

# Regulating New Banking Models that can Bring Financial Services to All

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## Abstract

Technology, and in particular the spread of real-time communications networks, permits banks to delegate 'last mile' cash management and customer servicing functions to third-party retail outlets. By making basic deposit, withdrawal, and payment functions available securely through retail shops that exist in every village and neighborhood, there is an opportunity to dramatically increase the physical footprint of banks and to transform the basic economics of low-balance savings. Banking regulations need to be adapted to these new possibilities of banking beyond bank branches. We highlight five areas where sharpened regulatory analysis would help strike a better balance between maximizing the opportunities of these models and containing risks: (i) branching regulations which distinguish between pure transactional outlets and full service bank branches; (ii) regulations which permit banks to engage third-party retail outlets with minimal financial risks for both banks and their customers; (iii) consumer protection regulations that help customers understand and act upon their rights in a more complex service delivery chain, without burdening banks with unnecessary provisions; (iv) tiered know-your-customer (KYC) regulations that permit immediate account opening with minimum barriers for poor people, with a progressive tightening of KYC as their usage of financial services grows; and (v) creating regulatory space for a class of non-bank e-money issuers authorized to raise deposits and process payments, but not to intermediate funds.

## *A Historic Opportunity: Bringing Banking Services to Every Community*

There is growing policy interest in the financial access agenda. One driver has been the mounting empirical evidence that increasing financial access is both pro-growth and pro-poor (growth with less inequality).<sup>1</sup> Another driver has been technology and business innovation, which challenges entrenched notions of what services can be delivered profitably and safely. Consider, for example, how in the last 30 years non-collateralized micro lending models have demonstrated that traditional financial arrangements can be successfully adapted to work for lower income people. Or the emergence of branchless banking models, particularly in Brazil with bankcards and Kenya with mobile phones, which raise the real opportunity of converting any retail outlet into a financial transactional point.

Policymakers and banking regulators are more attuned than ever to the economic consequences of financial exclusion. There are shining examples of success at scale (ASA, BRAC, and Grameen Bank in Bangladesh, BRI in Indonesia, Equity Bank and M-PESA in Kenya, Banco Azteca and Banco Compartamos in Mexico, SKS in India) which demonstrate that profitability, scale and serving poor clientele are not incompatible. And there is increasing connectivity in developing countries (mobiles, internet), which

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<sup>1</sup> Dupas and Robinson (2009) find that after six months, access to a savings account led to a 39% increase in productive investment and a 13% increase in food expenditure among women micro-entrepreneurs in Kenya. At the macro-level, Beck *et al* (2007) find that 30% of the cross-country variation in poverty rates can be attributed to variations in financial depth (private credit/GDP), while Levine (2005) finds a strong link between financial depth and economic growth. These findings are offset somewhat by Banerjee *et al* (2009) and Karlan and Zinman (2009) which find little to no short-term impact from providing households access to micro-credit in India and the Philippines, respectively.

puts technology-based solutions within reach of most banks.<sup>2</sup> There is now a historic opportunity to bring the bulk of poor people into the formal financial system.

### ***Banking the Poor: New Business Models Required...***

An estimated 2.5 billion adults lack access to basic formal financial services. Banks are simply out of reach for most poor people in the world.<sup>3</sup> It's not only that poor people often perceive them to be expensive, stuffy or intimidating – they are simply not there. This situation arises because banks do not find it economically attractive to deploy banking infrastructure (branches, ATMs) and market financial services (savings, insurance, credit) where the majority of poor people live and work.<sup>4</sup> In turn, poor people do not find formal financial services worthwhile due to the inconvenience and high cost involved in accessing these services (travel time and expense, queuing times, high minimum balance requirements) relative to the more local and informal alternatives they have traditionally used (cash under the mattress, informal deposit collectors, friends and family, storage of value in physical goods).

#### **BOX 1: Opportunities for Banks to Leverage Existing Retail and Telecoms Assets**

Most products and services in the world are distributed through third-party channels: producers engage others to sell and service their wares. This allows producers to ride on existing retail and logistics networks, sharing costs with others and converting them into variable costs based on volume of sales and transactions. Banking may be the only sector where direct sales and service remains the norm.



