

Advancing Financial Inclusion through Use of Market Archetypes

The evolution of money from physical cash to digital form is redefining financial services as an *information* business. This, in turn, is generating optimism around the long-term prospect of cashless or “cash-lite” societies, where most people have access to low-cost, convenient, and broadly available financial services. Research indicates that these digital cash models (often called branchless banking, mobile banking, or mobile money) can increase financial access for unbanked segments by reducing the cost-to-serve for providers and making service more convenient for customers. Branchless innovators who “get it right” can help accelerate the pace at which financial inclusion happens.

This evolution will create confusion before it creates clarity. It will shake the competitive game board by shifting which industry players create economic value and what role they play—a process that is dynamic and often difficult to predict. As branchless financial ecosystems develop and markets begin to shift, industry players often cite diverse (and conflicting) views about their roles. In parallel, policy makers struggle to promote regulation that can move the market forward since the “forward” step is not clear.

This Focus Note provides a framework that regulators, policy makers, financial service providers, donors, and investors can use to identify the most productive next steps in their respective markets. It argues that countries can be broadly grouped into three market archetypes—distinguished by broad economic, demographic, and policy environment characteristics—that represent three different starting points in the journey to financially inclusive ecosystems. Branchless financial ecosystems, therefore, develop differently in these markets.

- In the **Mobile Leapfrog** market archetype, mobile network operators (MNOs) fill a banking infrastructure gap to increase the percentage of the population that has access to services.

- In a **Convergence Battle** market archetype, branchless banks and retailers (and perhaps MNOs in the future) fiercely compete for the same customer in urban areas, while the countryside remains underserved.
- In the **Pervasive Social Banking** market archetype, historical financial inclusion success achieved through social banking leads to regulations that heavily favor future social banking, leaving less room for innovation.

For each of these market archetypes, this paper suggests a distinct agenda that can help lead the market toward financial inclusion.

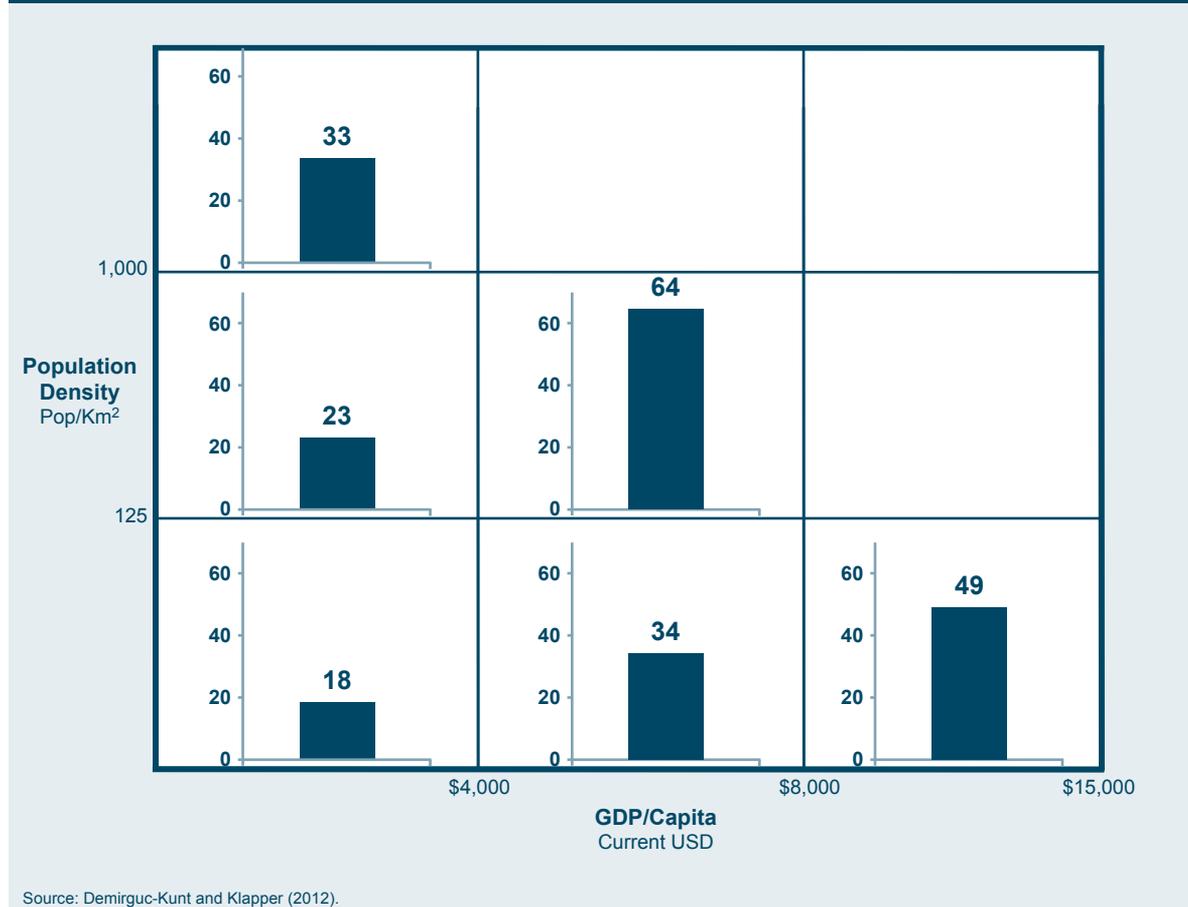
The Legacy Economics of Bank Branches

Only a few short years ago the physical nature of currency dictated that banking operate within the nine-to-five, brick-and-mortar, labor-heavy constraints of a *traditional retail* business. If there is one factor that drives success of any traditional retail activity, it is the *high frequency of the right type of customer* passing by a retail store, in this case, a bank branch. This explains the underlying basis for the old retail adage “location, location, location.”

Research suggests that we can extrapolate this retail principle from the street corner to the country level. An analysis of 148 countries covering 5.6 billion people suggests that population density and per capita income influence financial inclusion, as illustrated in Figure 1. This chart computes the population-weighted adoption of formal bank accounts in countries clustered along dimensions of gross domestic product (GDP) per capita and population density (Demirguc-Kunt and Klapper 2012). These data show both income and density matter (income being the most powerful by roughly a factor of two). Combined income and density is associated with still-higher financial inclusion.

Figure 1. Percentage of adults (15+ yrs and older) with a formal bank account

Weighted average per group of countries



Income and density seem to be significant factors, but are probably not the only factors involved. Several other factors may lead a market to have a different financial inclusion level than its income/density profile would suggest. One example is a country's cultural attitude toward banking, which can lead to a different level of inclusion than expected. Other examples are countries that have had rapid recent economic growth. Because the banking industry often takes time to catch up with such rapid growth, retail banking shows less penetration than would be predicted. Yet other examples are countries that only recently privatized their economies after decades of state control; in this case, financial inclusion may be higher or lower than expected.

Financial Ecosystems and Income/Density Archetypes

Having seen the variation in financial inclusion across income and density, we wanted to explore

how these two dimensions impact financial ecosystems. By "ecosystems" we mean the type of actors involved and the role they play in driving financial infrastructure. Comparing ecosystems by country (banking infrastructure, cell phone infrastructure, and presence of retail chains) and the breadth of financial services offered across socioeconomic segments in urban and rural localities, we found distinct links between income/density market groupings and financial ecosystems:

- *Within* common income/density country groups, financial service ecosystems seemed relatively similar.
- *Across* different income/density country groups, ecosystems had meaningful differences.

In other words, countries with similar income/density characteristics travel the road to branchless banking from similar starting points, while countries with different income/density characteristics make their journey from different starting points.

Box 1. The Positive Disruption of Branchless Banking

The power of income/density combinations to explain current financial inclusion levels (Figure 1) implies that *cost reduction* and *elimination of the distance effect* remain two key factors in expanding financial access.

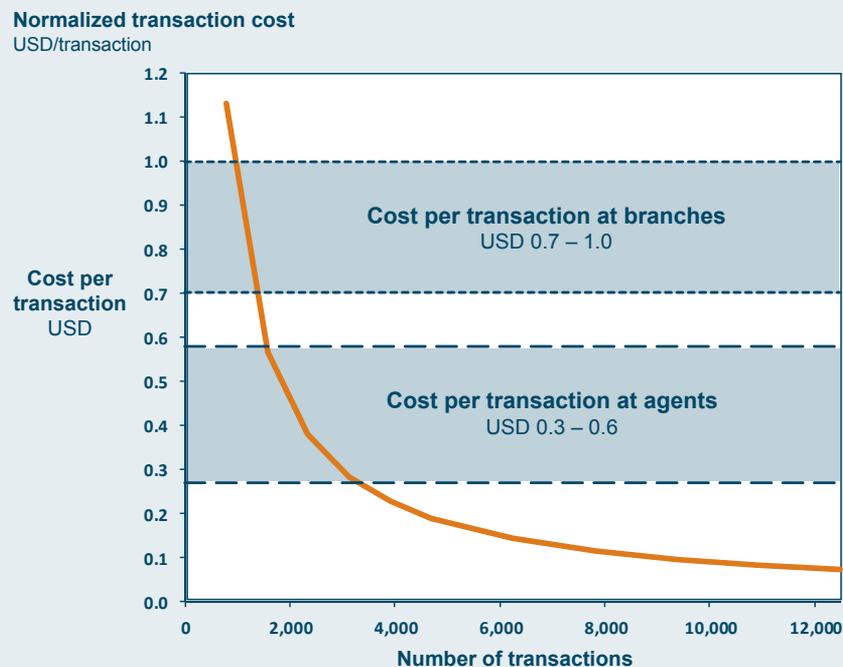
- **Cost reduction.** Innovations that reduce customer acquisition, customer transaction, and customer service costs empower financial services providers to serve lower-income clients without compromising profitability.
- **Elimination of the distance effect.** The time and cost that an individual must spend travelling to access a financial service is a major inhibitor of adoption. If this distance effect can be eliminated, pent-up demand (and new service adoption) should follow.

These factors help explain why one of the most potent enablers of new financial inclusion is the deployment of *technology-enabled branchless banking models*. By escaping the economics of stand-alone, labor-intensive branches, these models reduce

the combined cost of establishing a service point and carrying out a transaction. By using digital and mobile technologies and leveraging existing retailer footprints, these new models bridge gaps in branch infrastructure to make customer convenience a reality and offer more affordable services.

Figure B1.A illustrates this disruptive power. Banking agent transaction costs can beat branch costs by 50 percent; automatic teller machine (ATM) transaction costs in high-traffic locations can beat branch costs by as much as 90 percent. Even more encouraging, the fast pace at which technology is evolving suggests that today's digital money models are still in their infancy: high-speed wireless networks are still being rolled out, mobile handset prices (including smartphones) are falling toward mass affordability, self-service retail kiosks carry out increasingly sophisticated tasks, and business model innovators keep entering the market.

