of Mexico (CNBV) allowed the setting up of commercial “niche banks”. These banks need to comply with less stringent capital and prudential requirements (54 Million UDIS for an institution specialized in local operations relative to 90 Million UDIS for a full service financial institution), and are allowed to offer only basic services. They must specialize in a specific geographic region, sector of the economy or type of financial service. Since the niche banks offer a smaller gamut of services, they face limited exposure, making them viable despite the looser regulatory requirements. In addition, the smaller capital requirement has caused many NBFIs to apply for a license to operate as a niche bank. This brings these previously unregulated institutions under the purview of the CNBV, increasing the extent of oversight in the financial system. By allowing smaller capital requirements for banks to enter and operate, the CNBV has significantly lowered the barriers to entry for commercial banks thereby increasing the number of banks in a given area (CNBV, 2010, 2012).

## 6.2 *Bank Agents*

While government mandates have increased bank-density in remote regions, the sustainability of these remote branches is questionable given that they are unlikely to remain profitable in the long term. Additionally, even if the operation of such branches were to be subsidized by the government, they are likely to still be plagued by frequent absenteeism due to the sparser population in rural locations. This is a common phenomenon in other publicly-provided services in developing countries and reduces their efficacy (Chaudhury et al., 2006). Therefore, there is increasing realization in policy circles that physical bank branches may not be a sustainable solution for rural areas. This has led a number of countries to turn to agent- or correspondent-banking, a model which mobilizes the existing network of local retailers and other trusted members of the local community, and is a significantly cheaper alternative to setting up a physical branch (Lyman, Ivatury, and Staschen (2006).

Bank agents address other barriers to financial inclusion as well. According to estimates by Kumar et al. (2006), the initial cost of setting up banking agent in Brazil could be as low as merely a two hundredth of what it costs to open a traditional branch. The lower costs of setting up a bank agent than a physical branch will eventually translate into lower cost of services for the consumers. The introduction of banking agents also addresses some of the trust issues by using a familiar (and trusted) member of the community as the conduit between the bank and the customers.

Correspondent-banking has been prevalent in large parts of the developing world for many years in the form of post-offices. In Brazil, for example, the post established Banco Postal under a partnership model with an existing financial institution and between 2002 and 2011 more than 10 million accounts were opened (Ansón and Bosch Gual, 2008). According to data from

the Global Findex, 12 percent of adults in developing countries cited having an account at a post office. One of the primary reasons behind the popularity enjoyed by postal savings accounts is the ease with which individuals can access post offices even in remote areas.

The correspondent-banking model leverages this insight by utilizing local retail outlets as agents of financial institutions, in order to bring banking-services at the doorstep of rural inhabitants (Berthaud and Davico, 2013). This model has become immensely popular in Latin America and South Asia, with Brazil leading the way. According to the Central Bank of Brazil, more than 200 financial institutions were providing correspondent-services in almost 340,000 locations across the country in August, 2012.<sup>5</sup> More importantly, unlike conventional banks, these services are not limited to urban areas: Kumar et al. (2006) find that in 2000, prior to the introduction of correspondents, 1,659 of the 5,636 Brazilian municipalities had no formal banking services. Within three years of the introduction of banking correspondents, every municipality in the country had access to these services, and 6.5 million new accounts were opened. Further, 43 percent of the municipalities in the poorer northern and northeastern region, and 28 percent of the municipalities overall, were served solely by banking correspondents in 2002. According to the Central Bank's estimates, agents were handling 18 percent of all the assets in the banking system by December, 2010.

Encouraged by Brazil's enviable experience in agent-banking, many countries have emulated this model: Bolivia, Chile, Colombia, Ecuador, Mexico, and Peru in Latin America; India and Pakistan in South Asia; and Kenya, Nigeria, South Africa, and Uganda in Africa - have all adopted agent-banking with varying degrees of success. This necessarily begs the questions: what makes correspondent-banking work, and how can governments replicate Brazil's positive

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<sup>5</sup> For details, see <http://www.bcb.gov.br/?CORPAIS>.

experience in local contexts? Two key factors play a role in the success of correspondent banking in Brazil: (i) technology and (ii) the regulatory environment. Technology plays a vital enabling role in agent-based banking by a) facilitating real-time communication between the agents and the banks, and b) allowing identity verification of customers via electronic card-readers. Therefore, any successful correspondent-banking operation needs to have a sound technical network in place. Brazil was well-poised to harness this model, since the hyperinflation of the 1990s led its banks to invest in technical upgrades that allowed for faster processing of transactions. India, on the other hand, has not fared well in this regard overall: in a recent survey of banking agents conducted by CGAP, 25 percent of the agents surveyed reported an inability to transact at the time of the survey, a bulk of them due to connectivity problems or faulty card-readers (Chen and Thoumoung, 2012).