It is fundamentally a business model problem. New models must be developed that dramatically reduce transactions costs, both for the bank (which has to handle a large volume of low-value cash transactions) and its customers (which face high fees, travel costs, and wait times). The goal must be a banking system that reaches into at least 10 times the number of physical locations reached by banks today, and operates at one tenth the cost per transaction. New business models must also recognize that the float margin on poor customers' small-value deposits is unlikely to be a sufficient revenue driver

<sup>2</sup> In Africa, for example, mobile penetration has increased from 3 percent in 2002 to 51 percent today, and is expected to reach 71 percent by 2014 (Wireless Intelligence).

<sup>3</sup> Financial Access Initiative Focus Note (2009), using data from Honohan (2008), the UN Human Development Index, and the World Bank.

<sup>4</sup> Branch penetration, for example, averages only two branches per 100,000 people in the poorest country quintile (compared with 33 in the richest). ATMs are even scarcer in poor countries, averaging only 1.3 per 100,000 people in the poorest country quintile (compared with 67 in the richest). This data is from Beck et al (2007).

for banks targeting poor people, and instead banks must tap into poor people's demonstrable willingness to pay for transactions and payments that are convenient and secure.

Offering safe savings opportunities to the bulk of the population requires building financial service delivery channels that reach into the places where poor people live and work, yet are connected to regulated financial institutions. Banks can achieve these twin objectives by using existing retail stores as transactional outlets and leveraging technology (especially mobile communications networks) that enables banking transactions to happen through third party retail outlets in a trusted fashion and at low incremental cost per customer and per outlet. The principle is to overcome banks' traditional "last mile" barrier by leveraging as much as possible infrastructure that already exists (see Box 1).

### *... And New Players as Well: Enter the Mobile Operators*

Mobile operators have much to contribute to banking the unbanked, based on four core competencies and assets. The most obvious is technology, since they have a ubiquitous real-time communications network that permits transactions to be authorized and settled in real time. They also operate a fully encrypted smartcard-based authentication framework embedded in their customers' SIM cards which enables them to authenticate customers and transmit information securely.

On the marketing front, mobile operators have a large base of installed customers that are unbanked, to which they can cross-sell financial services.<sup>5</sup> And they generally have a higher level of brand awareness among the general population than most banks.

#### **BOX 2: Mobile transactions or mobile banking?**

The mobile phone is just an electronic transactional channel which allows users to access account information and undertake transactions, just like an ATM, a POS or an internet-connected PC. Strictly speaking, the term "mobile transactions" is more apt than "mobile banking" in describing how the mobile phone can be used to manage one's finances. One generally talks about "transacting" at the ATM, but "banking" at the branch or on the internet. The key difference is that the ATM is a pure transactional outlet where customers simply move money from their bank account into cash (or vice versa), while the branch or the internet can be used to contract *new* services, such as loans, insurance, or certificates of deposit. One might therefore refer to a "mobile banking" (rather than "transactions") service when one can contract *new* services over the mobile phone.

In terms of retail distribution, mobile operators have a large, structured network of retail airtime resellers, many of whom can be converted to act as cash in/out outlets for financial services. As a benchmark, the largest mobile operator in a country usually has 100-500 times more airtime reseller outlets (a form of cash deposit for electronic value) than banks have branches.

Finally, in terms of business model, mobile operators have experience running high-volume, real-time prepaid platforms to a high standard of availability and reliability. And their revenue model is usage-based (i.e. transactional), not float-based, which is more in tune with poor clients' willingness and ability to pay for services.

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<sup>5</sup> A CGAP-GSMA Mobile Money Market Sizing Study (2009) found that an estimated 1 billion poor, unbanked people own a mobile handset and this figure is expected to rise to 1.7 billion by 2012.

## ***Banks' Product Innovation Challenge***

The high transaction costs associated with collecting and dispensing small amounts of cash are the principal barrier to banking the poor. This causes banks to limit their distribution to a reduced number of banking outlets that are concentrated in areas where their average customer transacts larger (and therefore more profitable) sums of cash. This ensures that each branch generates enough revenues to cover its cash-handling costs. By leveraging the assets of existing retail and communications networks, we can envision an alternative cash distribution and collection mechanism that takes small value transactions out of banking halls and into local retail shops, where retail outlets such as airtime vendors, gas stations, and shopkeepers perform basic cash-in/cash-out functions. Once banks are free from the burden of handling cash in the last mile, they can focus on the true business of banking: marketing appropriate financial services to different customer segments. One can even envision a “cashless financial institution,” which is focused on promoting the right portfolio of products to their customers, and delegating the business of collecting and dispensing cash to their retail partners.

