Setting the regulatory landscape for the provision of electronic money in Peru

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Executive Summary

Although there is much evidence that access to financial services correlates positively with economic development, basic, convenient transfer and payment services are still unavailable for low-income segments of the Peruvian population. The experience of Kenya, the Philippines, and others has shown that e-money products can be effective in extending payment services to them. However, in Peru the absence of regulation for the provision of e-money based schemes prevents good investments and at the same time encourages fraudulent activities.

This policy memo discusses the main elements to establish a regulatory framework for e-money. It recommends that policy-makers first define e-money, taking into account the laws and regulations of a particular country. If e-money is not defined as a deposit, then it follows that financial institutions may provide e-money products as well as telecommunication companies and similar operators. This will provide contestability in the market and more efficiency in the provision of e-money based products, for the benefit of consumers, particularly the poor.

Problem

Although access to and usage of financial services in Peru has improved, progress has been insufficient. From June 2006 to June 2011, the level of access measured by the total points of service, including branches, ATMs and retail agents, per 100,000 adults, has increased from 23 to 103. In particular, the share of the number of transactions through retail agents has reached about 12% in 6 years of existence, and it is still increasing. In the same period, usage indicators such as the number of borrowers per 100 adults went from 18.2 to 26.1, and the number of physical persons with saving accounts per 100 adults went from 61.6 to 83.9.

However, there is still a large percentage of the population that remains underserved or excluded, particularly in most rural areas, where financial institutions do not find it profitable to offer services through the current channels and products available in the market. Relatively low population densities in remote areas and the small average size of transactions hamper the expansion of the financial system physical network. The population living in the districts with access to financial services delivery channels now reaches 82% of the total adult population. However, the remaining 18% of the adult population lives in 66% of the isolated districts.

\[\text{Note that the number of depositors may be overestimated, since the information available is the sum of depositors across institutions and one person may have accounts in more than one institution. Still, the trend observed is increasing.}\]
without any access to the financial system.

The international experience sheds some light on this problem. It shows that alternative access channels and products can be used to expand financial services. In particular, the use of diverse electronic devices including mobile phones can significantly reduce operational and transaction costs for both the consumers and the financial service providers. In Peru, the fact that the penetration of the mobile industry is above 95% and that 88% of the districts in Peru have mobile phone coverage creates an opportunity for using these devices to increase the scope and the depth of outreach.²

In spite of this, the lack of rules and of the supervision of Electronic Money (e-money) constrains the development of Mobile Financial Services (MFS) by generating uncertainty and preventing investments in e-money based products.³ On the other hand, this same lack of rules and supervision leaves room for fraudulent activities.

Therefore, it is necessary to define a regulatory framework conducive to the development of e-money based services so that they can be offered in a secure, reliable, efficient, and transparent way. The proposal of such a regulatory framework is the aim of this memo.

**Background: Distinguishing mobile financial services**

A regulatory framework may be conceived of as the rules of the game. It conditions entrance to the market and affects the decisions and hence the outcomes achieved by market participants. For this reason, regulators hold a great responsibility. They must be very clear about the vision of the market they want to encourage.

Electronic devices, including mobile phones, may be used in different ways to access financial services. In order to clearly delineate the scope of this policy memo, it is necessary to analyze at least two of these ways:

1. **M-Banking services:** The most immediate way to use electronic devices is simply as additional channels to access deposit accounts. In this case, a customer may manage her account using an electronic instrument such as her mobile phone, transferring money among her accounts or to others, or paying bills.⁴ This is done just by submitting orders to the Financial Institution (FI) holding her deposit account without her making a trip to the FI’s branch. This approach is usually called mobile banking, or m-banking. To sustain these

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² Penetration is measured by the number of lines over total population (OSIPTEL, 2010)
³ Bankable Frontiers and Afi (2009) argue that in civil law environments, like those in Latin America, “what is not expressly permitted, is usually not allowed unlike common law countries (such as South Africa and Kenya) where the absence of express laws prohibiting new developments may actually create space for innovations to develop.” Thus certainty is a relatively stronger pre-requisite in Latin America than in common law countries for the development of mobile financial services.
⁴ From now on, the customer will be referred as being “she”. This is to remind us that, typically, women have less access to financial services than men.
operations, FIs will need to hire the services of a Telecommunication Company (Telco). Some examples of this approach are the experiences of Wizzit in South Africa and Nipper in Mexico.

M-banking providers have to be FIs authorized to offer deposit accounts, which are in most of the cases, like in Peru, prudentially regulated and supervised. From a regulatory perspective, using this relatively new channel to access deposit accounts does not present a particular challenge, other than managing operational risks. In fact, m-banking activities already exist in Peru, though oriented to medium and high-income segments of the population. The extension of m-banking services for the un-served population should follow after deposit accounts become available to them. To encourage this, regulatory changes have already been brought up since February 2011 to reduce the average cost of opening small deposit accounts by lessening the AML/CFT rules for low risk products.