Second, a regulatory environment that is tailored to local conditions is critical for agent-banking to thrive. As part of a detailed review of the regulatory structure underlying the major agent-banking programs in the world, Breloff and Tarazi (2011) lay out multiple dimensions along which regulatory policy can play a part in determining who can be a correspondent.

The criteria for an entity to work as a correspondents vary across countries. For instance, Brazil disallows individuals from becoming agents in order to prevent fraud and to inspire consumer confidence; Kenya has sought to keep non-profits out of correspondent-banking for fear of derailing their social agenda; India started off by shutting-out both for-profits (due to concerns about exploitation of poor customers) and nonbank financial companies (due to their conflict with commercial banks). Breloff and Tarazi (2011) argue that such policies could potentially be so restrictive as to stifle the emergence of an effective network of correspondents. In addition, excessive regulation can breed unnecessary bureaucratic red-tape or corruption,

leading to either inefficiencies, or completely defeating the purpose for which the regulation was put in place. For instance, Brazil has found it hard to enforce its “no individuals as agents” dictum.

Another important aspect of the regulatory framework is the location of agents, which Brazil and India struggled with as early-adopters of agent-banking. Brazil started out by mandating that agents could only operate in unbanked municipalities, but then rescinded this policy in 2000 in order to enable customers to access their receipts under the *Bolsa Familia* program. This served to deepen the financial engagement of the poor as there is anecdotal evidence that they tend to prefer the familiarity of their local agents, perceived to be more trustworthy than regular branches (Kumar et al., 2006). Similarly, India first stipulated that agents be located at a distance of no more than 15 kilometers from the branch that they were attached to. While this was done to ensure supervision of the agents, it served to defeat the purpose of agent-banking in remote unbanked regions. Consequently, the guideline was amended in 2008 to 30 kilometers of maximum distance, and it was also made possible for banks to seek exemption from this rule. The Brazilian and Indian experiences have been instructive for other countries, and agent banking guidelines are now being adopted without any location constraints in several countries (Reserve Bank of India, 2010, 2012).

The final regulatory guideline about who can serve as a correspondent relates to the due diligence process prior to their appointment. While banks certainly need to exercise caution with regards to appointing their agents (clean criminal records and financial history), onerous requirements, especially in terms of the number and kinds of documents that a potential agent needs to produce could prove counter-productive. This is especially true in developing countries where credit records tend to be sparse. Also, even where records do exist, procuring them from

the appropriate authorities can be expensive and time-consuming. Regulators need to remain cognizant of such local realities before formulating specific requirements.

In addition to regulations pertaining to who can be a banking agent, a number of rules across countries dictate how to become one. For instance, Brazil and India have no licensing requirements for a potential agent, or for the banks seeking to appoint one. Peru requires banks to obtain a one-time license to offer agent services. Kenya and Mexico, on the other hand, require the banks in question to submit separate license applications for each individual agent that they seek to appoint. The most restrictive licensing requirements are to be found in Pakistan, which has a two-step licensing process, requiring individuals to first get licensed as potential agents, and then have the bank in question submit additional paperwork on their behalf (Lauer et al., 2011).

Ultimately, the lesson here cannot be for every country to mimic Brazilian regulations. Regulators need to lay down policies that are best-suited to the local conditions in their country. However, based on existing experience, rule-of-thumb policy guide would be to appoint organizations with a large network, avoid location-based restrictions, and minimize paper-work. Yet even though correspondent banking may be economically profitable, there is still a role for public policy. Despite lower costs for each area, correspondent banking may only be profitable at very large scales precisely due to the specific products (basic) and clients (low income) it is designed.