Banks have a long tradition of product innovation. Some even argue, in light of the recent global financial crisis, that their zeal for innovation is excessive. But, at the base of the pyramid, banks' segmentation tends to be rudimentary and products are often inflexible or outright unsuitable for the poor (e.g. high minimum account balances). What is holding back much-needed product innovation is the lack of a business case. Banks find little incentive to experiment with new products if marketing and channel costs make the promotion of such products unviable.

The best way to unleash the necessary diversity in financial services for the poor is to construct a sufficiently low-cost delivery platform that makes it worthwhile for financial institutions to innovate. Product development will remain the preserve of banks, as telecoms companies have no expertise and likely no desire to develop financial products beyond basic transactional services. This should establish a strong basis for partnerships between mobile operators who will be motivated by growth in transaction volume and banks who will be more interested in accessing float and cross-selling and up-selling products to clients.

## **The Regulatory Balancing Act: Enabling Innovation, Controlling Risks**

Traditional banking regulation needs to be adapted to enable commercial players – banks, mobile operators, and retailers – to experiment with new partnership models, while still protecting the stability of the financial system as a whole, the integrity of transactions, and the safety of customers' deposits. While there is some international experience suggesting that such models may be viable, it is still too early for regulators to prescribe specific models. There are no global best practices, and what works in one country may not work in another. Thus, at this point in time, regulation should focus on enabling experimentation with a range of new models while ensuring that all models adhere to basic security and consumer protection standards, know-your-customer norms, and transaction limits.

Technology-based models introduce new risks (e.g. electronic data security), but they present major new opportunities for reducing other risks (e.g. eliminating credit risk in remote transactions through real-time transaction authorizations). Banking regulation ought to be adapted to this changing landscape

- scaled back where it is no longer necessary so that it can be refocused where it is most needed, such as ensuring the integrity of banking systems and the prudent investment of funds.

Below we highlight five areas where sharpened regulatory analysis would result in a better balance between maximizing the opportunity of these models and containing risks. These are:

- More flexible branch regulations that permit banks to manage more differentiated customer sales and service models, based on the transaction types and volumes performed
- Banking agent regulations that permit banks to engage third-party retail outlets as *cash merchants*, with minimal financial risk for both banks and their customers
- Consumer protection regulations that help customers understand and act upon their rights in a more complex service delivery chain, without burdening banks with unnecessary provision
- Tiered Know Your Customer (KYC) regulations that permit immediate account opening with minimum barriers for poor people, with a progressive tightening of KYC as their usage of financial services grows
- Creating regulatory space for a class of non-bank e-money issuers authorized to raise deposits and process payments, but not to intermediate funds.

### ***Banking Beyond Bank Branches, not Banking Without Bank Branches***

With the appropriate technology platform and control mechanisms, any mobile phone and any store can potentially become a customer interface or *touch point* at which bank customers can access funds and manage their account. Branchless banking is about bringing technology innovation to the *front end* of the bank. While this ought to divert much of the transactional volume that is now channeled through bank branches, it does not make bank branches obsolete. Branches will retain two important roles.

First, while retail outlets may handle the bulk of cash transactions on behalf of the bank's poorer customers, these outlets will still need somewhere to deposit excess cash and access liquidity. In the new cash ecosystem, retail outlets handle the 'last mile,' but banks still do the 'long-haul.' Bank branches will thus retain a role as cash distribution 'nerve centers' in support of the bank's non-bank retail outlets located in their catchment area.

Second, banks will still require infrastructure at which to sell complex services to new and existing clients. Non-bank retail outlets have neither the skills nor incentives to propose the right product mix to each customer, much less to conduct credit evaluations or loan recovery procedures. Banks will also need to provide more sophisticated touch points at which customers can resolve complex customer care issues, including redress for errors. Hence, the user interface on the mobile phone and the retail outlet should be conceived as purely transactional channels, allowing the branch to evolve into a higher-touch "main street store" with fewer transactional activities.