Figure B1.A. Transaction cost through branches, agents, and ATMs
Example from Latin American financial institutions

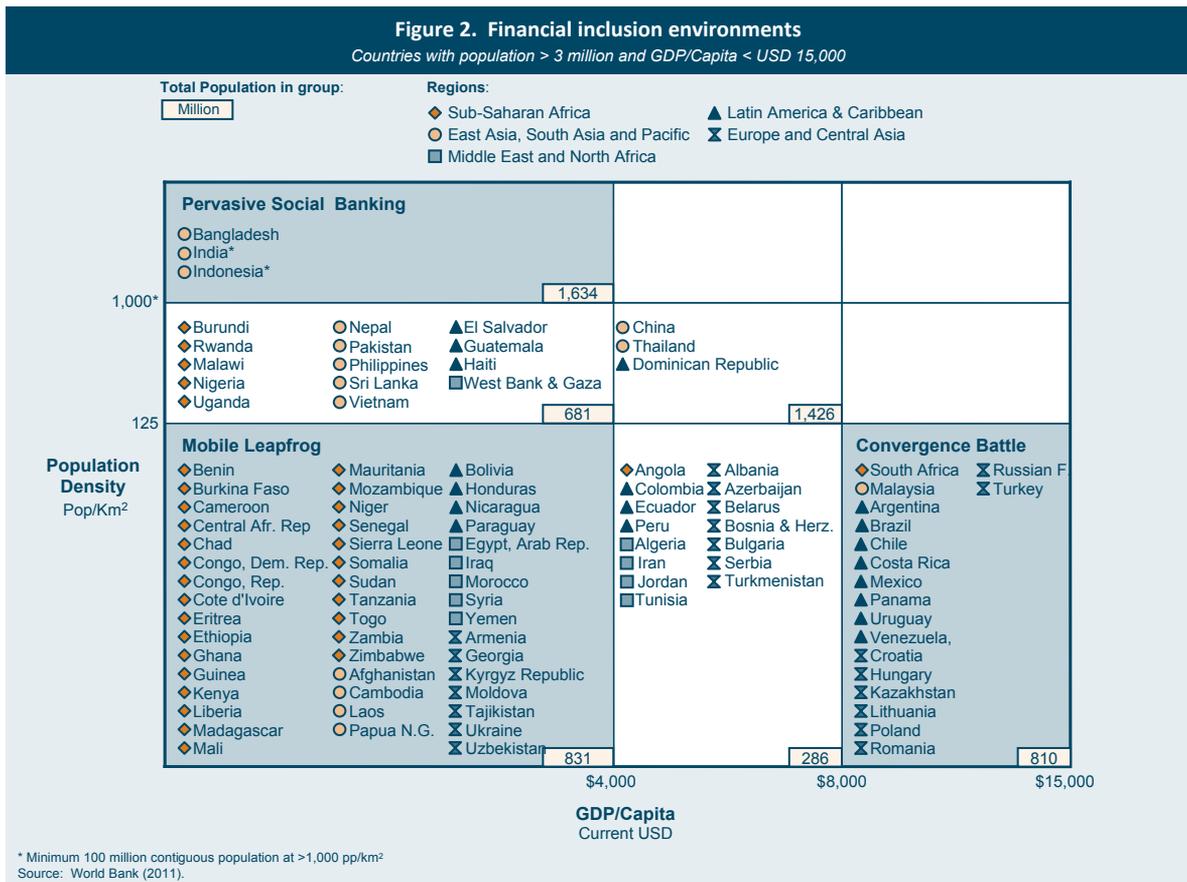


Source: World Bank (2010); Wireless Intelligence (2011); CGAP Country Notes (2012).

Figure 2 identifies the countries that fall into the income and density matrix from Figure 1 using the same breakpoints. Countries are color coded based on their region, and only countries with more than 3 million people are included. The aggregated size

of the population living in each cell of the matrix is noted in the small rectangles.

The extremes of this data set show the clearest market groupings, and as such, we have



highlighted and labeled three corners of the matrix as distinct market archetypes. While any effort to define a world’s worth of markets in only three categories will be full of exceptions, we believe that these three do a robust job of making strategic distinctions. Middle cell environments are more likely to be hybrids of these three archetypes than distinctively different environments. A brief summary of the characteristics of each market archetype follows.

1. Mobile Leapfrog markets (low income, low density)

In these markets, individuals live too far apart and account balances are too small for widespread bank branch economics to work well. As a result, consumer retail banking systems are generally underdeveloped, with little banking infrastructure and few branch-based access points. By the same token, the retail sector remains largely fragmented—there are few retail chains,¹ and those

that exist are not widespread. The customer bases of commercial banks or retail chains are typically only 15–25 percent of the population.

In contrast to banking and retail chain development, MNOs have developed significant networks for distribution of prepaid airtime in convenient top-up locations that help them gain and retain customers. While these airtime networks are loosely structured, when combined with high mobile phone penetration rates they put MNOs in touch with 65–80 percent of the population. In these markets, MNOs often take the lead in launching mobile banking initiatives, particularly money transfers. Some also create partnerships with microfinance banks or small commercial banks to offer more holistic branchless banking solutions.

2. Convergence Battle markets (higher income, low density)

As the name implies, in these markets all major types of branchless banking providers (banks, retailers, and

¹ Throughout this paper, the term “retail chains” refers in particular to formal retail stores with a relatively large number of outlets (such as convenience stores, supermarkets, pharmacy chains, among others). These chains coexist alongside informal merchants.

MNOs) have a strong enough market presence that they converge on and fight for each other's customers. Higher income per capita and higher urbanization enable major commercial banks to have a relatively strong financial inclusion footprint (often 60 percent or more of the population). Retail chains are also strong and possess sufficient operational expertise to carry out financial services partnerships or directly provide financial services. MNOs have networks that also reach 60 percent or more of the population, but they do not usually offer direct financial services. Instead they distribute the services of major commercial banks, typically because regulation prevents them from offering their own services, but sometimes because banks' brand equity in financial services is so strong. Customers' expectations of convenience (e.g., ability to bank through their mobile phone, conduct mobile payments, or bank where they shop) often force collaboration across actors, even when they are fierce competitors.

Rural areas represent the main challenge for financial inclusion in these markets. Commercial banking penetration in these areas remains low because traditional financial institutions lack the required business case for branch-based operations to be profitable, and while agent banking is beginning to develop, it often mostly focuses on urban branch decongestion. In addition, microfinance institutions (MFIs) in this environment struggle to generate sustainable financial results at reasonable interest rates because labor costs are too high in relation to the size of the loans needed by poor households.

3. Pervasive Social Banking markets (low income, high density)

The key characteristic of this market archetype is the pervasiveness of social banking, implemented through noncommercial banks and through government mandates for commercial banks to partially address social equality. High population density near branch sites creates attractive economics for social banking. Client incomes and account sizes are low, but so are labor costs, creating the potential to profitably bank low-income customers. Because the poor are the largest segment they serve, and because government

often plays a key role in the formation of these banks, there is a "public good" nature in these businesses. The result is scaling of microfinance for the poor, and some socially oriented commercial banking for lower-income segments. Financial service penetration figures are high relative to GDP per capita. At the same time, there are flaws in the system—many accounts end up inactive, because commercial banks seeking to meet government social banking targets provide accounts to individuals who don't use them, or some customers are excessively offered credit, creating a microlending bubble and over-indebtedness.

Because government and bank (commercial/nongovernmental organization) collaboration has advanced financial inclusion in the past few decades, policy makers continue to favor schemes where banking entities take the lead in branchless banking partnerships and MNOs and retail agents adopt supporting roles. Competition for value between commercial banks and MNOs in the context of this uneven playing field has led to slow-to-form and slow-to-act partnerships.

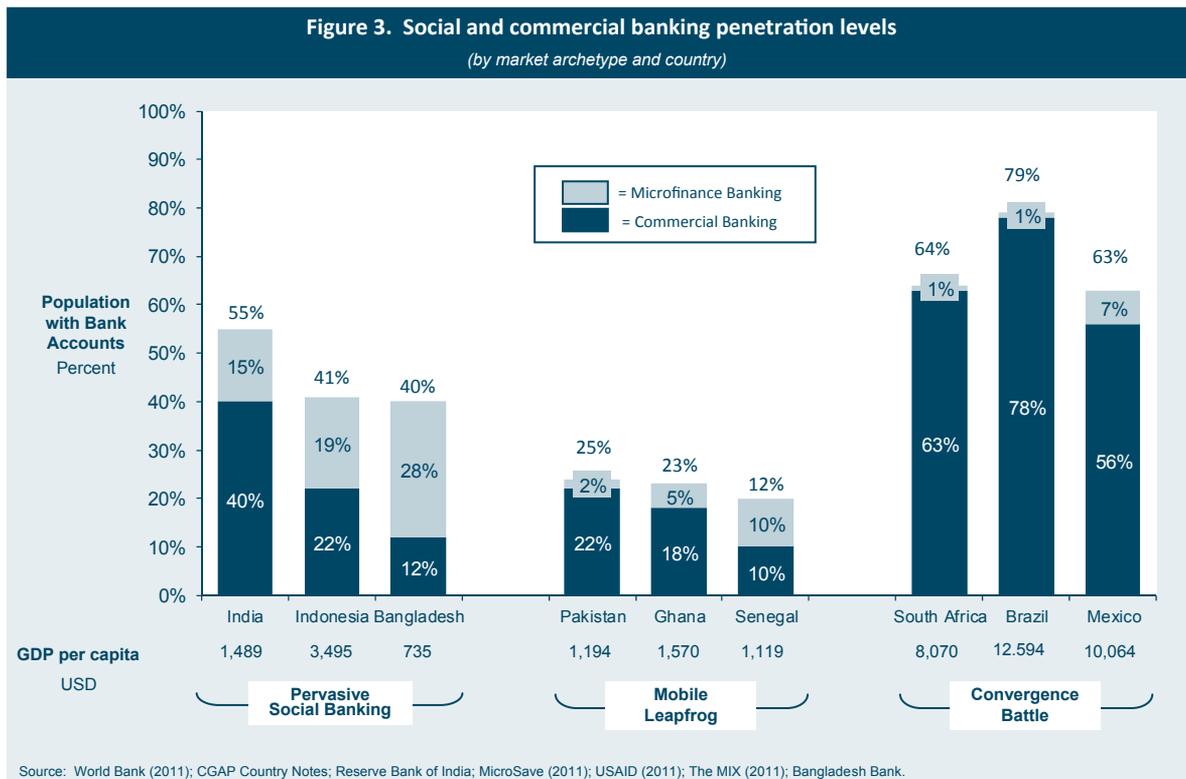
Financial Inclusion across Market Archetypes

To provide a more in-depth profile of countries in each market archetype, we have profiled financial inclusion in nine countries (three per archetype).² Figure 3 illustrates some key characteristics. The height of the bars represents the percentage of the population that has a bank account. The bottom part (darker color) represents commercial bank adoption; the top part (lighter color) represents penetration of microfinance. Retailers often host the services of banks, so they don't appear here as separate figures.

On average, the effect of having a significantly high population density has resulted in 2 to 2.5 times more banking penetration³ than for countries with roughly the same income per capita (but low or average population density). Some of the difference is driven by commercial banking (via social mandates); the rest is driven by microfinance. Current initiatives in Mobile Leapfrog countries are likely to change this picture, but for the time being, those initiatives have not yet

² These countries were selected considering the progress of adoption of branchless banking, the breadth of business models observed, and geographic coverage.

³ Penetration of formal financial services by commercial banks, MFIs, or any other formal financial service provider.



led to high bank account penetration—early wins have been in providing remittances or person-to-person money transfers, which are not counted here.

Countries in Convergence Battle markets have a markedly higher financial inclusion rate, but in contrast to Pervasive Social Banking markets, this progress has been led by commercial banks in tandem with retail store partners. Microfinance in these environments has had a lesser role in driving banking penetration, possibly due to a higher income per capita (which impacts cost structure) relative to client account or loan size.