2. E-Money services: The supply of transfer and payment services using electronic devices does not require deposit accounts. These services can also be offered using e-money, which may involve Telcos and other specialized operators such as service providers. This is the case of Safaricom (a Telco) that offers M-Pesa products in Kenya or G-Cash in the Philippines. In these cases, the customer buys electronic (virtual) money at the service provider’s agent, either with cash or other means of payment, crediting the same value. The value stored is registered by the service provider and can be used by the customer at her convenience using, for instance, a plastic card or a mobile phone. In the latter case, the product is commonly known as an “electronic wallet”, where the mobile phone is used to send orders of transfers or payments to the provider’s platform, by using a SMS or a specially designed menu.

Until now, e-money activities have not been available in Peru. However, some investors are interested in providing these services; investors vary from little-known operators to Telcos with significant market share.

However, there is a regulatory vacuum. No definition of e-money exists and regulation does not specify who can provide services and under what conditions, thus preventing investments or leaving the door open to any participant, however credible, to enter the market. The current Law of the Payment System recognizes the existence of possible providers of e-money schemes, but does not regulate or supervise them. It indicates that the Central Bank will supervise them only if providers pose a systemic risk. But if a systemic risk emerges, regulation may come too late. We must fill the regulatory vacuum related to e-money based services, which is the focus of this policy memo.

**The Objective of the Regulator**

The main objective of the Peruvian financial regulator is to design an enabling regulatory framework for the development of a sustainable and inclusive financial system. From the
regulator’s perspective, stability and sustainability are essential to the provision of financial services. However, the regulatory framework should not constrain innovations in order to meet the challenge of financial inclusion. For that purpose, in the arena of mobile financial services, the rules of the game should induce the development of transfer and payment services based on e-money, offered by solid and responsible institutions under conditions of safeness, reliability, efficiency, and transparency for the benefit of the population.

**Analysis: Setting the basis for e-money regulation**

There are two key elements that help define the rules of the game for e-money based services: a clear definition of e-money and the decision about the allowed issuers of e-money. In fact, both elements are related, as I will show.

Electronic money is generally understood as a value stored electronically that can be accessed by an electronic device. However, the consideration of e-money as being a deposit or not varies across countries, depending on how deposits are defined in their constitutions, laws and regulations. In the case of Peru, neither the Political Constitution of Peru nor the *General Law of the Financial System* defines a deposit. But the latter mandates the financial regulator to supervise depository firms collecting deposits from the public.\(^5\) The Peruvian Civil Code sheds some light on this concept. It indicates that a (regular) voluntary deposit occurs when the depository institution receives a good for custody and later return.\(^6\) On the other hand, an irregular deposit occurs when the depositor allows the depository institution to use the good acquiring the right to receive (or not) compensation, according to the terms of the contractual agreement.\(^7\)

None of these definitions of deposit tackle the way e-money based products work in the most successful cases. Those products do not involve just custody and return of the cash handled by the customer, as stated in the general definition of a voluntary deposit in the Peruvian Civil Code. They involve more. For instance, in e-wallet schemes, the customer uses the service of having her cash de-materialized (converted to e-cash) to store value and to carry out transfers and payments in a more convenient and cost efficient way (Mas and Kumar, 2008). Furthermore, e-money service providers are not allowed to use the value stored (for lending or any other purpose that the provider may deem convenient), which differs from the concept of irregular deposits defined in the Peruvian Civil Code. The provider only performs the operations that the customer requests. The cash exchanged for electronic value remains in control of the customer at all times, similarly as it was interpreted when the Central Bank of Kenya analyzed the case of M-Pesa (AFI, 2010).

Thus, under current Peruvian laws and regulations, e-money cannot be considered a deposit. We can define e-money as being a monetary value stored in an electronic device presented by

\(^{5}\) Political Constitution of Peru 2003, article 87.

\(^{6}\) Peruvian Civil Code, article 1814.

\(^{7}\) Peruvian Civil Code, article 1829.
a claim on the issuer and that has the following characteristics:

- It is issued upon receipt of funds at an equal value of the monetary value receipt
- It is widely accepted as a means of payment
- It can be converted back into cash
- It is not a deposit.

Analyzing potential e-money service providers

Consistent with the proposed definition the range of potential e-money service providers and models increases. According to the Peruvian Constitution, prudential regulation is required only for depository institutions. Hence, it is possible to allow the entrance of other non-financial service providers without requiring them to be regulated as full intermediaries.

However, the decision of who enters the market should be made only after careful analysis. All of the stakeholders’ concerns have to be taken into account, those of the regulator, of the service providers, and of the un-served population. I consider only two general types of potential e-money issuers.