Thus, we see the new technology-enabled banking distribution models as permitting an *unbundling* of the activities traditionally conducted at a branch. The more mechanical transactions – deposits, withdrawals, balance inquiries, transfers, account registration— can be pushed to the customer's doorstep or even to their hand through agent or mobile banking. But banks should maintain a separate

sales and service channel under their direct control for customer interactions that require more sophistication, deeper understanding of customers, or careful evaluation of risks.

The term *branchless* banking is misleading in that it suggests that branches will become increasingly irrelevant. A bank without branches will not be in control of its destiny because it will struggle to grow new business and adequately serve both its clients and its non-bank retail outlets. We find the term *banking beyond bank branches* more nuanced because, for the foreseeable future, banking will remain rooted in local branches, but banks should not continue to be *overly* constrained by their branch network. It's about specializing banking channels, not about eliminating the current ones.

To take full advantage of these new so-called branchless banking models, banking regulators need to closely examine the relevance of existing branching restrictions and the justification for burdensome branch regulations. Should, for example, pure transactional outlets face the same security standards (bulletproof glass, security guards) and staffing requirements as full service bank branches? In the new cash ecosystem, there may be room for 'light' branch models subject to lower regulatory requirements to complement strategically placed full branches and a plethora of third-party retail outlets.

### ***Retail Stores as Transactional Points: Agents or Value Added Resellers?***

Stores providing cash-in/out services for banks or mobile money schemes should be required to *pre-purchase* electronic value from the issuing bank or mobile operator. When a customer deposits cash with that retail outlet, the store clerk instantaneously transfers an equivalent amount of electronic value from the store's account to the customer's account. Because there is a simultaneous offsetting exchange of cash and electronic value, there is no credit exposure to the store for either the customer or the bank. Provided that the bank authorizes the transaction in real time, no financial risks arise from the store's handling of the deposit.

The store's real function is to take the other side of customers' cash transaction requirements. When a customer goes to a store to deposit money into his account (resulting in less cash, more prepaid electronic balance), the store withdraws cash *from his own account* (resulting in more cash, less prepaid electronic balance). The bank merely debited one account and credited the other, in real time, with no change to its total base of assets and liabilities. Moreover, because transactions occur against the store's prepaid account, the cash in the store's till remains the store's property at all times. The store does not hold any financial assets that belong to either the customer or the bank. Thus, when a customer does a 'cash-in' at the store, the store is not 'taking deposits' since the total liabilities of the bank remain unchanged. It is, rather, a private swap of assets between the customer and the store, which the store is willing to do for a fee (see Box 3).

Viewed in this light, the store is not acting as an *agent* for the bank in the legal/economic sense: the store is its own principal. The store acts as a *cash merchant*, offering cash in/out services because it sees a revenue-generating opportunity from leveraging its own bank account. The store is more of a value-added reseller of the bank's service – a *super-user* that uses its account to take the other side of a customer's transaction (i.e. either cash for e-money, or vice versa).

This means that there is no need to require banks to assume full responsibility for the financial transactions undertaken by retail outlets acting on their behalf, as long as they put in place the necessary measures to eliminate credit risk arising from the activities of such outlets. This will be the case if: (i) all cash transactions are undertaken against the store's own account, (ii) all parties to the transaction are authenticated and the transactions are authorized in real time by the bank, and (iii) the bank puts in place adequate controls to mitigate operational and technology risks.

### **BOX 3: When is a Deposit a Deposit?**

Sounds simple, but in fact it's not so straight-forward. Consider the following cases:

- **Electronic funds transfer.** Imagine that A transfers money electronically from his account to B's account. As a result, B's account balance is higher. Has there been a deposit? It is generally not considered so. B's account has been funded from A's account, and there is no net increase in the *total* liabilities of the banking system. There is merely a transfer of electronic value from one account to the other.
- **POS transaction.** Suppose that in the previous transaction, A was a customer using his debit card to pay for a meal at restaurant B. The transaction is not a stand-alone transfer of value, since it happens to be in exchange for something else (a meal in this case). It can hardly be said that customer A "deposited" the value of a meal in restaurant B's account. So an electronic funds transfer is not a deposit even if it offsets some other (non-electronic) transfer of value.
- **Cash-in transaction at a retail outlet.** Now consider the case where the physical transaction offsetting the electronic funds transfer between A and B is hard cash rather than a meal. Customer B gives cash to store A, and in exchange store A transfers electronic value to B. Yes, cash was involved. But B's cash was offset from A's *account*, not from A's cash, and there is no net increase in the total liabilities of the banking system.