Different Starting Points, Different Journeys

The three market archetypes represent three different starting points in the journey to financially inclusive ecosystems. The technology and business rationale that enable branchless banking models may be universal, but they will have a different impact on the financial ecosystems found in each of the three market archetypes.

It may seem unnecessary to focus on the “journey” toward branchless banking or on an “agenda” for

getting there—after all, if branchless economics make sense, why wouldn’t branchless banking just happen quickly and naturally? The reason is that there are often several sources of friction. The opportunity to grow down-market might be unclear; players may be concerned that they are investing in a marginally profitable segment of the market. In other cases, regulations may be outdated but supported by industry groups who profit from the way the market has worked in the past. In still other cases, players who lead a partnership might design the partnership’s revenue and profit splits in a way that gives them disproportionate benefits, thereby creating a disincentive for supporting partners to invest, or to participate enthusiastically. And even if partner economics are equitable, the long-term question of “who owns the customer?” may make some critical partners hesitate.

Because the issues that cause this friction vary across market archetypes, it is useful to think of a “financial inclusion agenda” as one that identifies the main barriers in the journey to a financially inclusive ecosystem, as well as the biggest opportunities that need to be pursued for a greater percentage of a country’s population to be served through formal financial services. Such an agenda

would necessarily focus on low-income populations, but might not be restricted to that group; in some countries the emerging middle class may be unbanked as well. An effective financial inclusion agenda would help prioritize efforts and align key market players along a consistent roadmap. As expected, each of the three market archetypes has a distinct financial inclusion agenda.

The remainder of this paper describes three distinct financial inclusion agendas, one for each of the three market archetypes. We hope that this type of thinking will strengthen efforts by enterprises, investors, and policy makers to accelerate financial inclusion in their respective markets.

Mobile Leapfrog Agenda

Mobile Leapfrog markets are characterized by low income per capita and low population density. In this context, three market dynamics play out.

1. MNOs are best positioned to drive financial inclusion because they have better economics for branchless banking than banks. Because bank branch profitability is driven largely by the number of individuals with sufficient income living within a convenient radius of the branch, these

markets' low-income/low-density profiles make commercial, branch-based banking unattractive. Banks in these environments tend to focus their business on providing financing to governments, larger businesses, and the wealthier part of the population (about 20 percent). They lack a strong retail branch footprint.

The same income/density profile hinders rapid development of large, organized retail chains. Poorer consumers won't typically shop at branded destination stores—the time and cost of travel is too high, and lower prices can be found in the informal retail sector. As a result, global retailers allocate their investment capital to other geographies first. Not only does this preclude retail chains from playing a major financial services role, it also makes agent network development more difficult and expensive for banks since they do not have the option of conveniently partnering with large retail chains.

This is where the MNOs' advantages come into play. They already have a commercial relationship with millions of customers—mobile phone penetration in Mobile Leapfrog markets ranges from 60 percent to 90 percent (see Figure 4). For all practical matters, MNOs already have their own version of a retail network—the airtime distribution network that they've developed as part of their voice business. Furthermore, MNOs

Figure 4. Mobile Leapfrog market archetype
Sample Country Profiles

	Ghana		Senegal		Pakistan	
	% Penetration ⁽¹⁾	Access Points ⁽²⁾	% Penetration ⁽¹⁾	Access Points ⁽²⁾	% Penetration ⁽¹⁾	Access Points ⁽²⁾
MNOs	87	-	67	-	59	-
Commercial Banks	18	1,317	10	400	22	5,546
Retailers Size of largest chain [all formal retail outlets] ⁽³⁾	-	20-25 [550]	-	20-25 [NA]	-	100 [6,000]

Notes:

- (1) Penetration of MNOs based on estimates of unique users as % of total population. Penetration of commercial banks based on % of adults with access to at least one financial service from commercial banks.
- (2) Number of access points for commercial banks estimated as # of bank branches plus # of ATMs; banking agents not considered since most existing agents do not serve bank customers.
- (3) Retail chain access points is a lower-bound estimate based on formal retail chain store outlets (including among others: food stores, pharmacies, textile, hardware, construction material, convenience stores, gas stations).

Box 2. The Power of Partnerships

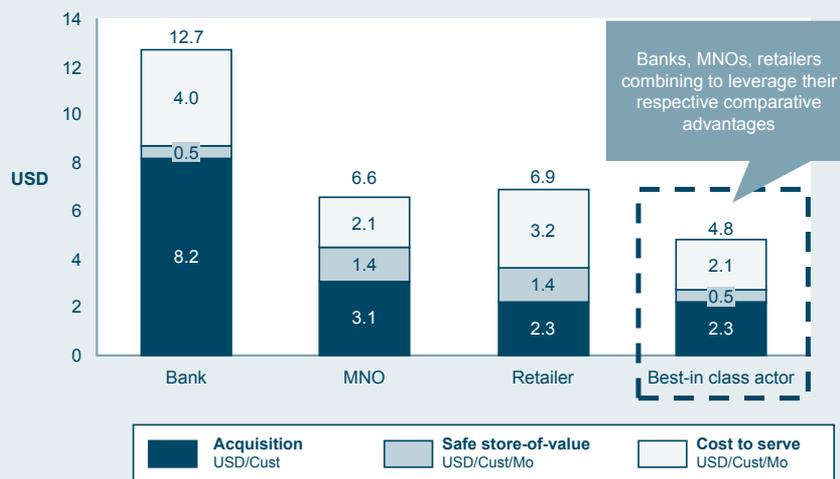
Figure B2-A measures the cost of delivering financial services via the three different actors commonly involved in branchless banking services. It incorporates the cost of acquiring and retaining a customer, the cost of safely storing a customer's savings, and the cost of carrying out related financial transactions in a scenario where more than 1 million customers are being served through a branchless banking model. The chart shows the following:

- The cost of acquiring a customer is an important part of the equation. MNOs and retailers can have lower costs than banks because they can leverage existing infrastructure and customer bases.

- Not surprisingly, banks retain the lowest cost of storing funds because the cost of complying with prudential regulation is marginal to their core business.
- MNOs have the lowest transaction costs because their core business already bears the cost of the infrastructure required to initiate and process transactions.

Note that a hypothetical three-way partnership using the retailer's ease of acquiring customers, the bank's cost of storage, and the MNO's transaction efficiency yields a total cost position 60 percent below that of a traditional bank branch approach. It is no surprise that partnerships are often a goal if not a reality in branchless banking ecosystems.

Figure B2-A. Estimated unit cost of financial service provision



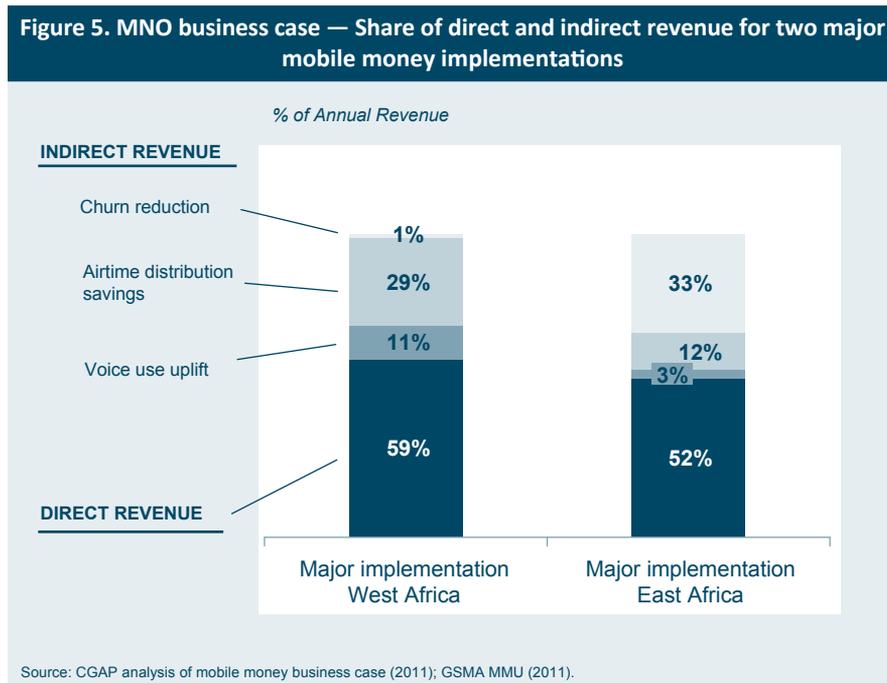
Source: CGAP analysis of retailer, bank, MNO economics (2011)

can find a suitable return on investment delivering financial services that yield moderate or low stand-alone profitability, because they have already paid to acquire their customers and because financial services bring additional core business synergies, such as lower customer churn, added average revenue per user, and savings on airtime distribution (see Figure 5).

Given that MNOs represent the Mobile Leapfrog market's best chance for financial inclusion, it is not surprising that central bankers and financial supervisors in these markets are among the most globally progressive in granting MNOs a role in financial services. That said, some regulators have

given tacit permission, but not explicit, written approval to MNOs. This hinders full investment by MNOs out of concern that their rights to operate may be removed or that future reforms might reduce the attractiveness of the business. Clear and unequivocal regulatory permission for MNOs is a foundational step toward financial inclusion in Mobile Leapfrog countries.

Given this context, MNOs are assuming team leader roles in Mobile Leapfrog geographies, recruiting banks as junior team members whose role is to provide licensed deposit-taking accounts. In some cases, MNOs choose to partner with a regulated microfinance bank that



has a large client base among the poor or with a second-tier commercial bank (Safaricom did both in Kenya). To maximize control and return on investment, an MNO might even buy a bank (as Telenor Pakistan did when it bought Tameer in Pakistan, a regulated microfinance bank). To add points of presence, MNOs may choose to supplement their own airtime networks with third-party agents. In some Mobile Leapfrog countries, “virtual” chains have been created by aggregators of small merchants. These aggregators, which may be entrepreneurs (e.g., INOVA in Burkina Faso), payment systems vendors (Visa, MasterCard), or firms that distribute goods across merchants (e.g., fast-moving consumer goods distributors such as Coca-Cola), can partner with MNOs to expand the MNOs’ access points. In these cases, MNOs bring additional transactions and revenues to the network.

2. *MNOs focus on transfers with limited interest in a full-service product line; however, long-term financial inclusion progress requires full-service products.* MNOs usually launch their financial services with payment services: remittances, person-to-person payments, person-to-business payments—and noninterest-bearing, stored-value “float” accounts. Broader financial services require abilities (such as assessing an individual’s likelihood of repayment, or pooling risk across multiple

financial products and segments) that MNOs don’t have.

Payments have generated a significant amount of social benefit where they have achieved scale. The Kenya market has been the benchmark for payments-led inclusion progress; growth is now picking up in Uganda and Tanzania as well. But adoption of payments and stored value alone does not add up to a robust set of financial inclusion services.

One promising MNO development might be fast-growing, MNO-marketed and distributed life insurance, promoted either as a stand-alone product or as a free reward for customer loyalty (as MNO Tigo does in Ghana, in partnership with MicroEnsure.) Tigo’s parent, Telenor—a major MNO with a focus in Asia—has now invested in MicroEnsure and plans to roll out MNO-based microinsurance in other countries). MNOs who partner with insurance companies offer insurers access to a stable risk pool as well as the ability to collect small premiums frequently at a low cost, which enables a new low-income-oriented product that has significant cost synergies with the payments business.