1. **Financial Intermediaries**: From the point of view of FIs the issuance of e-money would just increase the array of products they can offer to consumers. Similarly to their m-banking activities, they would have to use the services of a telecommunication company.

   From the point of view of the population, particularly of the poor, the gains are not clear. If FIs were able to reach them through e-money based products they can as well offer them m-banking services, which would make more sense since it implies additional services beyond transfers and payment services. However, despite the substantial increase of the retail agent of the financial system in Peru, which reached 9,204 as of December 2010, the impact appears to be limited to reach the low end of the market. Perhaps the advantage of offering e-money services in relation to m-banking will appear only if the agent network of the mobile operator can be added to the bank’s network to increase capillarity.

   Under this option, since deposit taking FIs are prudentially regulated, the concerns of the regulator are mostly related to transparency issues. The regulator should require FIs to make it clear for the customers the characteristics of the product that is being provided, m-banking or e-money (deposit or non-deposit). In addition, it will be necessary to require FIs to offer e-money based services using a trust like scheme, basically for two reasons. First, the regulation must keep consistency with the nature of e-money, whereby the service provider receives the money only to perform transfers and payments at the request of the customer. The constitution of a fund for a specific purpose is the concept intrinsic in a trust. Secondly, since the e-money issued is not a deposit, it is not protected by the Deposit Insurance Fund. In the event of the FIs bankruptcy the trust assets will not be liquidated; thus, the customers’ money will be safe.
3. **Mobile operators and other specialized service providers:** In this case, mobile operators have the opportunity to go beyond the communication services they provide and offer e-money services. This can be done with the relative advantage of having scope economies, since the systems needed are mostly in place, and they have experience running high-volume, real-time prepaid platforms (Alexandre et al, 2010). From the population perspective, considering the high level of penetration that mobile phones have achieved in Peru even among the poor, the gains are clear. Mobile phone users are already familiar with the mobile service and with their providers and they can benefit from the expansion of the functionality of their mobiles. Moreover, the large network of retail airtime resellers may serve them as convenient cash-in/out outlets.

The argument against allowing mobile operators to offer e-money services is that they do not promote full entry into a suite of a financial institution options. Without underscoring the value of providing access to, credit and deposit services, for instance, we have to acknowledge that the most basic service that the financial system should provide is transfer and payment facilities. This has not been happening in Peru as in other developing countries. So, very often, poor migrants living in the capital Lima find themselves sending money to their dependents by informal means, using bus services to send cash hidden in packages or using informal bus transportation remittance services, in order to avoid the high commissions that a regulated financial entity may charge. Thus, e-money services provided by mobile operators can make the unserved population better off by offering efficient payment and transfer services. In addition, alliances may take place between mobile operators and full intermediaries to provide a wider set of financial services. In fact, this entry route to financial services may be more effective for consumers since mobile networks may have a consumer track record in payment and creditworthiness (Williams and Torma, 2007). In particular, this type of information about the poor may help to reduce the barriers to accessing a desirable larger set of financial services.

From the regulatory perspective, when mobile operators are allowed to offer a financial service (i.e. e-money based) they have to be supervised by a financial regulator. However, since the service is not a deposit, only non-prudential regulation is needed to ensure the safety of the value stored by the costumers and to protect consumers from possible mistreatment by the providers. To safeguard the customers’ funds, diverse financial regulators, from the Philippines, Kenya, Indonesia, among others, have taken the decision to require the e-money issuers to maintain liquid assets equivalent to the total value of the funds collected in a trust account of a prudentially regulated institution. As explained before, if a specialized mobile operator goes bankrupt, customers’ funds are safe and they will be able to cash out an equal value to the one they have cashed-in. In this sense, under this approach there is no solvency risk posed by the mobile operator (GSMA, 2010).
The choice

The most conservative approach would be to allow as e-money issuers only those FIs that are prudentially regulated, which is more than what is needed to monitor e-money services. But this would create a regulatory barrier for market contestability and may hinder potential gains for financial inclusion. On the other hand, the international experience has shown that the participation of mobile operators is the most effective way to incorporate the underserved population to the payment systems. Their advantage lies in their ability to safely offer e-money services with lower cost structures than banks (GSMA, 2010). Moreover, mobile operators have a larger agent network, which provides more convenience to customers for cash in and cash out operations. In the Peruvian case, it is estimated that the Telco that has the largest share in the mobile telecommunication market has a network of almost 90,000 airtime resellers, which is about ten times the network agent of financial intermediaries.

From the regulator’s perspective, the concerns involved in allowing mobile operators to offer payment services can be easily addressed.

In fact, there is not a trade-off between the participation of financial intermediaries and mobile operators. Under the two possible scenarios, competition between different types of service providers or alliances among them, the population can be better off. At the end, by allowing all types of participants, the financial regulator leaves the market to figure out what works best, and the customers will benefit from the result.