These three cases are identical from a *financial* point of view. The electronic funds transfer in the third case is itself no more or less risky than the equivalent electronic funds transfer in the other two cases. Seen in this light, deposit-taking must be understood as a transaction that increases the liabilities of the banking system (i.e. when it is funded from *outside* the banking system). Otherwise, it's just an inter-account transfer.

### ***Consumer Protection: Protecting All Consumers, not just Banked Customers***

While banks should not have to assume full responsibility for the cash-in/out transactions undertaken by retail outlets against their own accounts, there is an *implied* agency if the bank displays its logo on the retail storefront. In this case, customers may believe they are dealing directly with the bank, which gives rise to consumer protection concerns. Policymakers are rightly concerned about ensuring that consumers are adequately protected against unscrupulous actors in a financial system with an increasingly disaggregated value chain. Even if all players are scrupulous, having more players involved may create ambiguity in their roles and responsibilities *vis à vis* customers, to the detriment of the customer.

These concerns often spur regulators to err on the side of being overly restrictive in their consumer protection requirements, resulting in people continuing to be excluded. David Porteous refers to this as the *regulator's dilemma*: whether to implement measures that may hinder expansion of access to non-users in the interest of greater protection for those who already have access.<sup>6</sup> Regulators in several

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<sup>6</sup> Cited in Porteous, D (2009). To stress the regulator's dilemma, he quotes Joan Robinson as saying "The misery of being exploited by capitalists is nothing compared to the misery of not being exploited at all."

countries, for example, place restrictions on the transaction fees banks can charge poor customers, or impose strict limits on acceptable customer wait times in call centers. These restrictions often make it unprofitable to offer accounts to poor customers. By applying stringent consumer protection measures to the formal providers most willing and able to serve poor customers, regulations meant to protect customers may in fact force them to go to higher risk, higher cost informal players who evade the requirements. Or they may not be served at all.

Given the magnitude of the problem of financial exclusion in developing countries (where up to 60-90% of the adult population can be excluded from the formal financial system), regulators should balance their objective to protect consumers with the urgent need to (dramatically) expand financial access. In other words, the regulator's dilemma should be viewed more as a *policy* question of how to prudently boost financial access, than as a narrow *regulatory* concern of how to protect existing consumers. Following this approach, regulator's should ensure that retail banking outlets are subject to disclosure norms (displaying a poster with the store's roles and responsibilities, a schedule of fees, the bank's customer care phone number), data privacy standards, and redress mechanisms, while mitigating the resulting cost burden on providers who serve poor customers.

### ***Financial Integrity: Balancing the Dual Objectives of Identification and Traceability***

Regulators need to perform another balancing act when it comes to implementing know-your-customer (KYC) procedures. Clearly, KYC is a key element in the fight against money laundering and terrorist financing. KYC procedures typically require customers to present valid identification and providers to verify the documents and store copies.

These requirements can present obstacles to financial inclusion in several ways. First, it may constitute an obstacle to poor people who do not have ready access to documents, especially in countries with no national ID scheme. Second, extra operational requirements may impose a higher account opening cost for banks, to the point of making low-balance accounts economically unprofitable. Finally, it may present logistical problems to rural retail outlets which do not have access to copy machines or lack stable electricity supply.

For low-value accounts and small transactions, the incremental cost of KYC procedures may be disproportionate to both the money laundering risks they purport to address and the value of these services to poor people. Consequently, they may entice customers to revert to informal money transfer and store of value solutions which operate outside of any regulatory constraints.

Here the balancing act is not between the policy objectives of anti-money laundering (AML) and financial inclusion, but rather between the two necessary elements of an effective AML strategy: (i) to shift as many financial flows as possible onto electronic platforms which are in principle traceable; and (ii) to identify the parties to financial transactions. KYC procedures help identify *who* is conducting transactions (point ii), but, if overly cumbersome, may undermine efforts to trace transaction flows (point i) if poor customers are forced to revert to informal solutions.