Beyond insurance, a more challenging product line question is whether MNOs will promote real savings accounts or simply promote stored value as a substitute for cash. Strategically, a float account

or stored-value e-money wallet⁴ is more attractive for MNOs (higher MNO profitability plus MNO customer relationship control) compared to a bank-based savings account that the MNO facilitates. Savings products for low-balance customers are not highly profitable, and they create a tighter bond between bank and customer. However, research indicates that if the poor have longer-term surplus funds, they prefer the security of a bank account, and they value the “out of sight, out of mind” personal discipline created by a harder-to-withdraw savings program. Poor families who have savings are better positioned to weather unexpected downturns in income or costly health care bills. MNOs will better serve true financial inclusion if they add this customer option to their product line.

Finally, MNO-led financial services teams will need to decide whether to provide credit in cases where weak client information makes risk management difficult. Microfinance addressed this problem in the past through group risk pooling, but more broadly, financial service providers are now aggressively searching for ways to create individual credit risk profiles or their proxies. MNOs are in the process of creating individual credit score proxies for low-income customers, enabling MNO-led teams to extend credit one client at a time. This highlights the value to an MNO of picking a high-quality banking or microfinance partner who has experience in credit product development for low-income clients.

3. *MNO interoperability is critical for high adoption.*⁵

One obstacle has slowed the take-off of mobile payments in many countries. MNOs have built closed-loop, proprietary payment systems that work only within their own networks. As a result, person-to-person transfers often require that both sender and recipient use the same MNO.

This hurdle to usage prevents customers from making mobile payments part of their normal routine. Without that hurdle, customers could adopt the service more quickly. The swing is dramatic because it is exponential. If an individual has three friends who use one MNO

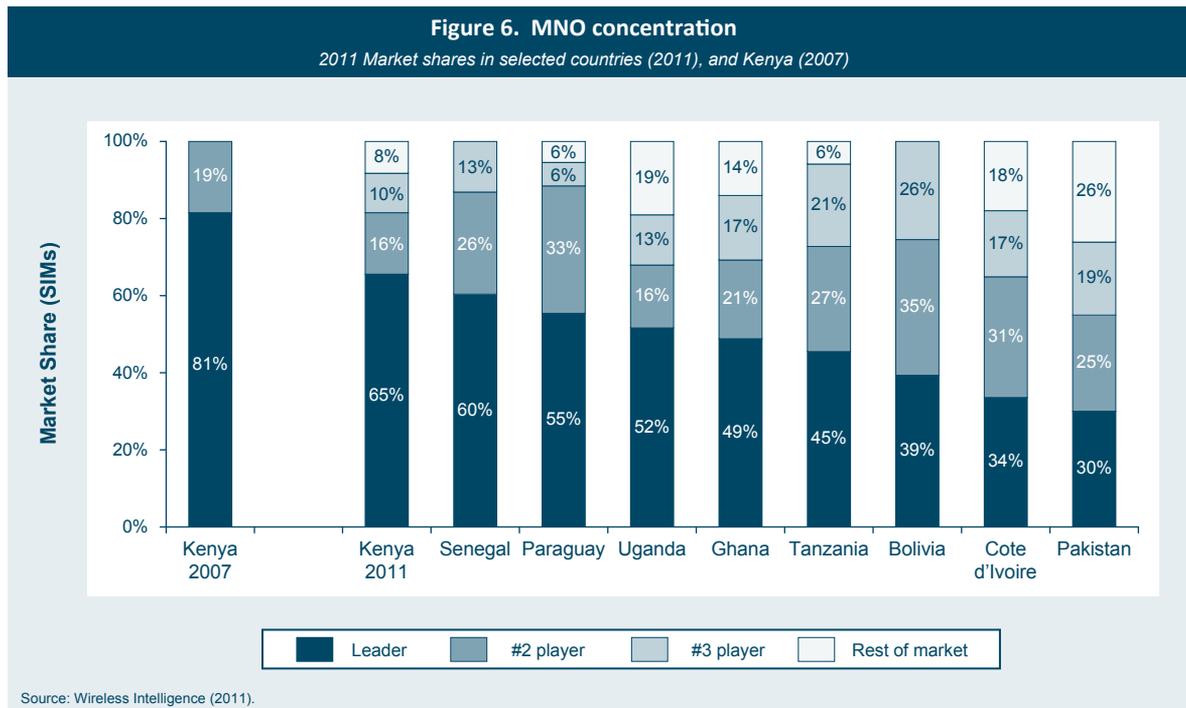
and another three friends who use a second MNO, there are nine points of usage opportunity (rather than six) if the two MNOs became interoperable. If another three friends who use a third MNO became interoperable, points of usage among them increase to 27. If a high proportion of an individual’s network transacts on an interconnected system, this exponential effect could be sufficiently powerful to convince customers to change behavior and adopt mobile payments.

The general MNO bias toward proprietary payment systems is driven in part by easier engineering and in part by the intense rivalry among competing mobile carriers. It may also stem from efforts to replicate the success of M-PESA and its owner Safaricom in Kenya. M-PESA is a Safaricom-owned system that became a proprietary standard (rather than a shared standard) in Kenya. For many Kenyan users, M-PESA’s market share has been so high that for all practical purposes the limitations of noninteroperability have been insignificant. Many branchless banking articles have held up Kenya as a model for the future.

But can Safaricom’s creation of a de facto standard and de facto M-PESA interoperability through dominant market share be replicated in other countries? Figure 6 implies no. During the key years of M-PESA’s take off (2007–2009), Safaricom had an 80 percent to 20 percent market share lead over its only major Kenyan competitor, and Safaricom was the only player on the market with a mobile payments service. Safaricom’s unusual level of dominance created its own “network effect.” In 2011, MNO country-leader market shares were 20–40 points lower than Safaricom’s were in 2007 (even in Kenya). There were three to four major players per market rather than two. In addition, multiple MNOs within the same country offer mobile payments. Even MNOs who hold the second or third position in the market (in terms of share) can afford to offer payment solutions, due to the availability of technology platforms and solutions that are fully operated and maintained by technology providers.

4 Nonbank, stored-value accounts are not considered savings accounts. Regulation often defines caps in balances, and products are not marketed for savings.

5 “Interoperability” as used here is defined as the ability of a user to send money to or receive money from a customer of a different mobile financial service provider.



The adoption rate that M-PESA triggered in Kenya through near-interoperable dominance will be difficult to replicate in other Mobile Leapfrog countries without truly interoperable platforms. Figure 7 compares the adoption rate of mobile payments in several similar Mobile Leapfrog environments two years after the launch of each service. Adoption by end-users in a country with de facto interoperability (Kenya 2007–2009) was six to seven times greater than adoption in more competitively fragmented African markets (Uganda, Tanzania) and 17 times greater than in Pakistan.

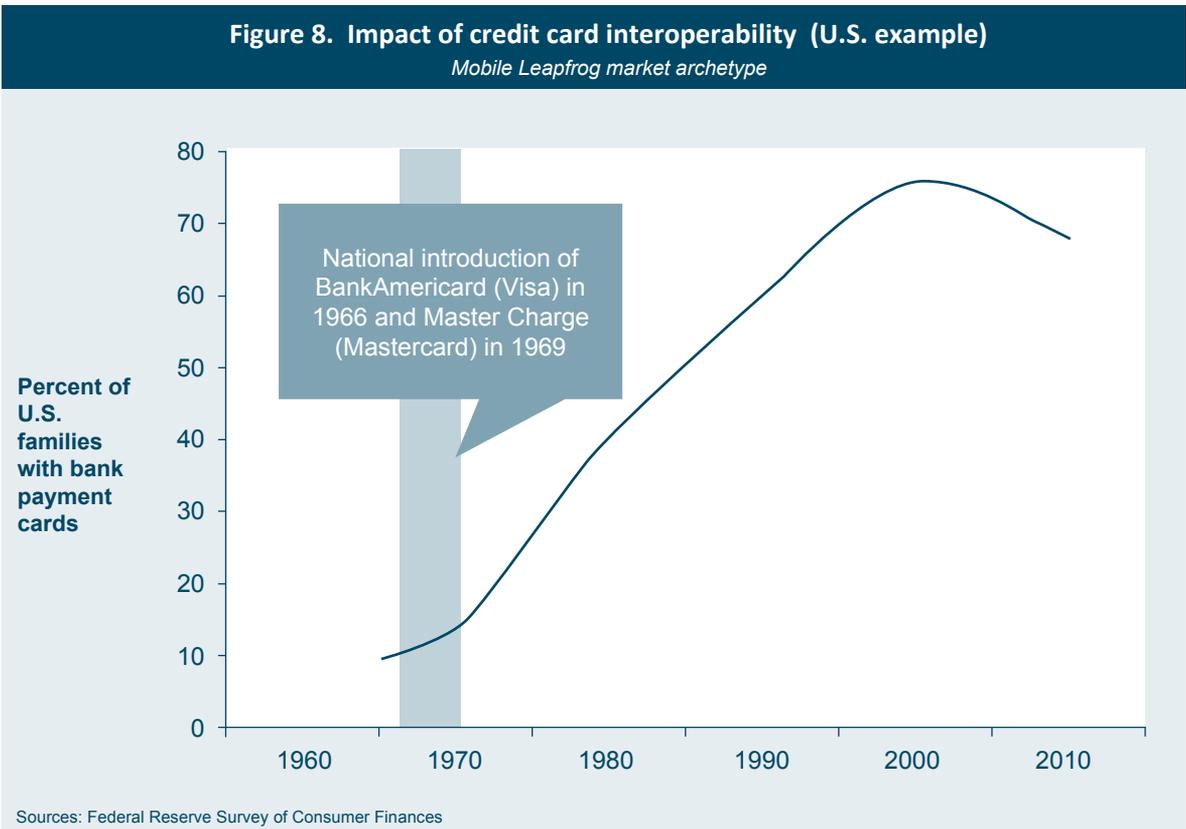
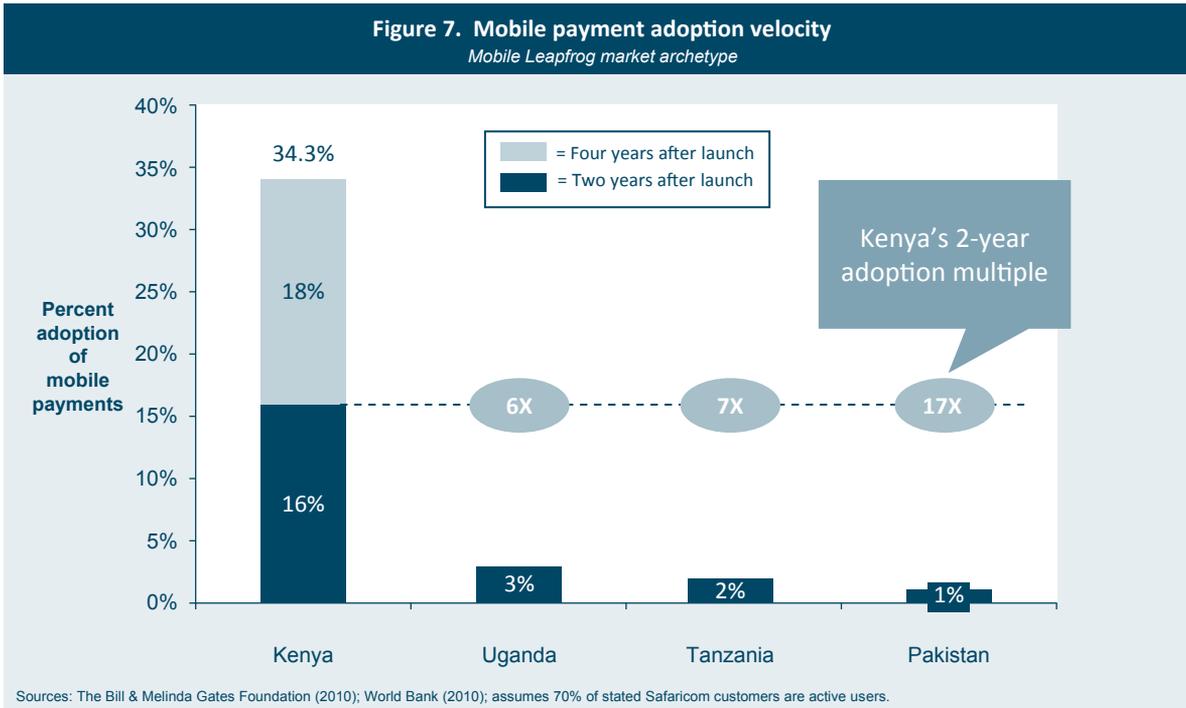
Rather than focusing on the low-odds vision of creating a dominant proprietary standard, leading MNOs in Mobile Leapfrog environments would be well-advised to consider the impact that collaborative interoperability could make in market take-off. There are multiple ways that interoperable standards could come about:

- MNOs might create a joint standard by adopting a common switch or protocol.
- A third-party payments switch or agent network might convince MNOs to unite around an interoperable technology layer that it provides. Visa recently launched a mobile platform in Rwanda that can enable connections across mobile accounts from different banks on any

MNO network. Both Visa and MasterCard can point to the impact that their respective switches have made in U.S. bank payment cards years ago: after years of achieving less than 10 percent market penetration using proprietary approaches, the interoperability of third-party cards enabled market penetration to rise to over 70 percent in ensuing decades (see Figure 8).

- A government, social investor, and/or software provider might create an interoperable platform, then stimulate end-user demand for MNO-independent e-money wallets (e.g., Rêv in Mexico). The decreasing costs of smart phones and the emergence of ultra-low-cost mobile financial apps suggest the long-term potential of this approach.
- A mobile payments provider might become a standard in a particular country if it were made available as an open system to MNOs in that environment.

How does competition respond to the evolution from proprietary to interoperable standards? In the first scenario, where all players agree to a common standard through negotiation, there is an overnight “big bang” effect. In the other scenarios, MNOs second in size in terms of market share and below adopt interoperability, either individually or as a group, to gain market share against the market



leader. If this group's initiative proves successful, the leading MNO—who has the most to lose through interoperability—feels compelled to follow over time.

Financial inclusion agenda for Mobile Leapfrog environments

Key opportunities to drive financial inclusion in Mobile Leapfrog markets include the following:

- Regulators and policy makers:
 - Ensure that regulation explicitly and clearly allows MNOs to operate and take leadership roles in partnerships, including nonbank issuance of e-money.⁶
- Banks, MNOs, and retailers:
 - MNOs should seek to build partnerships that include financial institutions (commercial banks or MFIs) and merchant aggregator networks to maximize coverage and broaden the spectrum of potential financial products that may be offered to payments customers. They should also rethink the trade-off among interoperable systems (with higher adoption) and proprietary systems (with stronger customer retention incentives) across MNO-bank platforms. In general, they should aim to maximize customer adoption and create network effects.
 - Banks and MFIs should seek to partner with MNOs and implement growth strategies leveraging potential to expand product lines (to include insurance, savings, and credit).
- Funders and social investors:
 - Encourage experimentation to expand MNO-linked products beyond payments.
 - Social venture capitalists could consider investments in disruptive players that help introduce interoperability.

Convergence Battle Agenda

If the primary dynamic in Mobile Leapfrog markets is one of MNOs filling a coverage vacuum, the primary dynamic in Convergence Battle markets is one of banks, retailers, and MNOs each using branchless banking models to improve convenience levels for already banked, partially banked, and newly banked customers—and in doing so trying to achieve an edge in “owning” what is really a shared customer relationship.

In these markets, banks, retailers, and MNOs all have solid though not pervasive penetration levels, which makes sense given higher income per capita (see Figure 9). Bank accounts number around 60 percent of the adult population, three to four times the bank account intensity found in Mobile Leapfrog environments. The largest retail chains

Box 3. Technology and Microfinance

One clear trend in microfinance is the use of technology to lower costs and support innovation. The cost-and-access benefits of branchless banking have as much potential to help MFIs lend to even poorer communities and reach rural clients as they do to help commercial banks reach the lower-middle class. Technology is also enabling the delivery of individual (vs. group) loan products and is helping to make microsavings, insurance, and remittance products financially sustainable. Finally, by placing electronic tablets and mobile money technology in the hands of their loan officers, MFIs can usher in multiproduct client solutions and create client-centric relationship management, while using cash-in agents to reduce the challenge of officer cash transport.

What might hamper smaller MFIs’ opportunities in mobile financial services is their ability to drive scale deployment of technology-enabled business models. By contrast, commercial banks often have the advantage of having a larger customer base and typically offer a broader set of services, which in combination can drive the economies of scale that make alternative channels economically viable. MFIs that have achieved larger scale (i.e., millions of customers) can benefit in a similar manner as commercial banks.

(2,000–10,000 stores in size) are several orders of magnitude bigger than in Mobile Leapfrog markets. The level of cell phone penetration is roughly the same, with 60–85 percent penetration.

Because a certain level of inclusion progress has already been made in Convergence Battle countries, the inclusion agenda should take into account secondary levels of inclusion, not just primary levels. For instance, a household that has received a loan may qualify as “included,” but it would be “more included” in the financial system if it also had a savings account and insurance. As research in a higher-income market (Mexico) indicates in Figure 10, on a product-by-product basis there remain many unserved and underserved customers not yet benefiting from a full range of services—even among those who are not poor.

Given that there are three strong types of contenders for financial services leadership, and each has a robust customer relationship in its core business, it is no

⁶ For more details refer to Tarazi and Breloff (2010).

Figure 9. Convergence Battle market archetype

Sample Country Profiles

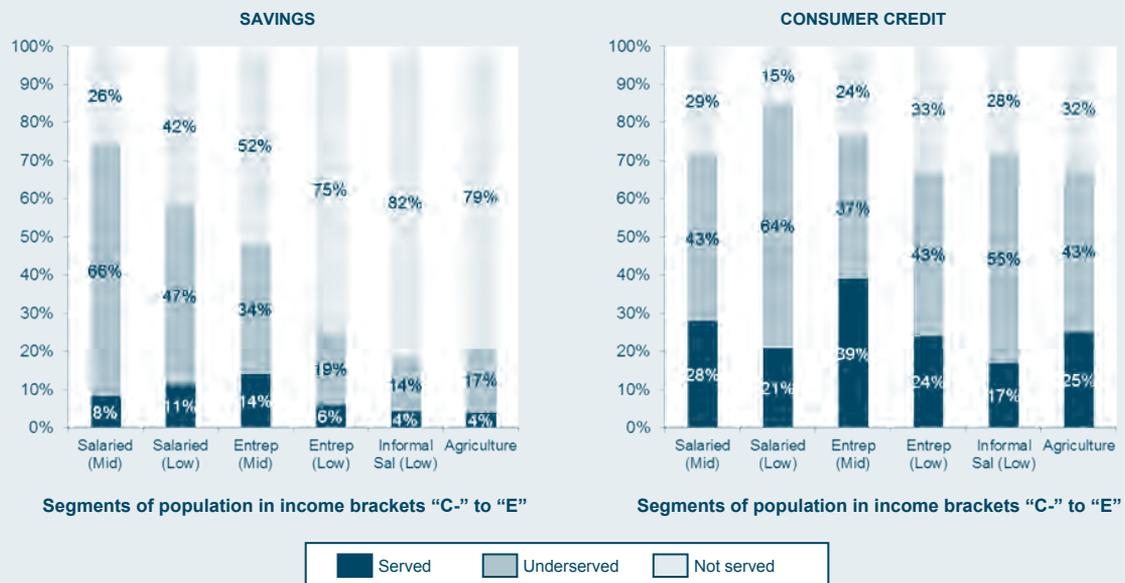
	Mexico		Brazil		South Africa	
	% Penetration ⁽¹⁾	Access Points ⁽²⁾	% Penetration ⁽¹⁾	Access Points ⁽²⁾	% Penetration ⁽¹⁾	Access Points ⁽²⁾
MNOs	65	-	71	-	83	-
Commercial Banks ⁽³⁾	56	55,200 (+450K POS)	78	360,000 (+ >1Mn POS)	63	38,600 (+150K POS)
Retailers Size of largest chain [all formal retail outlets] ⁽⁴⁾	-	10,000 [>100,000]	-	3,500 [>320,000]	-	2,000-5,000 [>12,000]

Notes:

- (1) Penetration of MNOs based on estimates of unique users as % of total population. Penetration of commercial banks based % of adults with access to at least one financial service from commercial banks.
- (2) Number of access points for banks is estimated as # of branches plus # of ATMs outside branches (assuming there is on average one ATM/branch) plus total number of banking agents.
- (3) An estimation of total point-of-sale (POS) devices is provided since these are access points for payments through debit/credit cards. Some fraction of these points are usually used for "cash-back."
- (4) Organized retail refers to formal outlets of retail stores typically with more than one branch. Estimate is lower bound amount of stores in food, pharmacies, textile, hardware, construction material, convenience stores, gas stations.

Source: World Bank (2011); Wireless Intelligence (2011); CNBV (2011); México ENIGH (2010); México SHCP Financial Inclusion Survey (2009); FinScope South Africa (2011); FEBRABAN (2011); ABRAS, ABRAFARMA and ANAMACO (2011)

Figure 10. Mexican banking customer profiles



Source: CGAP analysis based on the study "Segmenting the Base of the Pyramid in Mexico" (2011)

wonder that a convergence battle for the customer is unfolding. The key market development dynamics in this environment are as follows:

1. Banks invest in agent banking to grow revenue in a capital-efficient manner, to bring greater convenience to current customers, and to add new customers from

among the emerging lower-middle income class. However, regulation often creates friction that hinders the full deployment of agent-based banking.

Many Convergence Battle economies are growing at a reasonably strong pace. These economies often have a consolidated banking industry,

with four to six well-branded national banks. This dynamic creates a race for growth among the banks. Rather than simply growing through aggressive new branch construction, banks are growing through the addition of bank agent networks and self-service technologies such as ATMs and online banking.

The banks' approach is rooted in a current customer service problem as well as in smart asset management. Today's bank branches are often congested, which degrades the customer's experience. Two types of activities occur within the branch: *transactions*—simple services—that could be carried out by less skilled staff or by self-service technology, and *solutions*—more complex financial products and services that require more personal time and skilled support. Branch congestion is worsening as urban areas experience demographic, economic, and density (e.g., residential high rise) growth. Banks have responded to this problem with a simple principle: *transactions should take place outside of the branch, and more engaged customized customer service should take place inside.* To enable branchless transactions, banks have been building out networks of agents and self-service ATMs and kiosks in current customer neighborhoods, as well as deploying Internet banking websites. The result is a "branch and spoke" network designed to provide customers with more convenience and a better experience. These networks on average also provide lower-cost access points for banks as shown in Figure 1.