### ***6.3 Point of Transaction (POT) machines***

Another way to provide remote branchless banking services is through point of transaction (POT) machines, which allow users to reach financial institutions directly, and often

all aspects of their finances, from bank accounts, to insurance instruments, to brokerage accounts. Unlike conventional ATMs where you can only reach your bank account (or those in your ATM's network), the initial screen of a POT when signed on gives the user options on which account or accounts they want to transact business.

For example, in 2013 the Bank of Kathmandu in Nepal introduced a new scheme named 'Ghar Angan Banking Sewa', targeted at encouraging banking habits among lower income groups and people in rural areas who are as yet un-banked. POT machines have been deployed at 20 new locations across the country, mostly in remote areas, to enable people in far-flung regions to access banking services.

#### **6.4 *Mobile Money***

Another approach to providing branchless banking to the poor is mobile money (M-money), or the transfer of money through mobile phones. This method of transferring funds is rapidly growing in parts of Africa where branch banking has traditionally been hampered by transportation and other infrastructure problems. M-money allows account holders to pay bills, make deposits or conduct other transactions using a mobile phone. By eliminating the physical branch infrastructure, M-money also promises to provide lower cost services as well. This service was pioneered in Kenya, and has been so successful that now covers 70 percent of Kenyan households (Kendall, 2010; Mas and Radcliffe, 2010). The initial idea behind M-money was to harness the extremely high penetration rates of cell phone ownership among the poor in order to provide them with banking services. With decreasing costs of purchasing a mobile phone and increasing network coverage, cell phones remain a powerful tool in the policymakers' arsenal for providing greater financial access.

Global Findex data shows that mobile money provides millions of people—who may be otherwise excluded from the formal financial system—a way to perform transactions such as paying bills and sending or receiving money. In Sub-Saharan Africa, 16 percent of adults (and 23 percent of mobile phone users) report having used mobile money in the past year. Mobile payments can be made via various channels: by transferring airtime credit; with money stored on a mobile phone; with money in an account linked to a mobile phone; or via a mobile banking app on a smart phone. Due to the prevalence of mobile phones in certain regions, mobile money is often more accessible and affordable than traditional bank branches. These features of mobile money could facilitate formal saving by making it easier for people to deposit and keep money in their accounts.

For example, in Kenya, Safaricom introduced “M-Shwari” accounts, which can be set up instantly and accessed from any mobile phone. The account is operated jointly with Commercial Bank of Africa, but no branch facilities are offered. It requires no minimum balance and offers a small overdraft, with a one-off, 7.5% set-up fee. In its first four months, 2.3 million subscribers opened M-Shwari accounts, holding about \$47 million in deposits as of March, 2013.<sup>6</sup>

Yet, the average use of mobile money transfers for all developing countries is only 5 percent, suggesting there are still barriers to the introduction of new technologies in regions outside Africa. For example, a key issue facing telecommunication and banking regulators is interoperability. According to a recent survey (World Bank, 2012a), most of the innovative mobile-payment products are closed-loop, which means that they are usable only in a limited set of locations, typically only those affiliated with the operator of the scheme (e.g. money can only be added or cashed-out at locations affiliated with the mobile provider). This is the case of 108 of the 173 products reported. Encouraging greater interoperability between providers—that allows

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<sup>6</sup> The Economist, “Is it a phone, is it a bank?”, March 30, 2013.

individuals to be able to send or receive money across family, sellers, and employers—is critical for the success of mobile money to broaden financial inclusion.

## **7. Conclusion**

Unsurprisingly, the proportion of adults without a formal financial account is disproportionately higher in the developing world, according to data from the Global Findex database (Demirguc-Kunt and Klapper, 2012). Unbanked adults in developing countries cite the lack of money to use an account, high costs of opening an account, distance, documentation requirements and lack of trust in financial institutions as some of the reasons behind not having formal accounts. We discuss previous literature showing that relaxing these barriers can encourage greater savings, consumption smoothing, and improved social welfare.

Informed by a fast-growing body of experience and knowledge, an increasing number of countries are introducing comprehensive measures to improve access to and use of financial services (see Appendix A for a review of the related literature). Since a deposit account is usually viewed as the starting point for broader financial access, e.g. credit and insurance, we focus on changes to government regulations that encourage the propagation of savings accounts at formal financial institutions. Our review highlights the role of both direct government interventions (e.g. electronic payments of government transfers) as well as reforms that encourage bank and other private sector investment in commercially viable product innovation, such as mobile banking.