In other words, applying reduced KYC procedures for low value accounts and small deposits which pose lower AML risks would not only be more access-friendly, but may also *increase* the effectiveness of AML



policy. The more people handle their finances and payments through formal electronic platforms, the more difficult it will be for criminals to find effective ways to move cash, use informal payment means, or hide their ill-gotten gains in the shadow of an informal money sector. After all, cash is the enemy for both law enforcement and financial inclusion: it allows criminals to hide their operations, and it makes poor people costly to serve financially. Making transactions electronic increases the surveillance power of law enforcement, and enhances the ability of poor people to avail of financial services at lower cost.

The notion of proportionate or risk-based KYC procedures is well established within the Financial Action Task Force (FATF) principles and there should be an easy, cheap entry proposition for previously unbanked people. As customer balances and transactions volumes grow, the KYC and security arrangements can be tightened progressively. Dave Birch has proposed permitting KYC-exempt transactions and accounts at least up to the value of the highest denomination banknote available – typically the \$100 bill. For such small transactions, displacing cash – the most anonymous payment instrument – would be a worthwhile AML goal. For larger accounts targeting the unbanked poor, KYC verification might be outsourced to properly trained banking retail outlets, with a requirement to store records electronically only.

This so-called tiered KYC approach has the advantage of not putting the full KYC barrier *up-front* for poor customers who are new to banking. The policy objective should be to permit immediate account opening with minimal barriers for poor people, with a progressive tightening of KYC as their usage of financial services grows.

These measures would also increase the soundness of payments systems. Central bankers cannot exert oversight over a significant chunk of economic activity that takes place outside their jurisdiction in the informal cash economy. By giving poor customers access to formal financial services, central bankers will gain more visibility over individual financial flows, exercise more control over monetary aggregates, and gain broader oversight over the stability of payment systems across the economy.

If the bank delegates its customer registration and KYC functions to retail outlets (e.g. cash merchants), there is a direct legal/economic agency relationship between the bank and the store. This is because the retail outlet does not derive intrinsic benefit from proper identification of its clients, and hence, if left to its own devices, is likely to underinvest in this activity. In this case, agent regulations should prescribe some level of store training and bank control procedures to ensure that the stores exercise their agency obligations adequately.

### ***Issuance of Individual Accounts: There is Room for Non-Banks, but All Systems Must Ultimately be Bank-Based***

All branchless banking models ought to be bank-based, in that the money collected from the public must be ultimately intermediated by a bank under the full purview of prudential regulation and supervision. Indeed, all existing mobile money deployments are bank-based, since 100% of customers' electronic value is either issued by or backed by deposits stored in a prudentially regulated bank. When the float is invested, it is always done by a bank. This principle is important to remember, because it is the lack of transparency of banks' assets (composed largely of illiquid loans) that gives rise to the need for banking

regulation. One speaks about reckless lending when customer deposits are backed by low quality or risky loans. But there is no such thing as reckless deposit taking – only reckless investing of those funds.

The key distinction between branchless banking schemes is the range of operations that the bank is willing to delegate or outsource to non-bank players. In principle, any activity ought to be ‘outsourcable’ to a non-bank as long as the arrangement does not compromise the ability of banking authorities to ensure compliance with banking regulations. Beyond that, regulation should permit banks and non-banks to negotiate their respective roles in a way that optimizes their comparative advantages.

To be more precise, banks must be able to outsource specific *functions*, though not necessarily the legal *responsibilities* arising from them, to non-bank players who have the ability to perform them more effectively. This may apply to channel management (managing electronic or retail channels), transaction processing (aggregating transactions from multiple channels), account management, or customer care through call centers. Such arrangements may result in a more economical service model for poor people, and should not be discouraged.

Outsourcing of core banking functions should not result in a loss of supervisory jurisdiction on the part of financial authorities: banks can be required to insert clauses in outsourcing contracts requiring their non-bank partners to provide appropriate access to supervisors to their premises, systems, and documentation.