A parallel build-out of branchless service points in new areas enables banks to acquire customers with improving incomes as they rise into the lower-middle class. Banks can target geographic hot spots where these economic climbers are located and use agents and ATMs to provide affordable but close-to-client service levels. A branch may not even be part of this infrastructure—it may be just a management node for agents. This approach brings the bank more agility as well as more customers.

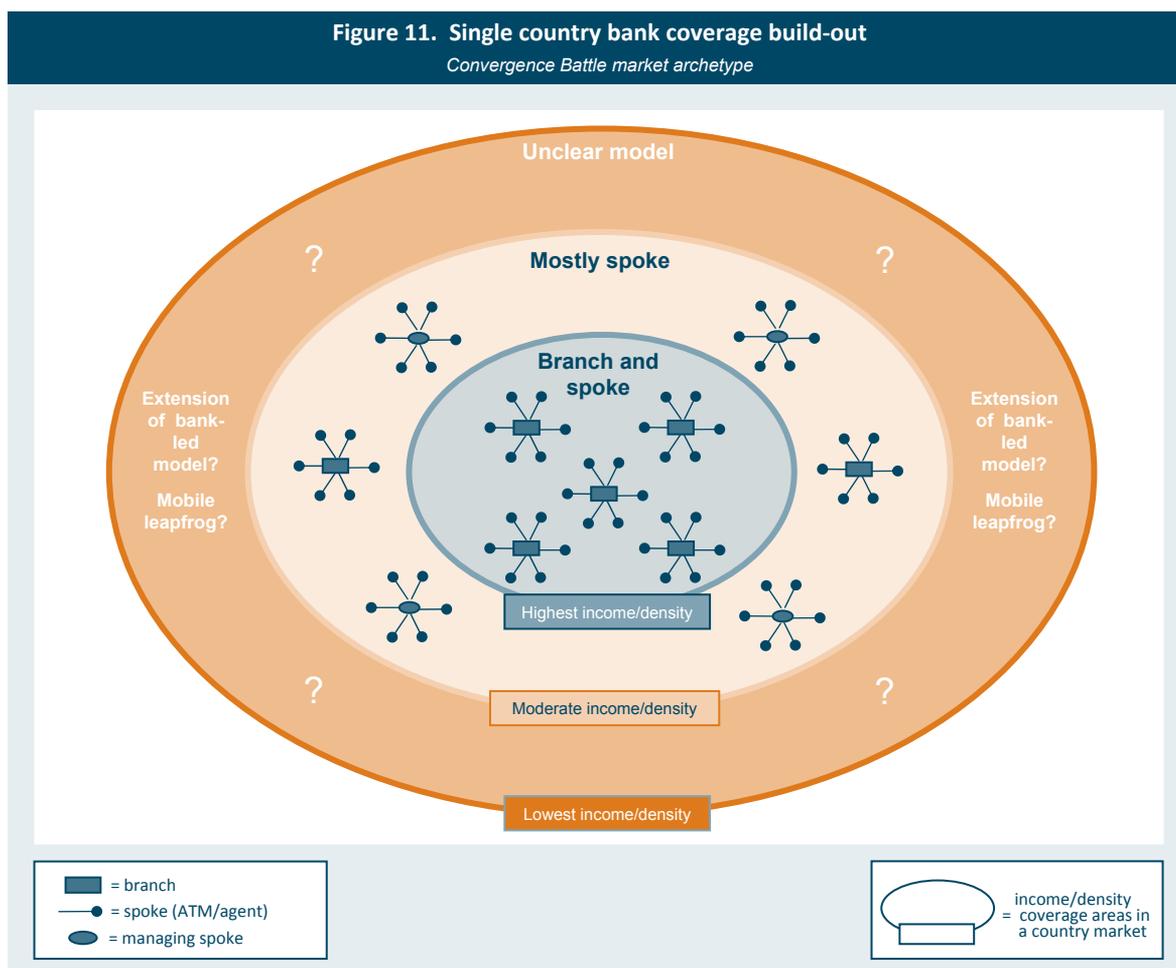
Figure 11 presents this growth strategy. The diagram applies income/density principles *within* a country (rather than *across* countries)—a

process that is particularly valuable in countries with high income disparities between urban and rural locations. A bank's current customer service locations are represented by the inner circle. It is here where branch-and-spoke structures are replacing the traditional branch-only system. The middle circle represents lower-middle class areas, where those rising economically might join the formal financial system. It is here that a mostly spokes system is used, with fewer branches deployed to reflect the need for a lower-cost approach. Because the same branchless banking technology is used to serve both current and new customers, a bank that invests in branchless convenience for current customers today also lowers its cost of reaching new, lower-income unbanked individuals tomorrow.

Banks that invest in branch-and-spoke models often encounter regulatory requirements that seem effective for the inner circle but might be costly to meet as banks expand toward the middle and outermost circles. A single agent operating model may not be effective or efficient in all localities; banks may need flexible approaches for recruiting and phasing out agents and adopting different schemes for managing liquidity. In other cases, while regulations permit the use of agents, requirements around the account-opening process (e.g., the need to handle paper-based

Box 4. Legal Challenges to Agent Banking

In Brazil, a Convergence Battle country where banks have achieved significant growth through agent networks, banks are facing two types of legal challenges. One challenge is from unions that claim that captive bank agents are really employees by labor law and, therefore, should be paid the same wages as bank workers (they are usually paid less.) A second challenge is that various groups advocate for legislated caps on bank agent fees. If agent labor costs were adjusted up and prices were capped, it would cast doubt on the viability of agent economics. Lack of clarity on these two issues puts at risk the significant investment made by banks in adopting financially inclusive models. Legislative clarity would help further financial inclusion. While this is an issue in Brazil today, the dynamics of agent banking create the potential for this issue to arise in any Convergence Battle market.



documentation) and limitations on fees that can be appropriately passed on to the customer, hinder the business case for incorporating new customers.

2. *MNO-led approaches may be needed in rural areas.*

What is the bank's game plan for the outer circle? Economically speaking, it is not clear that bank-agent-and-ATM economics work below a certain level of income or density. There may be significant poverty-stricken or rural areas that it just can't reach. Can a further iteration of the bank's model work? Or does the bank-led model need to flip to an MNO-led model, with nonbank issued e-money and banks playing the junior team member role? This would create a "pocket" of MNO-led financial inclusion, a Mobile Leapfrog story, in the midst of an otherwise bank-led market.

This kind of in-country segmentation may already be happening. In Mexico, Telcel's launch of a person-to-person funds transfer service in partnership with Banamex may support a longer-term strategy to move into rural remittances (though clearly the initial focus is urban). In Brazil, two of the country's largest banks—Banco do Brasil and Bradesco (through card acquirer Cielo)—recently bought an equity interest in the mobile payments subsidiary (Oi Paggo) of Oi, an MNO. These examples speak to the different approaches that may be called for in the outer circle, lowest income/density areas where traditional banks cannot reach.

These types of initiatives will require greater support from regulators in Convergence Battle markets. Ideally, MNOs would be allowed to compete with banks nationwide (e.g., through the issuance of e-money⁷), and free market choices

7 In this Focus Note, "e-money" refers to "electronically recorded value issued against the receipt of equivalent value" as described in Tarazi and Breloff (2010). Nonbank issuers of e-money may offer services to transfer value between customers, make payments to merchants or utility companies, or redeem the value in cash.

would improve coverage of gaps in rural areas. An imperfect transitional compromise may be one that creates “exception zones” to bank-led national regulation that explicitly allow MNOs to lead financial service initiatives in tough-to-reach rural areas.

Solving this issue is even more important because traditional microfinance models may not be able to reach many of the 20–30 percent impoverished and unbanked in higher-income Convergence Battle markets. The reason is that the ratio of MFI staff costs to client loan sizes in Convergence Battle markets is much higher than in markets that produce more sustainable microfinance organizations. The higher the GINI inequality coefficient, the more intense this problem tends to be. This helps explain why for-profit microfinance has been accompanied by extremely high real interest rates in Mexico, even at scale (Compartamos), and why more socially oriented microfinance has struggled to achieve market penetration and economic viability in Brazil and South Africa.

3. *Beyond rural inclusion, increased e-money flexibility could improve urban payments services levels and provide affordable substitutes for low-balance savings accounts.*

E-money is most closely associated with making financial services available for the first time to rural populations. However, e-money also improves the quality of certain financial services in urban areas. It is particularly helpful in two ways.

First e-money enables less costly and more convenient money transfer/payment services. While low-income urban populations in Convergence Battleground markets can already access transfer/payment services through banks and remittance companies, these services require travel on the part of the payer (and the recipient in person-to-person scenarios). Minimum charges are typically higher than with e-money, and recipients have to convert their payments to cash, unlike using a mobile wallet.

Second, e-money provides a substitute to a low-balance savings account through the e-wallet function. In many Convergence Battleground markets there are no legislated no-frills/no-fees

accounts for low-balance savers, as might be found in Pervasive Social Banking markets such as India. As a result, the time cost of travel to a bank and the financial cost of paying small-balance fees can make the use of savings accounts prohibitive to small savers, even though they are technically available. E-wallets, whether prepaid card or especially mobile-phone based, require less travel by the small saver and do not charge fees on savings.

4. *Strong retailers distribute bank services, positioning themselves to negotiate a maximum split of value and selectively trying to own the customer.*

The spokes in Figure 12 are often retail stores. Paradoxically, in Convergence Battle environments, retailers represent both the strongest partners to banks and the strongest competitors for value that banks traditionally capture.

From a cost perspective, retailers have an advantage compared to banks because they have access to an already-paid-for store footprint. From a customer experience perspective, a well-designed retail format can compete favorably with both bank branches and MNOs. On the one hand, the retailer can provide a wider range of services and customer support than the MNO. On the other, retailers can provide these services in the same store that the customer must visit anyway for food and basic goods, providing greater convenience.

Several types of retailers are relevant to branchless banking model development:

- *Mass merchandise chains.* These massive stores can provide financial services similar to bank branches. The large store format provides space for a full financial services counter. Although mass merchandiser chains have a relatively small number of stores, they boast high traffic per store, and the ability to provide customers with “everything you need under one roof” convenience. In most cases, mass merchandisers have chosen a major bank as a service delivery partner. Even then, large merchandisers push the boundaries of what financial services they can offer through store loyalty cards. In a few cases (Wal-Mart in Mexico; Falabella and Ripley in Chile), the

Figure 12. Pervasive Social Banking market archetype

Country Profiles

	India		Indonesia		Bangladesh	
	% Penetration ⁽¹⁾	Access Points ⁽²⁾	% Penetration ⁽¹⁾	Access Points ⁽²⁾	% Penetration ⁽¹⁾	Access Points ⁽²⁾
MNOs	76	1.0-1.5M	66	-	62	-
Commercial Banks	40 ⁽³⁾	286,000 (+635K POS)	22	19,100 (+182K POS)	12 ⁽⁴⁾	8,365 ⁽⁴⁾
MFIs	15 ⁽⁵⁾	168,254 ⁽⁶⁾	19	44,100	28	18,022
Retailers Size of largest chain [all formal retail outlets] ⁽⁷⁾	-	1,000 [3,000]	-	4,800 [13,650]	-	70 [600]

Notes:

- (1) Penetration of MNOs based on estimates of unique users as % of total population. Penetration of commercial banks based % of adults with access to at least one financial service from commercial banks.
- (2) Number of bank access points estimated as # of branches plus # of ATMs outside branches (assuming on average one ATM/branch) plus total number of banking agents; for India, 50% of ATMs is taken to be "offsite" according to RBI.
- (3) India commercial bank penetration is based on institutions under "scheduled commercial banks," public and private, including rural regional banks.
- (4) Bangladesh commercial bank penetration based on "scheduled commercial banks" and "nonbank financial institutions."
- (5) India microfinance penetration based on MFI customers and SHG members.
- (6) India microfinance access points based on number of MFI branches and SHG village organizations.
- (7) Retail chain access points is a lower-bound estimate based on formal retail chain store outlets (including among others: food stores, pharmacies, textile, hardware, construction material, convenience stores, gas stations).