While some of these efforts have been hugely successful, others have produced only modest results. For financial inclusion efforts to be successful, policy-design must be tailored to the systemic failure in each setting. For instance, rural and remote populations might benefit

more from efforts to bring banks closer, like banking correspondents. On the other hand, urban poor stand to gain a deal more from relaxed documentation requirements. Unbanked women, who generally receive directly government transfers for children and basic needs, might be best reached by electronic government payments. Ultimately, however, it would be of greater benefit in the long run to eliminate the causes behind some of these failures, minimizing the need for government intervention. Measures like building roads to bring rural populations closer to markets would be a step in the right direction.

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**Table 1: Percentage Unbanked and Corresponding Reasons, by Region**

Region	Unbanked	Reason why unbanked						
		1	2	3	4	5	6	7
		Average						
East Asia & Pacific	0.45	0.20	0.18	0.14	0.06	0.64	0.01	0.24
Europe & Central Asia	0.55	0.15	0.17	0.15	0.31	0.65	0.04	0.18
High Income	0.10	0.10	0.21	0.14	0.24	0.45	0.06	0.31
Latin America & Caribbean	0.61	0.15	0.40	0.21	0.26	0.55	0.02	0.17
Middle East & North Africa	0.82	0.08	0.21	0.10	0.10	0.77	0.12	0.09
South Asia	0.67	0.22	0.23	0.16	0.09	0.65	0.08	0.34
Sub-Saharan Africa	0.76	0.31	0.36	0.30	0.16	0.81	0.04	0.07

Notes: The data are from Demirguc-Kunt and Klapper (2012). Complete data is available at: [www.worldbank.org/globalindex](http://www.worldbank.org/globalindex). Unbanked is the share of adults that do not indicate to have an account. The numbers corresponding to the reasons are shares of the unbanked. The reasons of being unbanked are the following.

1. Too far away
2. Too expensive
3. Lack of necessary documentation
4. Lack of trust
5. Not enough money
6. Religious reasons
7. Family member already has account

## Appendix A: Review of Related Literature

Author(s)	Period	Region	Method
<i>Banking Costs</i>			
Allen et al. (2012)	2011	123 countries	Survey evidence
Bankable Frontier Associates (2009)	2004-2008	South Africa	Survey evidence
Beck et al. (2008)	2004-2005	62 countries	Survey evidence
<i>Documentation Requirements</i>			
Allen et al. (2012)	2011	123 countries	Survey evidence
Barth, Caprio and Levine (2004)	1999	107 countries	Survey evidence
CGAP (2009)	2008	139 countries	Survey evidence
Chin et al. (2011)	2007	U.S. city	Experimental and survey evidence
<i>Trust in Banks / Financial Literacy</i>			
Alessie et al. (2011)	2005 and 2010	Netherlands	Survey evidence
Berg and Zia (2013)	2011-2012	South Africa	Experimental and survey evidence
Bruhn et al. (2012)	2010-2011	Brazil	Experimental evidence
Cole et al. (2011)	2006 and 2007	India and Indonesia	Experimental and survey evidence
Collard et al. (2001)	2000	Bristol	Community select committee
Collard et al. (2003)	2002	Bristol and Leeds	Community select committee
Duflo and Saez (2003)	2000	MIT, University	Experimental evidence
Dupas et al. (2012)	2009-2010	Kenya	Experimental and survey evidence
Lusardi and Mitchell (2007)	2004	United States	Survey evidence
Martinez Peria and Schmukler (2001)	1981-1997	Argentina, Chile, Mexico	Evidence based on administrative data
Stango and Zinman (2011)	2006-2008	United States	Evidence based on administrative and survey data
<i>Distance to a Bank</i>			
Allen et al. (2012)	2011	123 countries	Survey evidence
Ashraf et al. (2006)	2004	Philippines	Experimental and survey evidence
Berthaud and Davico (2013)	2012	123 countries	Evidence based on administrative and survey data
Burgess and Pande (2005)	1969-1990	India and Indonesia	Evidence based on administrative data
CNBV (2010)	2010	Mexico	Evidence based on administrative data
Kumar et al. (2006)	2001-2004	Brazil	Evidence based on administrative data