Other regulatory issues

The fundamental principle that the financial regulator should follow when defining the regulation is to establish a level playing field for all types of service providers. For this purpose, a key approach is to focus the regulation on the service rather than on the service providers (GSMA, 2010). And, to guarantee that all participants will follow the same rules, they should have a common supervisor; in this case, the financial supervisor. Thus, mobile operators must apply for a special license to provide e-money services only, fulfilling the usual entry requirements to ensure the viability of the project. Some of those requirements may be the suitability of the shareholders, fit and proper of managers and executives and a minimum capital sufficient to support the start up of operations and to deter non-serious investors.

A factor frequently mentioned as affecting competition in the market is interoperability, which exists when the service is network independent, allowing consumers to transact beyond their service provider’s network. Otherwise, consumers would have to choose their provider evaluating which one allows them to transact with a larger group of individuals or with those with who they interact more, a situation that may become constraining for them. Thus,

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8 It is clear that during the whole regulatory and supervisory process, the financial supervisor will need to maintain a continuing dialogue with other supervisors such as the Central Bank that oversees the payment system, and the regulator of the telecommunication sector.
consumers are better off with as much interoperability as feasible. However, to avoid the risk of hampering market development and innovation, it should not be imposed at this stage, when e-money services are not developed. Regulators should just make sure that technical interoperability remains feasible at low cost (Houpis and Bellis, 2007). In fact, even at this stage it is more likely that interoperability will emerge spontaneously if the leader wants to build up a large customer base, which is a necessary condition for the viability of this service.

To ensure the adequate supervision of the risk involved in e-money based services, the regulator should create a flexible, proportionate regulation to allow ongoing active supervision to service providers (Bezuidenhoudt and Porteous, 2008). And, the standards defined should be technology neutral in order not to constrain innovation and efficiency gains.

Pertaining to money laundering concerns, fieldwork revealed that low amounts of money, traceability, and the monitoring features of mobile money can make mobile money far less risky than other means of payment, especially cash (Chatain et al, 2011). Thus, it is possible to introduce some flexibility to the usually rigorous Know Your Customer (KYC) requirements of AML norms, in order to ease the access of unbanked populations to financial services. Moreover, if the regulations are too rigid people will not move out of the informal sector (Mas, 2010), which is another desirable objective to pursue.

Peru has taken this “proportionate to risk” approach, by defining in the AML/CFT regulation along three regimes, recognizing the existence of varying risk levels associated with customers and the services and products provided. The first regime is a general regime, where regular measures of KYC and due diligence apply. The others are special regimes. In the second regime, exemptions from traditional customer due diligence rules aimed at preventing ML apply to low risk products. Under this regime the regulation defines a general basic deposit account with balance and transaction limits, per month and per day. This product can be contracted with the (widely available) Peruvian National Identification even at the financial intermediary’s retail agent network. For e-money based products, the same balance and transaction limits should apply. Finally, in the third regime, firms should apply reinforced measures of due diligence for customers whose transactions are inconsistent to their business profiles and for those highly exposed to the risk of engaging in money laundering activities.

On the other hand, the regulatory framework for consumer protection is well developed in Peru. The basic purpose of this regulation is to induce FIs to adopt a conduct of respect to consumers and to provide services with transparency. Transparency allows better decision-making which also contributes to the healthy development of services providers. However, some requirements may become cumbersome and costly when dealing with low-risk products.

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9 These authors present a detailed analysis of MFSs risks, including recommendations for the regulators and mobile services providers.


So, a simplified regime is also defined for consumer protection rules maintaining transparency on the most important elements of information. This framework should also apply when the provision of e-money services develops. In this case, basic relevant information for consumers includes the commission charges for each type of transaction, how their money is protected, the mechanisms for questions and complaints, and others.

Conclusion and Recommendations

An enabling environment for the development of sustainable and inclusive mobile financial services requires a clear regulatory framework without preventing innovation and competition in the market. Key recommendations for crafting such a regulatory framework for e-money based services can be summarized as follows:

• A clear definition of e-money must first exist, which takes into account the laws and regulations of a particular country. A key element in that definition is to establish whether or not e-money is a deposit. This defines the array of service providers that may be allowed into the market.

• In order to induce market contestability, it is important to allow all types of e-money issuers, if possible. In particular, the participation of mobile operators may have the potential of accelerating the incorporation of the poor into an efficient payment service system, by providing them convenient and affordable products.

• Risk based approaches deal with ML concerns without jeopardizing the objective of financial inclusion. The literature has shown that e-money based schemes offer less risk than the use of cash since they are traceable and easy to control.

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References


Alexandre, Claire; Ignacio Mas and Dan Radcliffe (2010). “Regulating New Banking Models that can Bring Financial Services to All”. Bill & Melinda Gates Foundation.