Source: World Bank (2011); Wireless Intelligence (2011); GSMA (2011); CGAP Country Notes (2012); Reserve Bank of India; NABARD; Bank Indonesia; Bangladesh Bank; MicroSave (2011); USAID (2011); MIX (2011).

retailer ended bank distribution and acquired its own banking license.

- *Convenience store chains.* The store "footprint" of these chains is the best for financial inclusion, because they often locate close to lower-income neighborhoods. Convenience stores are best suited for certain basic financial transactions: cash-in/cash-out, stored-value card or phone top-up, remittances, and payments. Some convenience retailers have organized themselves as independent agents and, in a reversal of roles, have signed up multiple banks as partners. Oxxo in Mexico is a strong multibank agent example. Oxxo also illustrates how a strong distribution partner can also become a direct provider of financial services. While Oxxo proudly partners with several major banks for certain financial services, Oxxo is also preparing to launch its own stored-value card to provide a more convenient client solution.
- *Home furniture and appliance retail chains.* These retailers serve as an intermediary that aggregates credit opportunities that banks

would find difficult or inconvenient to serve directly. From a financial inclusion perspective, chains focused on poor clients can provide valuable financing of items that improve quality of life, such as a refrigerator or oven. These chains should consider enriching the financial role they play by promoting item-specific savings programs (i.e., lay-away) that encourage clients to save in advance of their purchases rather than incurring debt as the only financing option. While credit may be more profitable, savings options may improve sales and market share of stores that offer it.

5. *Convergence battles will extend to government social payments.*

Governments in Convergence Battle countries often provide significant levels of social welfare payments to their poorest citizens (called government-to-person [G2P] payments). The inefficiency and nontransparency associated with physical distribution of government benefits mean that governments can achieve high returns on their investment by implementing digital social payments.

To date, government-owned banks have been the vendor of choice for digital social payment distribution. They establish bank accounts for each recipient and certify a network of cash-out agents. Studies of early-stage cost savings per recipient in Brazil and South Africa have been very promising, indicating that the government may save up to 30–40 percent of its distribution costs through use of mainstream savings accounts and digital infrastructure (Bold, Porteous, and Rotman 2012). (In countries without pre-existing infrastructure, governments must make an initial build-out investment.)

The most disappointing aspect of G2P payments has been that payment recipients have not become financial services clients. Social payment recipients typically empty their accounts immediately or within days of receipt, leaving balances at zero, and the account unused until the next payment arrives. Because of inactive recipient accounts, the distributing bank's role has been closer to that of a digital post office rather than a branchless financial service provider.

This creates an opportunity for MNOs. If people could receive their payment more conveniently on a cell phone account or stored-value phone, would they store their surplus instead of immediately converting it to cash? Would they begin making digital payments? Would odds increase of successfully marketing additional financial products to payment recipients?

Early evidence from mobile G2P pilots in Colombia⁸ seems to indicate that answers to these questions are yes. Mobile payment recipients retained a fraction of their social payment as stored value, implying that it was convenient to receive and use their social payment through the phone. After an initial learning curve to understand the full capabilities and features of the product, they made use of other functionality (balance inquiries, cash-outs at ATMs, airtime purchases). Moreover, they indicated the desire to use their mobile phone as a safe storage for longer-term funds (i.e., saving). The pilots were short, and formal results have yet to be published, but the government is now implementing broader strategies that involve

payments through mobile accounts (in combination with other channels) to conduct payments.

In Mexico and Brazil, banks are carrying out market research to find out what kind of product innovations might convince social payment recipients to become true banking customers. The intensity of bank and MNO competition for G2P contracts may help crack the code of financial inclusion for some of society's poorest members.

Key opportunities to drive financial inclusion in Convergence Battle markets include the following:

- Regulators and policy makers:
 - Develop secondary inclusion metrics (adoption of a broad range of services vs. single-product adoption) to capture a more refined picture of financial inclusion progress.
 - Ensure that the cost of complying with agent banking regulations does not surpass the benefits of implementing them to enable banks to use growth/outreach strategies (e.g., simplified account opening, simple bank agent recruitment, less restrictions on fees).
 - Enable MNOs to lead financial service initiatives in the market (e.g., by allowing nonbank issuance of e-money) to both better serve and improve quality of service to urban populations.
 - If enabling MNOs to compete nationally is not possible in the near term, financial regulators and policy makers may consider enabling or even incentivizing MNOs to lead the provision of financial services in “exception zones” where income/density economics limit the effectiveness of agent-based banking models or microfinance. Government agencies in charge of cash transfer programs should aggressively explore mobile G2P distribution pilots; aim to deliver low-cost payments; maximize client convenience; and convert clients to financial services users.
- Banks, MNOs, and retailers:
 - Banks should create a branchless banking investment portfolio that is balanced between short-term returns (decongesting branches in the inner circle) and medium-term growth (acquiring lower-middle-class customers in the

8 Results of the study have not been made public yet

- middle circle); consider developing an “outer circle” game plan that might involve playing a secondary role in partnerships with MNOs.
- MNOs should consider developing a mobile financial services strategy taking the lead for outer circle subregions of the country. In parallel, they should consider bank partnerships for mobile banking in wealthier/denser areas.
 - Convenience store retail chains/aggregators: Develop independent multibank agent models (via convenience chains or aggregated convenience merchants) with particular focus on stores near low-income communities.
 - Home furniture and appliance retail chains: Consider adding layaway options to complement current credit-based financing options.
 - Funders and social investors:
 - Improve understanding of low-income households that are underserved or unbanked, by supporting public-good, demand-side research to help providers develop products that are better tailored to customers’ needs.
 - Conduct research to raise awareness and advocate solutions to the rural financial coverage gap (e.g., income/density measurement within country, evaluation of bank-led and MNO-led options).
 - Promote conversion of large convenience store chains into multibank agent networks.

Pervasive Social Banking Agenda

Countries where average income per capita is very low, but population density is significantly high, have distinctively developed large, successful social banking systems. These countries have an annual income per capita of less than US\$4,000, similar to Mobile Leapfrog environments. But while Mobile Leapfrog environments have population densities of 50–150 persons per square kilometer, Pervasive Social Banking environments have densities 10 times as high (more than 1,000 persons per square kilometer). The three countries in this archetype all have at least 100 million persons living contiguously at 1,000 persons/square kilometer density (nearly

all of Bangladesh, the island of Java in Indonesia, and significant swathes of India). While not all of India or Indonesia are as dense, these high-density zones have played a significant role in shaping national government financial inclusion policy and regulation.

There are structural reasons why high population density, low income per capita, and successful social banking are linked. Despite low client income, it is viable to run a bank branch if there is a high volume of clients nearby (branches in this environment typically serve 15,000 to 20,000 customers/branch), and the product mix is skewed toward loans⁹ (as opposed to savings). Low income per capita also has a positive effect on the viability of social banking because staff wages are relatively low. As a result, what is distinctive about this market archetype (see Figure 12) is less the cell phone, commercial banking, or retail infrastructure, and more the additional relevance of the social banking infrastructure.

Governments in these environments have played a pivotal role in the way social banking has developed, and continue to influence the financial sector through political clout, allocation of resources, and/or direct bank ownership. Social banking involves more than government funding of a state-owned bank (after all, many developing countries nationalized one or more of their banks in the 1950s or 1960s, and many still have specialized development banks today). What distinguishes social banking is the extent to which government policy has driven meaningful financial inclusion among the poor while achieving sustainable economics, thus enabling the government to create significant social impact with modest taxpayer subsidies and in many cases making profits. This success has made social banking the cornerstone of financial inclusion policy in these environments.

Can the pervasive social banking model be improved? Are there geographic areas or product lines within these countries where existing social banking models have not been able to fill the financial inclusion gaps? Despite the high

⁹ This refers to institutions that, even if funded primarily by client/member deposits, promote microcredit at the center of their product offering.

penetration of social banking in these environments, some financial services still remain undelivered or unsustainably structured. Services such as low-balance savings accounts, transfers, and remote area financial services are good examples. More than half of the adult population remains unserved.

The common thread emerging from the three countries analyzed for this market archetype—India, Indonesia, and Bangladesh—is that *their impressive historical achievement of financial inclusion success through social banking led to regulations that may slow the future emergence of next-generation financial services business models.*

While this pattern is broadly accurate, each of these three countries is unique. What follows is each market’s individual story, illustrating both commonalities and differences.

India

India is the most complex market in the Pervasive Social Banking archetype due to its massive scale, multiple cultures, global investor interest, and pioneering government. The country is now entering a new era of financial inclusion initiatives (see Box 5). Branchless banking opportunities are emerging at the same time that policy makers are setting limits on privately led microfinance. The result is a reform wave that simultaneously aims to more strictly monitor MFIs, to cap profit-seeking (by way of a margin cap on nonbank financial companies [NBFC] MFIs¹⁰), and to mandate the roll-out of agent-based banking while keeping commercial banks responsible for constructing and leading these deployments.

The challenge that India’s pioneering regulations now face is to balance a top-down social banking approach with bottom-up business model innovation by nonbanking actors. The following are some examples:

- Regulations initially allowed only bank agents with a “proven” social mission (NGOs, retired government/bank employees, servicemen) to act as

agents for banks. More recently, these restrictions were lifted, allowing banks to more freely choose the kind of third parties that can serve as agents. Yet most bank agents still reflect past efforts to meet quotas, and insufficient attention is given by providers to design quality service delivery (Chen and Thoumoung 2012). New initiatives by commercial banks to tap into new agent networks could yield additional financial inclusion.

- Regulations are highly restrictive on MNOs (or nonbanks) to provide electronic payments¹¹ or issue e-money. As much as these services have the potential to reduce the cost of conducting business in the everyday lives of the poor, they also bring large, foreign, and profit-driven MNOs into the social banking system. By closely restricting how MNOs play, the Indian market misses out on new models that might be able to cover less penetrated areas of the country, and on the integration of banking services with payments models via mobile. Experiments with MNOs and banks in partnership are being tested, but have been slow to develop so far.
- Giving MNOs an innovator’s role is all the more important given that government historical restrictions on international retailers have kept the retail sector fragmented, with a corresponding reduction in retailer-based financial services innovation.