In some markets, banks and non-banks may be unwilling to find an appropriate outsourcing arrangement. And, as stated above, commercial banks have not traditionally found a way to profitably serve large numbers of poor people. Hence, licensing regimes must allow for a broader range of players who face different cost structures and economic incentives to contest the market directly. They should be able to do so under a special licensing regime that recognizes the lower risks posed by account issuers that do not themselves intermediate funds. Such players can be variously called e-money issuers, prepaid card issuers, conduit banks (in the sense that they pass on the public deposits they raise to full-fledged banks), or narrow banks (in the sense that they do not perform lending activities).

Through proper licensing, financial authorities would have supervisory jurisdiction over such players. But a deposit-taking institution that does not on-lend funds and instead commits to place 100% of deposits raised in one or more pooled accounts in supervised banks does not give rise to prudential or liquidity risks. Indeed, it is not that they are prudentially unregulated, as in fact they are subject to the highest level of prudential regulation imaginable: a 100% reserve requirement.<sup>7</sup> In this manner, regulatory and supervisory concerns can be circumscribed to operational and technology risks. All of these are valid models, and in fact all have a precedent in the world. At this early stage in the global experience with branchless banking, it would be premature for regulators to prejudge which will be the more successful model, and hence regulations should not preclude any of these options.

***BOX 4: Prepaid Cards vs. Electronic Money vs. Bank Accounts***

Liquid (i.e. currency-denominated) value can be stored in one of three ways: as cash (the real thing), as a paper-based claim (IOU), or as an entry on a set of electronically-maintained accounts (“e-money”). We tend to associate

<sup>7</sup> For more detailed analysis on how to regulate non-bank e-money issuers, see Tarazi and Breloff (2010).

the term “e-money” with new mediums of exchange such as Paypal, but a current account at a bank is “electronic” to exactly the same degree. There is no specific stash of cash backing the Paypal or bank account; rather, these accounts are a line in the accounts of the issuer (Paypal, the bank) which registers a claim against the issuer.

Likewise, we tend to associate the notion of “prepaid account” with special-purpose cards sold by non-traditional players, but any savings account is “prepaid” by definition: the bank will not allow me to withdraw more than I’ve put in (unless the bank has sold me an “overdraft” credit policy). And the fact that the “prepaid account” is marketed as a card is not at all different to the notion of a debit card; both prepaid and debit cards permit the withdrawal of value subject to a verification in real time that the customer has enough value stored.

So prepaid cards and e-money are in principle no different to what banks offer routinely – all savings accounts are “electronic money” and “prepaid.” However, there can be differences which differentiate the various products. One difference may be regulatory, defined in terms of who issues the accounts (a bank or non-bank), what are the legal account features (KYC requirements, maximum account size) and how the money is invested (in liquid assets or intermediated as loans). A second set of differences may relate to the general acceptance and redeemability of the stored value: Is the value exchangeable only for a narrow set of eligible products and services, or can it be used to pay for anything? Can the value stored be redeemed for cash? A third difference may be on the storage method: Is the value stored on a server maintained by the issuer, or on a card owned by the customer? The latter case comes closer to replicating the functionality of cash (including anonymity), but has the drawback that the value stored in the card is lost if the card itself is lost.

## Concluding Thoughts

There is growing awareness that absence of retail distribution is the binding constraint in the delivery of financial services to poor people. There is a strong tide of support in many developing countries for the idea that technology-based solutions, including mobile-phone based ones, can allow a leap-frogging in mass-market financial service delivery systems. Mobile communications, in particular, can bridge distances for people living in remote areas and reduce transaction costs for poor people whose financial needs require small balances and transaction sizes. It can also vastly reduce transactional credit risks for both banks and their customers by enabling instantaneous transaction authorizations and processing. Enabling these models to occur requires adapting regulations in a way that reflects the new opportunities that are possible in this age of widespread (and soon-to-be ubiquitous) real-time communications.

There is now intense debate on how regulatory frameworks need to be adapted to enable the kind of models described above. It is important that regulations address all the risks arising from each of these models. But instead of fully enumerating all models and establishing a specific regulatory and supervisory regime for each, it is sufficient to have adequate norms around the five enabling regulatory elements referred to above: *(i)* streamlined branch regulations, *(ii)* use of non-traditional retail channels as cash merchants, *(iii)* proportionate consumer protection, KYC and security standards, and *(iv)* participation by non-banks through outsourcing of banking functions or direct participation under a *narrow bank* or *e-money* license. The key issues are mapped against the service delivery chain in Box 5.