Bangladesh

While Bangladesh has four major state-owned banks, financial inclusion has been driven by nonprofit NGOs who have been successful in building a profitable microfinance model to scale. Most of these organizations received early government and donor agency support from the 1970s through the 1990s although growth over the past two decades has been driven without significant additional subsidies. Technically a for-profit bank, Grameen Bank serves more than 8 million poor on social business principles. Together with large NGOs, such as BRAC, ASA, and Buro Bangladesh, microfinance reaches nearly every corner of Bangladesh, operating on a sustainable basis. These institutions make profits but are all

¹⁰ MFIs that operate under the legal form of the NBFC Act, which allows them to lend but not to take deposits from the public.

¹¹ Closed loop would be possible, but not broader open-loop systems with a stronger value proposition to customers.

Box 5. History of Pervasive Social Banking in India

India began a series of efforts to formalize finance, especially in rural areas following independence. This included nationalization of the banking system and the creation of a new class of regional rural bank. The Reserve Bank of India also implemented regulations designed to replace the countryside money lender with commercial bank branches. For every new commercial branch opened in an already-banked geography, four new branch openings were required in territories designated as “unbanked.” India’s commercial banks added 30,000 branches in unbanked areas during this period, and cut money lender share by half. However, progress came at an unsustainable cost to the banks: loan repayments rate were only 42 percent, and costs per client helped were in the thousands of dollars (Burgess and Pande 2003).

Rather than continuing to insist that commercial banks play a “last mile” lending role through new branch openings, in 1991 regulators instead asked commercial banks to support emerging microcredit models (Mahajan and Navin 2012). This began with self-help groups (SHGs) in the 1990s; and by the 2000s, regulators had also added NGOs and NBFC MFIs. This led to a marked increase in the availability of small loans in rural areas across India, carried out by private organizations but under the guidance of state directed policy.

This supported the rapid growth of India’s microcredit industry (which today serves about 140 million Indian clients—about 15 percent of the adult population—including SHGs, MFIs, and regional rural banks).^a While private MFIs have recently faced a set-back

from a government crackdown in the state of Andhra Pradesh, MFIs remain active in the rest of India. Overall, India’s microcredit industry has established a sustained presence and remains a significant contributor to financial inclusion.

On the savings side, regulations made commercial and state-owned banks responsible for providing no-frills savings accounts to low-balance holders. The provision of these accounts is more a necessary obligation of doing business in India than a self-sustaining economic activity. Many accounts are dormant. It is yet to be seen whether the viability of this approach will improve with branchless models.

Today, the Government of India has embarked on a shift to use technology models to improve the effectiveness of social banking. India’s first nationwide identity system is under development; this will serve as a key link in the delivery of social payments and can help monitor the use of microcredit. A rapid expansion of agent banking is planned: commercial banks have been asked to develop targets to reach nearly 75,000 unbanked villages. The National Payments Corporation of India, a bank-owned entity working in close consultation with government, is promoting a national switch that is interoperable among all bank agents and banks.

India’s technology initiatives are notably aimed at improving the effectiveness of social banking without expanding the types of actors that could provide new levels of financial inclusion (MNOs, retailers).

^aBased on information from MIX (2010) and the National Bank for Agriculture and Rural Development of India (2010).

grounded in a social mission to serve Bangladesh and, therefore, retain their social banking character.

As in India, this success has raised expectations that future financial inclusion happens primarily through a social banking model. Unlike India, the government has not prohibited MFIs from providing savings accounts. This has empowered MFIs to provide a mobile banking platform to MNOs who are more willing to work in partnership because of a lower perceived competitive threat. For example, BRAC the NGO has offered the “bKash” platform to MNOs as a mobile financial service linked to its affiliated deposit-taking BRAC Bank.¹² BRAC’s nonthreatening

partnership with MNOs has led to fast growth, now reaching more than 3 million customers through more than 35,000 agents. Another early mobile banking platform is Dutch Bangla Mobile, offered by a socially responsible commercial bank. The platform now has almost 900,000 customers and 15,000 agents. In each case, although the banks provide the account infrastructure, the MNOs are able to own the customer relationship.

Bangladesh is a Pervasive Social Banking market to watch for alternative models. This said, the present approach does not allow MNOs to issue individual e-money wallets, which may leave some business

¹² bKash’s press release for its launch in June 2011 described the platform as “a full-scale mobile phone-based payments switch” in addition to being “an extension of BBL (BRAC Bank Limited).”

model options for financial inclusion untested. In addition, nearly 50 commercial banks are not involved in experimentation.

Indonesia

Indonesia's history of financial inclusion has revolved primarily around government-owned Bank Rakyat Indonesia (BRI), the world's largest microfinance and small and medium enterprise (SME) lending bank boasting 28 million active clients (13 percent of the adult population), with roughly 6,800 branches and 7,000 ATMs. Its 28 percent return on investment rivals the financial performance of any Indonesian bank (BRI 2010). The bank has evolved over time from lending to savings and from microfinance/SME services to corporate financial services. At the same time, BRI has been partially privatized via minority investment.

BRI has a strong presence in Java, which at 1,024 persons per square kilometer is the nation's densest province, housing nearly 60 percent of the population. BRI has significant presence as well across the other 9,000 named islands through a "tiered" scheme of branches (going all the way down to small kiosks) that allow it to reach much lower density areas efficiently. Without formally adopting agent banking, BRI has in effect achieved a similar outcome in reach and cost efficiency. In addition to BRI, 1,700 provincially focused rural banks (BPRs) and several hundred thousand cooperatives help serve the islands outside of Java. Despite all of this activity, research indicates that the inclusion gap across the country remains significant, particularly in regions outside the island of Java.

Due to the government's historical success at social banking, plus the power of incumbency, branchless banking has been slow to take off as a new tool for financial inclusion. Banks cannot use agents to conduct regular banking transactions. Rules developed five years ago allow banks and nonbanks to issue e-money, but e-money agents (which cannot act as bank agents) can provide only cash-in services (in practice, primarily used for bill paying). Several commercial banks and the largest MNOs—including Telkomsel, and Indosat—have issued e-money wallets, and today along with competitors claim more than 11 million subscribers.

However, the main benefit of this e-money system is narrowly focused—provincial citizens use e-money to make payments that otherwise require travel to make in person (IFC 2010). This is in itself a real financial inclusion achievement. But limitations in cash-out preclude real banking services from flourishing through this model.

There are several signs that more profound branchless change is on the way. Branchless banking regulations that allow cash-in/cash-out and MNO-bank partnerships look to be finally coming to fruition. Bank Mandiri has also just finalized a deal with the PT Pos Indonesia post to open bank branches at post office outlets.¹³ A BRI-Telkom partnership for a hybrid mobile bank account is meant to be announced soon.

As with other leading social banking markets, Indonesia will be challenged to balance top-down rules that create order and protect incumbent social banking providers with new model innovation. The benefits of supporting innovation include the following:

- Commercial banks that are trying to target low-income segments can provide healthy competition if they are truly allowed to adopt agent banking.
- Allowing full cash-in/cash-out agents for e-money would broaden the financial services available to Indonesia's remote poor (beyond the current benefit of bill payment services provided today).

A summary of opportunities to drive financial inclusion in Pervasive Social Banking markets include the following:

- Regulators and policy makers:
 - Regulators should strike the right balance between depending on the known actors responsible for the past successes of social banking, and the potential for healthy competition and innovation that can be introduced through new nonbanking actors. In most cases this implies allowing social banks to develop e-money platforms that MNOs can aggressively use to bring mobile financial services to unserved customers.

¹³ Through this deal, the postal company PT Pos Indonesia also invests in Mandiri Bank through one of its subsidiaries, the Bank Sinar Harapan Bali (The Jakarta Post 2013).

- Ensure that social banking targets for commercial players don't lead to a false sense of progress (e.g., inactive bank accounts, inactive agents, other examples of fulfilling quotas without achieving the underlying financial inclusion goals). Objective evaluation of impact is critical.
- Banks, MNOs, and retailers:
 - Social banks that can take deposits should aggressively provide attractive platforms for MNOs to incentivize them to invest heavily in promoting financial services.
 - Commercial banks should be on the lookout for new agent banking opportunities, both through nonretail networks and through retail chains that may emerge in the future.
 - MNOs who have access to a mobile money platform in partnership with a social bank should invest aggressively in promoting mobile financial services. MNOs who do not yet have access to such a platform, should clearly articulate the value proposition to society for greater MNO leadership in certain financial inclusion products and in areas of the country that are underserved by a bank-led model.
- Funders and social investors:
 - Invest in research that demonstrates what is working best in branchless banking across Pervasive Social Banking markets:
 - Document patterns of success across the three Pervasive Social Banking markets to identify conditions through which successful mobile banking is emerging in financially underserved areas.
 - Document patterns of the most successful agent banking networks established by commercial banks especially in fragmented retail environments.

A Brief Word on China

There is one giant data point in the center of the three-by-three income/density matrix that warrants its own discussion—China. The country is located in the middle, touching the corner of all three market archetypes, making it aptly placed. Within China's 1.3 billion population:

- Over 600 million people—a population larger than all of Latin America—live in Convergence

Battleground levels of GDP per capita, although with significantly higher population density than Latin American markets, supporting even higher levels of financial inclusion.

- Over 300 million live in population densities similar to Mobile Leapfrog markets, albeit with higher income per capita than those environments.
- The country's 20th century history of state-controlled economy makes Pervasive Social Banking issues relevant to China, even though its income/density profile does not fit that environment.

While this paper does not directly address China's issues, we believe the combined issues raised in all three market archetypes provide the building blocks for a Chinese financial inclusion agenda. A China note that applies these market archetypes would be valuable.

Implementing a Financial Inclusion Strategy Based on Market Archetypes

The ideas expressed in this Focus Note have implications for the planning, investment, and organizational approaches of those involved in promoting financial inclusion.

1. National teams of business and government leaders who are trying to develop effective financial inclusion strategies may gain new insights by choosing comparators from countries within similar market archetypes, including those outside of their own geographic region.
2. Investor and donor strategies for financial inclusion are likely to be more focused and to generate better results if they are thought about by market archetypes. Specialized funding pools or staff organization by common income/density market archetypes is one possible approach. This same principle holds true for industry knowledge management players and broader knowledge dissemination strategies.
3. In large and highly varied countries, financial inclusion leaders should debate whether a single archetype approach best fits their country, or whether a multi-archetype approach is needed. This could apply to Convergence

Battle countries that have a much less wealthy and dense rural population or to island-based geographies whose income and density varies dramatically.

4. It may be appropriate to measure financial inclusion progress taking into account the market archetype to which a country belongs rather than using nominal metrics. For instance, financial inclusion of 40 percent in a Mobile Leapfrog environment might be viewed as a more impressive accomplishment than financial inclusion of 70 percent in a Convergence Battle country.

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The authors would like to thank Rodger Voorhies (the Bill & Melinda

Gates Foundation), David Ferrand (the Kenya Financial Sector Deepening Trust) as well as Gregory Chen (CGAP) and Katharine McKee (CGAP) for their invaluable input to this paper. The Technology and Business Model Innovation Program at CGAP is co-funded by the Bill & Melinda Gates Foundation, CGAP, The MasterCard Foundation, and the UK Department for International Development (DFID).

The suggested citation for this Focus Note is as follows:

Faz, Xavier, and Ted Moser. 2013. "Advancing Financial Inclusion through Use of Market Archetypes." Focus Note 86. Washington, D.C.: CGAP, April.

Print: ISBN 978-1-62696-012-1
pdf: ISBN 978-1-62696-013-8

epub: ISBN 978-1-62696-014-5
mobi: ISBN 978-1-62696-015-2