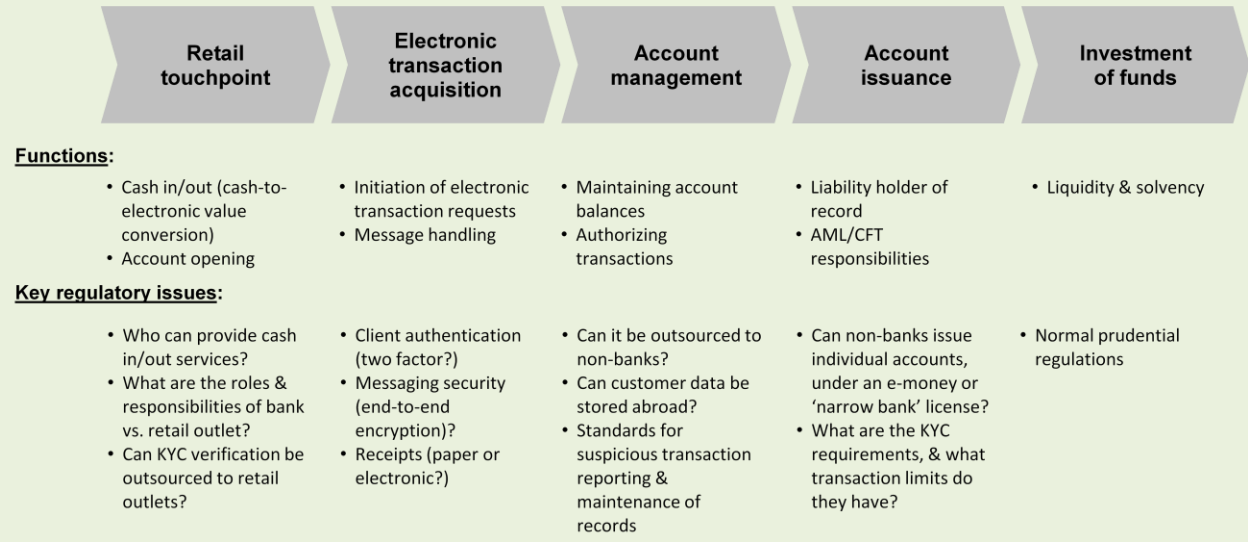
In this early stage of development of alternative models, it is important for regulators to be driven by clear ideas of the opportunities and risks raised by the use of technology-enabled third-party channels, but they should not be overly prescriptive on the business models that will eventually underlie the use of these channels. This is a delicate balancing act.

A key aspect is the nature of the relationship between banks and any third-party retail outlets they enlist. We need to unbundle the various actions that retail outlets conduct for banks and identify precisely which create principal-agent problems that need to be addressed through regulation. Retail outlets need not create financial risks for either banks or their customers, as long as the right technology platform and control mechanisms are put in place by banks. Retail outlets conducting cash in/out services on behalf of banks will perform this activity more as individual *super-users*, sensing a profitable business opportunity. Hence, it is unnecessary to mandate that banks assume *blanket* responsibility for any action of their agents, as long as the bank has in place a real-time communications network that permits transactions to be authorized and settled in real time. But use of banks’ branding elements in a retail environment does raise consumer protection issues that need to be adequately addressed regulatorily and contractually between banks and their third-party retail outlets.

Achieving universal financial inclusion will require substantial policy support from governments. Beyond enabling new models through appropriate regulation, the State can apply some key resources to promote the spread of financial services across the territory. The State typically operates extensive retail networks — post offices, remote branches of state-owned banks, and, in some cases, lottery outlets and petrol stations — which can be used to structure third-party retail networks that serve banks. The State is also typically the largest payer in the country, and the volume of government salaries, pensions, and social welfare or transfer payments can be channeled through bank accounts and banking networks.

In the end, however, achieving the vision of universal financial inclusion will depend on whether banks see opportunities to leverage assets that exist beyond the banking sector (off-loading retail transaction processing to non-banks) or whether they see strategic threats and unwarranted business complexity. That will primarily depend on how confident banks are in being able to add value to customers by constructing appropriate product propositions and on whether the regulatory framework is adequately focused on addressing the key risks.

**BOX 5: Key Regulatory Issues Arising from Banking Beyond Branches**



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